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Blow them out, roots
and all—easily and
cheaply with

**GOLD
DYNAMITE
MEDAL**

Most efficient and economical aid in clearing stump land, swamp draining, ditch digging and tree planting. Full strength and 100% quality maintained for 17 years. A grade for every need. If your dealer can't supply you, get in touch with us direct.

Write for free booklet
"What Dynamite Will Do."
Illinois Powder Mfg. Co.
1622 Pierce Bldg. St. Louis, Mo.

Imported Melotte

with the self-balancing bowl. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. Runs so easily, bowl spins 25 minutes after you stop cranking unless you apply brake.

\$7.50
After 30 Days
FREE TRIAL

Catalog tells all—WRITE

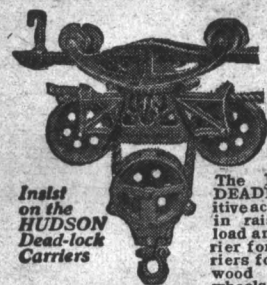
Caution! U. S. Bulletin 201 of the bowl causes cream to set! 30 days' free trial—then, if satisfied, only \$7.50 and a few easy payments—*and*—the wonderful Belgium Melotte Separator is yours.

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Send today for free separator book containing full description. Don't buy any separator until you have found out all about the Melotte and details of our 15 year guarantee.

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HUDSON HAYING TOOLS



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Install on the HUDSON Dead-lock Carriers

The Hudson Patented DEADLOCK insures positive action of carrier both in raising and moving load and in returning carrier for next load. Carriers for steel, cable or wood tracks, 4 or 8 wheels; for fork or slings.

HUDSON HAY TRACK is the strongest made. Doubly strong at joints. If necessary the HUDSON takes a whole ton load at once. Be sure to see it. Ask your HOME TOWN HUDSON DEALER or write us.

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BIG BARGAIN—Sample Free—SAVE MONEY. Red Clover and Timothy mixed—Standard Grasses, unsurpassed for hay or pasture. Contains 10% to 15% clover—ready to sow. Thoroughly re-cleaned, guaranteed and sold subject to your test and approval. Real Bargain. Have Pure Clover, Alfalfa, Sweet Clover, Timothy and all Field Seeds at amazingly low prices. Write for free samples and 52-p. catalog. American Field Seed Co., Dept. 531, Chicago, Ill.

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in the best wet weather logs
ever invented the

**FISH BRAND
REFLEX
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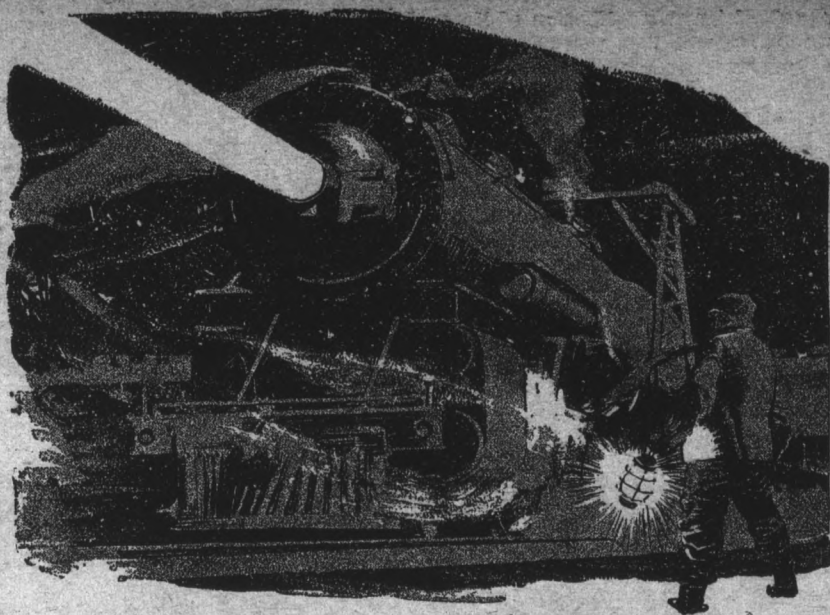
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TOWER'S

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"The Rainy Day Pal"

A. J. TOWER CO. BOSTON



New York Central's 11,000,000 horse-power

THE locomotives in service on the New York Central Lines have an aggregate capacity of 11,000,000 horse-power. This equals a third of all power used in the manufacturing industries of the country.

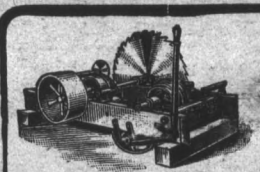
Operating and maintaining this great power plant cost last year \$169,000,000, or 33% of operating expenses. The men on the engines earned \$34,000,000. In the fire-boxes was burned \$54,000,000 worth of coal. Repairs, another large item, took \$54,000,000.

Adequate power is the first necessity of efficient transportation service. The capacity of New York Central Lines to meet the test of heavy traffic—as was so strikingly shown in the war emergency—is in no small measure due to the New York Central policy of maintaining a power reserve to meet abnormal traffic demands.

New York Central locomotives—whether designed to haul 100-car coal trains or the *Twentieth Century Limited*—are all built to special New York Central specifications, and year after year represent the highest achievement in American locomotive construction.

NEW YORK CENTRAL LINES

BOSTON & ALBANY—MICHIGAN CENTRAL—BIG FOUR—PITTSBURGH & LAKE ERIE
AND THE NEW YORK CENTRAL AND SUBSIDIARY LINES
General Offices—466 Lexington Ave., New York



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with a Howell Portable Saw Mill. Turn your standing timber into high price building lumber at the mere cost of sawing. Big demand for lumber, lath and shingles. Keep your engine busy the year round making

Big Money In Custom Sawing for your neighbors. Howell saw mills are made in several sizes suitable for tractors of any size. Also Edgers, Planers, Lath and Shingle machines. Write for free Catalog, B-5.

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\$5 Down
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LESS than 1/33rd of 1% of cream—one drop of cream in 3300—goes past this separator to the skim milk pail. How could any separator get more cream? So why pay half again as much for a separator?

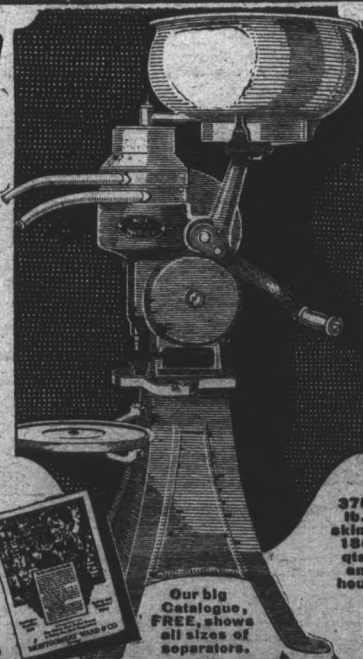
The Sattley Separator is made in our own factory—it is strong, firm on its base, smooth running, easy to turn and clean—and easy to buy. It stands up—and it bears our absolute guarantee.

Send \$5.00 only. We will ship you the separator. Use it for 30 days. If you are completely satisfied, you may pay the balance in 10 monthly payments. Write for the separator and ask for General Catalogue showing all sizes separators and complete line of dairy supplies.

Don't buy a separator until you investigate Ward's Sattley and learn how you save 1/3 or more through buying direct from the manufacturer.

No. 289M4615... \$48.80 (Cash \$46.00)
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Our big Catalogue, FREE, shows all sizes of separators.

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Genuine "Bayer Tablets of Aspirin" have been proved safe by millions and prescribed by physicians over twenty-three years. Aspirin is the trade mark of Bayer Manufacture of Monoacetic acid ester of Salicylic acid.

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BEST FOR FARM USE

Makes a quick, lasting job of belt lacing. Clinched teeth bind and protect belt ends. Approved by belt-lacing manufacturers for farm engine, tractor, threshing and all farm belts. Used by implement manufacturers. Sold by leading dealers in standard boxes or "Handy Packages." Sold by dealers everywhere.

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"Never Lets Go" Saves Time and Money

\$24.95 American Upward CREAM SEPARATOR

On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows large size easy running New L. S. Model. Get our easy

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Avoid ignition troubles—misfiring—dirty plugs—worn timers—short circuits—delays. Install our wonderful new ignition attachment. It makes starting easy, adds power, saves gas and eliminates all ignition troubles. Send for descriptive booklet and ask about our FREE TRIAL OFFER. American Bosch Mag. Corp. Box 5636 Springfield, Mass.

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"Reo" Cluster Metal Shingles, V-Crimp, Corrugated, Standing Seam, Painted or Galvanized Roofing, Siding, Wallboard, Paints, etc., direct to you at Rock-Bottom Factory Prices. Save money—get better quality and lasting satisfaction.

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MICHIGAN FARMER

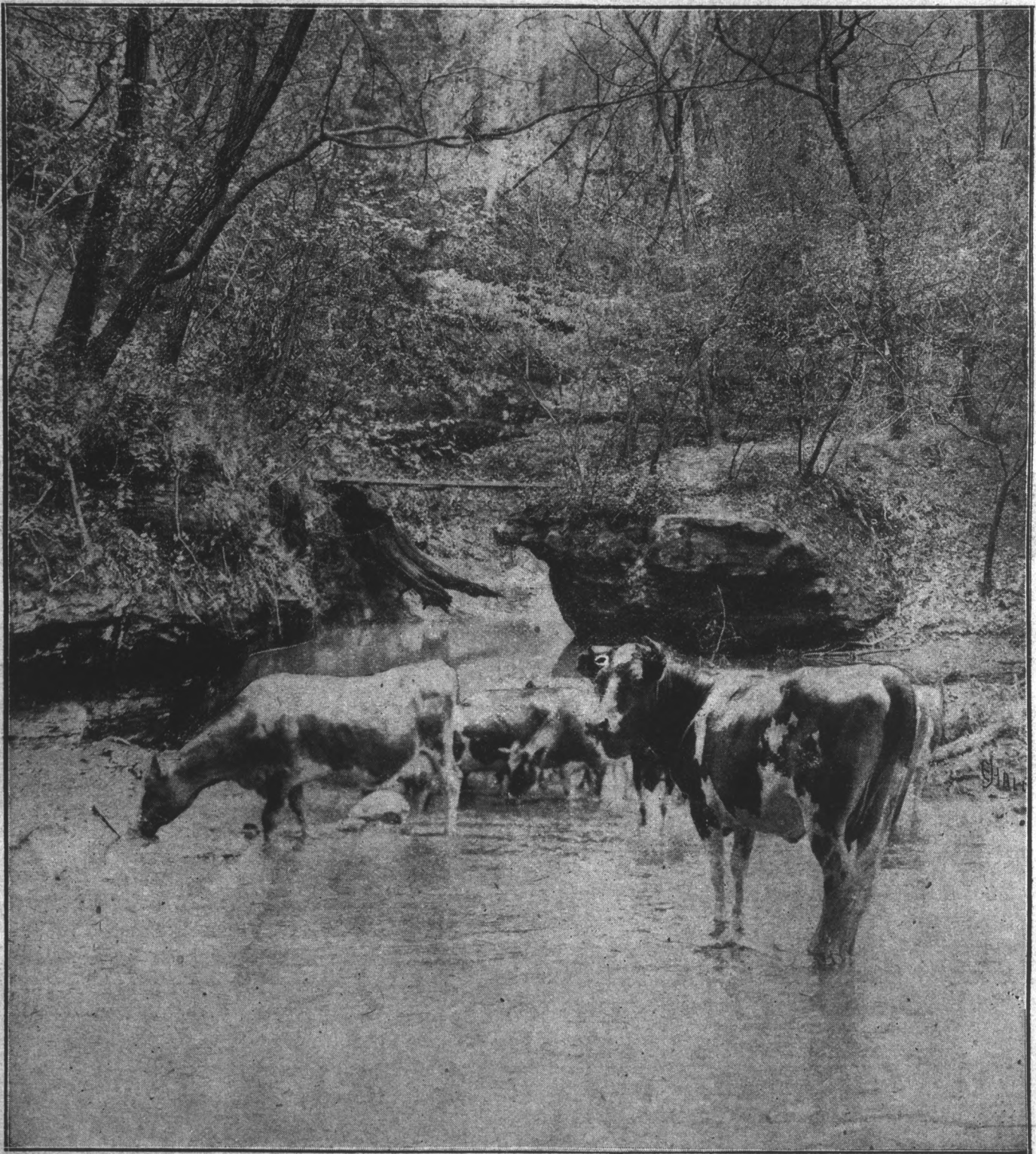
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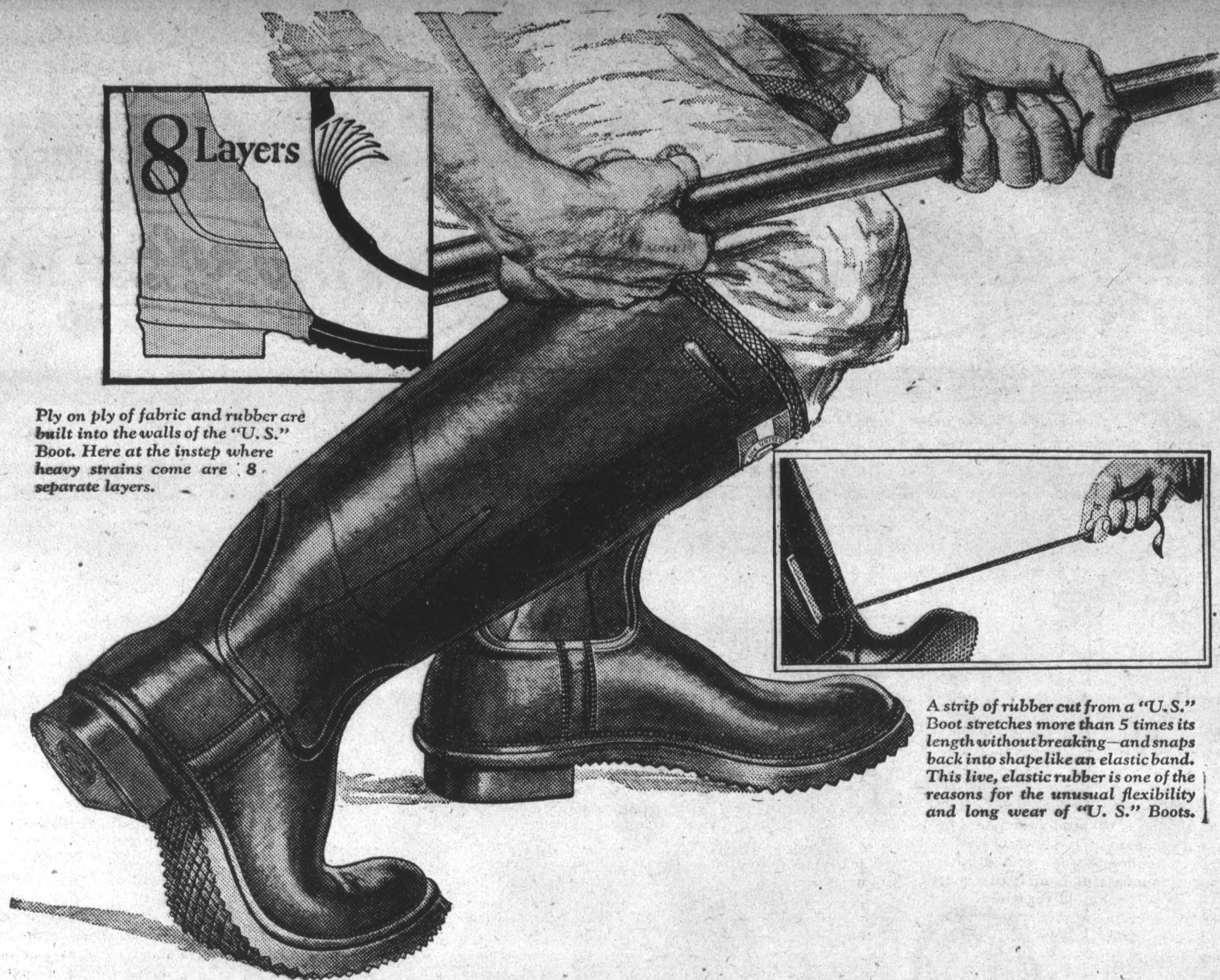
JOURNAL
ESTABLISHED 1843.

VOL. CLXII. No. 12
Whole Number 4297

DETROIT, MICH., SATURDAY, MARCH 22, 1924

ONE YEAR \$1.00
FIVE YEARS \$5.00





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United States Rubber Company



Ask for "U.S." Boots

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For this method of selling would be impossible were it not for the fact that each car, before shipment, has been examined by an impartial government inspector who has certified as to the exact condition of its contents. And his report is evidence, if necessary, in any court of law. Here, then, is a typical "Lot number" from the catalogue:

"Lot No. 1.
Acct. Seropian Fruit Co. RD 14181
shipped No. 5 Blackstone Cal. Santa Fe Rl 1080 open lugs malagas net 27,612.
GSI Grapes loose in lugs, lugs level full, clusters and berries from small to large, mostly medium, five to seven oc of berries show mildew scars, 6 to 8 pc soft crushed and otherwise defective good quality, stems fresh, berries firm, firm berries. Remainder of loads of ly attached, stock is of good color. Sug24pc."

Translated into common English, this pargon means that on November 5th, Refrigerator Dispatch Car Number 14181 left Blackstone, California, to pass eastward over the Santa Fe and Rock Island Railways, to be sold for the Seropian Fruit Company. It contains one thousand and eighty open lugs (or boxes) of Malaga Grapes, weighing in all, 27,612 pounds, or about 25 pounds of grapes in each lug. The fruit, as the government inspector at Blackstone says, was as described in the "GSI," or government state inspection. It takes a car of fruit about eleven days, normally, to go across the continent, so on the day in question this car must have been nearing Chicago.

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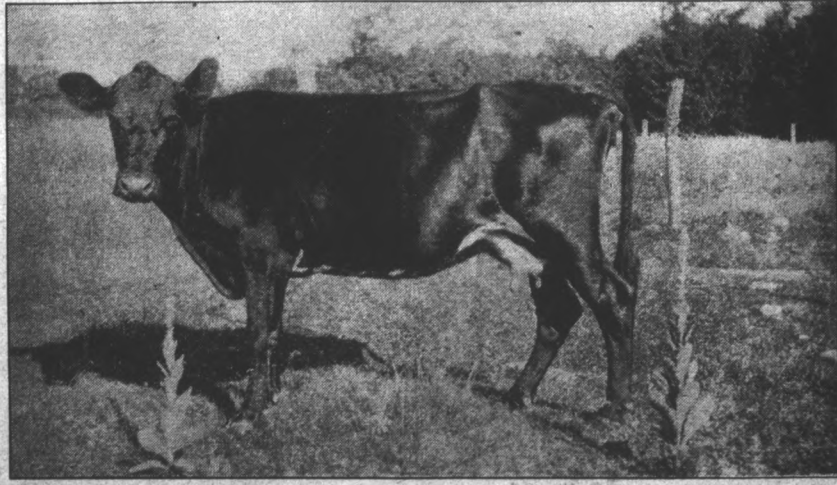
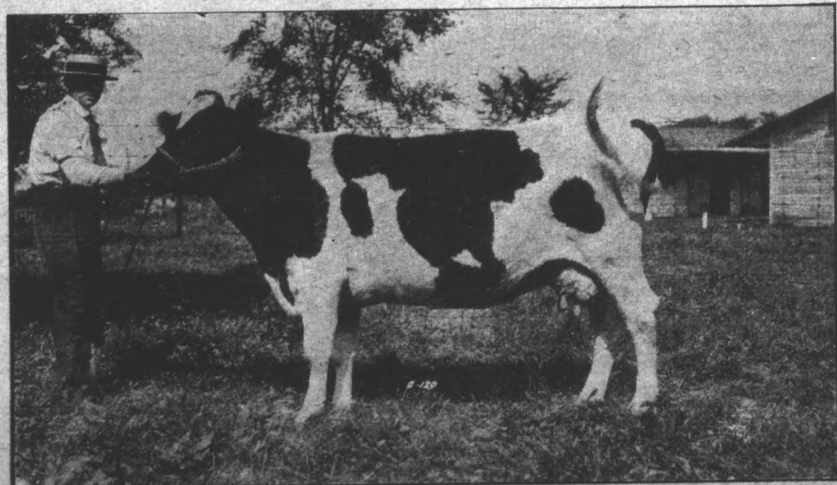
slump, and he will suffer for his venture, by making a loss. (One buyer was pointed out to me, who lost six hundred dollars on a car of grapes the previous week.) But in either event, the shipper will find the money in his bank the morning after the auction, and if there is any complaint by the buyer that the goods are inferior when received, why, there is the government's say-so as to what they were when the buyer bought them, and that's that. So the shipper goes on his way rejoicing.

In a little over an hour the entire days catalogue of forty-three cars is sold. Chicago takes the bulk of the grapes. When a lot is called in which the "GSI" report mentions lugs with lids neatly nailed on, grapes with little or no mildew, good color, and other favorable features, the bidding changes from a ton basis to a per package basis and becomes spirited. I saw one such car bring exactly twice as much money as Lot 1 that we started with. It is always refreshing to see the sure response of a free and unrestricted market to quality goods, whether grapes or potatoes.

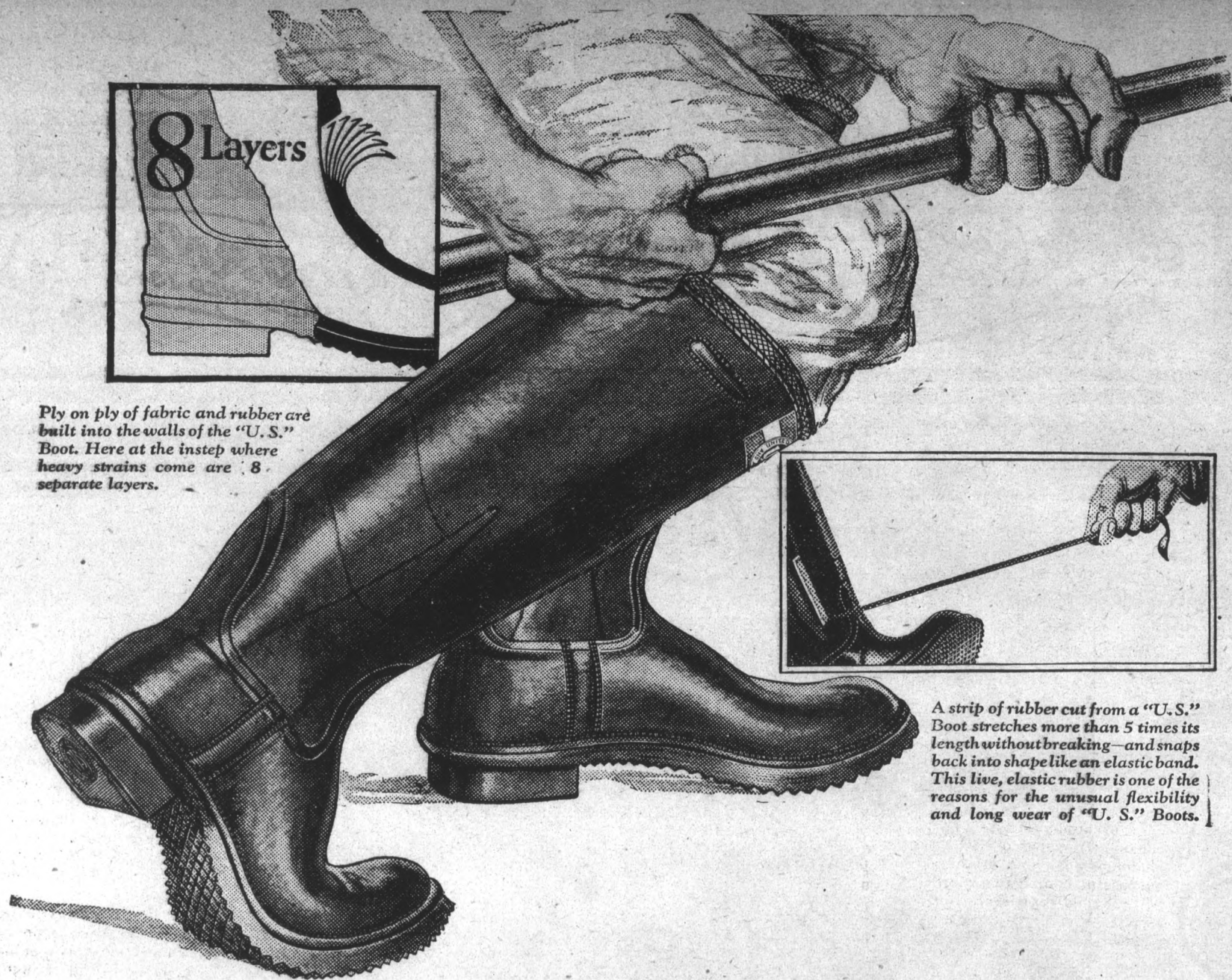
Most of the auction offerings this day were grapes. One car of fancy apples sold for 87½c per box to a New York buyer. With freight, they will cost \$1.77½ when they get to him. As soon as his purchase is recorded, the car is located by wire, and the railroad diverts it to him at whatever point he wants it unloaded.

As I walked out, I meditated upon this new trend in merchandising farm products. After all, who suffers when low quality goods are shipped and marketed? Can the farmer make a profit in such a highly organized market as this by shipping poorly packed, poorly graded produce, hoping to force it upon the trade? Is not the expense of shipping cull produce, that has to be eliminated at destination, a great annual tax upon the producer, in the shape of waste freight, waste packages and waste car room? For the purchaser is beginning to protect himself in advance, by an impartial government inspection at loading point.

What if this new science of radio is geared up to our marketing machinery? Don't it rather look as though with the world moving at such a rate, we farmers had better move with it.



The signs of the times point unerringly to more efficient dairying. Better cows will come through better breeding. Cow testing associations point out the way. These better cows will be given better care and more suitable feed. Here, too, we shall give way to cow testing associations. Furthermore—experience, health and education are going to popularize dairy products among all classes. This increased consumption ought to maintain prices on a basis, profitable to the efficient cow man.



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full, clusters and berries from small to
large, mostly medium, five to seven oc
of berries show mildew scars, 6 to 8
pc soft crushed and otherwise defect
good quality, stems fresh, berries firm
firm berries. Remainder of loads of
ly attached, stock is of good color.
Sug24pc."

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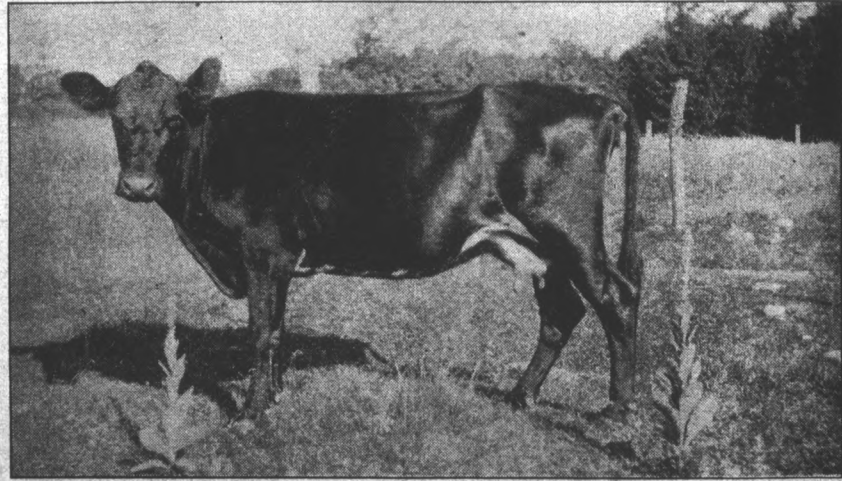
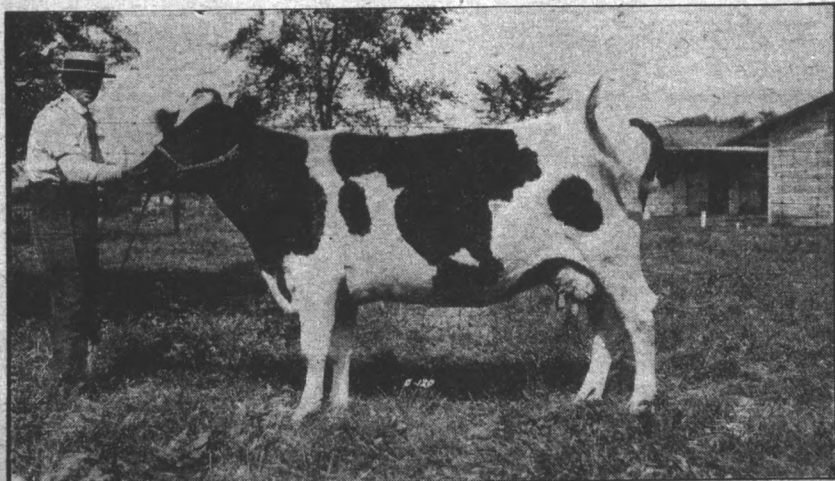
slump, and he will suffer for his venture, by making a loss. (One buyer was pointed out to me, who lost six hundred dollars on a car of grapes the previous week.) But in either event, the shipper will find the money in his bank the morning after the auction, and if there is any complaint by the buyer that the goods are inferior when received, why, there is the government's say-so as to what they were when the buyer bought them, and that's that. So the shipper goes on his way rejoicing.

In a little over an hour the entire days catalogue of forty-three cars is sold. Chicago takes the bulk of the grapes. When a lot is called in which the "GSI" report mentions lugs with lids neatly nailed on, grapes with little or no mildew, good color, and other favorable features, the bidding changes from a ton basis to a per package basis and becomes spirited. I saw one such car bring exactly twice as much money as Lot 1 that we started with. It is always refreshing to see the sure response of a free and unrestricted market to quality goods, whether grapes or potatoes.

Most of the auction offerings this day were grapes. One car of fancy apples sold for 87½c per box to a New York buyer. With freight, they will cost \$1.77½ when they get to him. As soon as his purchase is recorded, the car is located by wire, and the railroad diverts it to him at whatever point he wants it unloaded.

As I walked out, I meditated upon this new trend in merchandising farm products. After all, who suffers when low quality goods are shipped and marketed? Can the farmer make a profit in such a highly organized market as this by shipping poorly packed, poorly graded produce, hoping to force it upon the trade? Is not the expense of shipping cull produce, that has to be eliminated at destination, a great annual tax upon the producer, in the shape of waste freight, waste packages and waste car room? For the purchaser is beginning to protect himself in advance, by an impartial government inspection at loading point.

What if this new science of radio is geared up to our marketing machinery? Don't it rather look as though with the world moving at such a rate, we farmers had better move with it.



The signs of the times point unerringly to more efficient dairying. Better cows will come through better breeding. Cow testing associations point out the way. These better cows will be given better care and more suitable feed. Here, too, we shall give way to cow testing associations. Furthermore—experience, health and education are going to popularize dairy products among all classes. This increased consumption ought to maintain prices on a basis, profitable to the efficient cow man.

MICHIGAN SECTION THE CAPPER FARM PRESS



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DETROIT, MARCH 22, 1924

CURRENT COMMENT

Progress In Good Government

RECENT sensational developments in the Senate investigations being conducted at Washington make the consideration of the question of good government both pertinent and timely, especially with a view of determining whether we are progressing or retrograding in the matter of good government.

The nature of these developments is such as to have a strong tendency to shake public confidence in high officials and create a general impression in the public mind that corruption and intrigue are rife in official circles and that plunder is a common aim among government officials. Unfortunately, this is a logical conclusion, not only in view of recent developments, but in consideration of the well-known and widespread waste and profiteering in war equipment and supplies.

But in reality these revelations are encouraging signs of progress in good government, rather than of retrogression. It is only in very recent years that a government policy of conservation of natural resources was inaugurated. During our entire previous history as a nation, these great natural resources have been looked upon as fair plunder, and have been grabbed by private interests, with enormous profits to the predatory holders, and a reckless waste in their exploitation. Public lands, enormously rich in timber and mineral resources and valuable water rights, have passed to private ownership with small recompense to the public, in pursuance of what now appears to have been an uneconomic and unwise public policy.

It is impossible to conceive that under such a policy intrigue and corruption would not be employed. But it does not follow that the policy was conceived in iniquity. With an immense new country, with what appeared to be almost inexhaustible natural resources, to develop, it was a consistent and defensible policy, which resulted in a development of unparalleled rapidity. A network of railroads were built, cheap materials were produced in abundance, industries grew apace and a long era of prosperity ensued, during which the wisdom of the policy was not generally questioned.

But with the slowing up of the program of development and expansion, a different situation was encountered. Not only was there a very considerable depletion of some important natural resources, but there was a

marked tendency on the part of the public to figure interest on the value of unearned increment in their holdings as an operating cost and using various other devices to increase the price of their products. Then the wisdom of the established policy began to be seriously questioned and a policy of conservation of our remaining natural resources was inaugurated.

While most regrettable, it is not surprising that the final attempts at public plunder, which gave rise to the present developments, was made. Nor is it surprising that intrigue and corruption seem to have been marked in certain of our administrative departments.

But it is an encouraging evidence that we are making progress in honest and efficient government that these cases are not going unchallenged, and that while political log rolling may be in evidence in the investigations it has not greatly befogged the issue of clean administration of sound government policies.

As compared with past generations, present-day citizens of the United States have reason to congratulate themselves on the progress being made in good government, due to an aroused public conscience among citizens and public officials as well, to which the recent revelations may be ascribed. Regrettable as the events leading up to these revelations may be, their exposure should increase, rather than diminish, our confidence in the integrity of our government.

Watch The Seed Corn

ON another page of this issue, appears a timely article warning farmers generally of the importance of looking to the quality of their seed corn.

Good seed is imperative to a good crop. You cannot succeed at growing corn, or any other crop, without having high germinating seeds with plenty of vitality to give the young shoots the start needed to reproduce healthy, high producing plants.

The closing months of 1923 did not favor the proper maturing and housing of corn. As a consequence a lot of corn is mouldy, much is rotting, a copious amount shows a very low percentage of germination, and much that does germinate is too weak to make the kind of plants you want in your field.

The advice is, therefore, to look early to your seed corn supply. Test it right away. Do not test a few ears, but every ear you intend to plant. If you should find that the corn you had depended upon is not good, there is a chance that you can secure suitable seed elsewhere.

On the other hand, if you have corn showing high germination and high vitality, it would be the part of wisdom to save all the good ears you have to supply your less fortunate neighbor who will be wanting it before the planting season is over.

Milk Consumption Increases

ONE of the most comprehensive surveys yet made of the consumption of dairy products has just been completed by the department of agriculture.

The conclusions reached are encouraging. They show a gradual increase in the amount of milk used by our people. The average consumption of milk and cream in 1921 was 49 gallons, the next year this average was increased to 50 gallons and last year it jumped three points to 53 gallons.

Figures tabulated from some 30,000 farms and data covering 25,000,000 city people formed the basis of these conclusions. The investigators further found that farmers owning cows were the heaviest users of dairy products; while the farmer who had no milch cows was the lightest user, the city consumer ranging between the two. The average for the farmer with

cows was 1.78 pints per day, for the farmer without cows, 0.775 pints, and for the city consumer 0.87 pints per day.

In our opinion these figures justify two conclusions: First, that, for the sake of health, the cow-less farmer ought to get a good healthy milk producing machine or otherwise arrange for an ample supply of dairy food; and second, that the effective educational work urging city people to a wider use of the products of the dairy be continued and extended.

Discontent And Progress

THERE is a discontent born of idleness. It has no part in the advancement of the world. People who have nothing to do become tired of themselves; they are overwhelmed with their own leisure and ultimately find themselves in the region of perpetual despair.

But that other discontent, coming to us as we measure ourselves and our work by our ideals, means progress. It urges us to leave behind that which is old, and step on to the new. It furnishes the seed to industry, moves us away from narrow selfish desires to efforts for the improvement of those about us as well as ourselves.

And, paradoxical as it may seem, this second discontent is the only one that can bring real joy. Happiness is a sort of a by-product. We do not get it by direct effort but by planning and laboring to attain some object in life. It is by losing our life in our work through our devotion to high ideals, that we discover the real essence of living.

The Sleeping Giant

ALL through the past months there has been a great power lying dormant. A giant has been sleeping to awaken soon and come to the fullness of power again another season.

That giant is the soil, the very dirt we trod under our feet. Inconsequential and despised as it may seem, it teems with life and energy, the very energy from which we get our own.

That giant sleeps but will soon be awakened by the warmth of the sun which has apparently been spending the winter down at Palm Beach or other winter resorts. The sun never sleeps but the soil does for it needs a rest.

We, who are so dependant upon what the soil gives us, are almost its masters. If we will but spend upon it a little of the energy which we have derived from its products, it will return to us energy a hundred fold.

It seems that some of us do not want to have that giant work for us to the best of its ability for we do not do our part by giving it the materials to work with. Those who have given this giant its just dues find it never failing.

It is to your selfish interest to have this giant work hard for you this coming season. With the proper materials and care, he will produce efficiently and economically those things which the world most needs. Do your part, and the sun and soil will repay you for your toil.

The Shifting Farmer

WE are in the habit of classifying farmers as the stable element in our society. We look to them for conservative thinking and action in times of crises and during waves of radicalism.

But as compared to the farmer of our European countries, the American tiller of the soil is very shifty. For the year 1922, nineteen percent of the farms of the country had new tenants or owners upon them. Twenty-six percent of the tenant farms changed operators that year, as did also six percent of the owned farms.

This condition is improving, however, according to the census figures. In 1910 the average period of occupancy of the farms of the land was 8.4 years; while in 1920 this term had increased to 9.2 years. A difference in the manner of taking census data makes these figures a little uncertain, but they, without doubt, show the tendency of farm occupancy in America.

The highest percentage of shifting is in the southern states where negro tenants and croppers aid much in swelling the figures; and the lowest percentage is in the New England and other northern states.

The statistics shows us further that occupancy varies widely among the different classes of farmers. Mortgage free farms were occupied on an average of 14 years; mortgaged farms for 9.2 years; part-owned, 8.6 years; managers, 4.4 years; cash tenants, 3.8 years; and share tenants, 2.6 years.

The appeal of new land, our rapidly developing industrial life, the ability of our farmers to rise from one class to another in farming operations and, over and above all, the tendency of the American people to jump from one line of endeavor to another, are all underlying causes in this transition.

Since continuance of occupancy tends towards a better type of farming, it ought to be the ambition of every man, or woman, who hopes to continue in the farming business to strive for that type of land tenure which makes for greater stability.

Immigrants

I SEE by the papers that they is havin' lots of doin's about this immigrunt business. They sometimes send over a boat load and gotta send it back 'cause the country is full for a month. They don't want too many for come at oncet 'cause they is enuf bootleggers here now.

The whole trouble is many o' them folks what come over here ain't never been weaned before they come and they just gotta have their bottle. Our offshulls is, therefore, havin' lots a trouble tryin' to get them to ferget their attachmunts to their Mother country, specshully when them offshulls likes them kinda attachmunts themselves.

There's immigrunts and immigrunts. Fer inst., there was one what come in our midst a couple weeks ago. He is Zek Jones'es baby and they is havin' lots a trouble with him tryin' to make him see the ways of this country. Like all of them, he is hittin' the bottle too. I tell you, he's so what-you-call radical that he ain't got no respect fer the laws of this country, specshully when it comes to disturbin' peace.

There's some folkses what has lived here all their lives what oughta be admitted to this country. Fer inst., Joe Hassenfeffer was born on the farm where he lives and married the girl next door. Now, when they wanta take a trip, they go to church. They is entirely satisfied with themselves and their farm. Some day somebody oughta introduce them to US of America so they will wanta vote fer the President of US and the cownstable of our township, and will say huraw for US when they see the American flag.

But you know, immigrunts is nice things to have. Fer inst., if it wasn't fer immigrunts we wouldn't have nobody ta sell us bananas, or ta run loan shops and Chinese restrunts or buy rags and old iron. The way some of them immigrunts is makin' money, I know there ain't nothin' allin' them aliens. Sometimes, when I feel grunty, I wish I was a immigrunt.

HY SYCKLE.



Does Not Know Beans

At Least, Until He Gets Acquainted with the Robust Variety

By D. F. Rainey

THE farmer of today knows the advantages of using good seed. From bitter experience he knows it is necessary to examine the tag on each lot of seed for germination; he already has a large assortment of weeds on his farm and wants no new ones, so he looks to see what the purity is, too.

And then during the last few years he has heard a lot about "better varieties," "high-yielding varieties," and "adapted varieties." Instead of growing just "corn," the Michigan farmer of today has "Duncan," "M. A. C. Yellow Dent," "Golden Glow," "Laughlin Golden Dent," "Pickett," "Silver King," and other varieties from which to make his selection. Over a period of many years these varieties have proven their worth and stood the acid test of time.

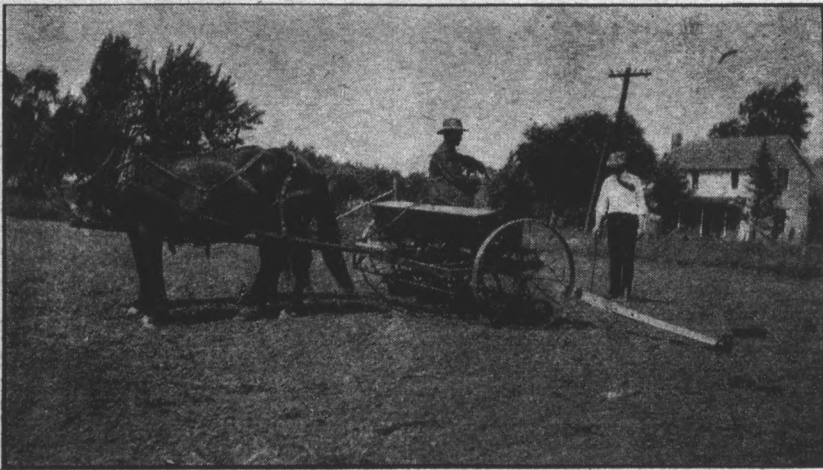
Beans differ from corn, however, in this respect: That there are not several high-yielding varieties from which to choose, according to the data secured from tests conducted by the college both at the experiment station and in variety tests located in many

the Robust. This is a mighty fine showing, but further inquiry will disclose that one of these four varieties was Robust which had been grown in that locality for two or three years. Another one was the 1000-1 variety, which was also planted in all four tests the same as the Robust, and the average of all these tests favored the Robust by six bushels per acre, the Robust yielding twenty-eight and the 1000-1 yielding twenty-two bushels per acre; a cash difference of over \$15.00 per acre favoring the Robust.

In a test last year on F. D. King's farm, near Charlotte, the following yields were obtained:

Variety.	Yield Bush.
Robust	39.95
1000-1	36.67
Bottomley's seed	36.31
*Local seed	33.20
Estelle's seed	32.71
Gorn's seed	31.13
Great Northern	29.32
*Variety not known. Seed furnished by high school.	

For this test Mr. King used a field which in 1922 was in clover and pastured by hogs. A good stand of clover



Planting Beans in Variety Tests conducted on the Farm of Carl DeWitt and under the direction of Agricultural Agent Pressly of Gratiot County.

different counties. The fact is, there is only one variety, the "Robust," which has uniformly given a high yield when planted in good season.

The fact that the Robust beans are about a week later in maturing than the common bean, should be borne in mind and the field fitted so that planting can be made early in June, preferably by the fifth in lower Michigan. Because the Robust is later maturing has meant immature beans in late planted fields, resulting in a higher pick, and consequently being condemned for what was considered a characteristic, whereas it was due to late planting. If Robust are planted in season and have as favorable conditions during the growing season and at harvest time, they will have no higher pick than any other bean, leaving them that characteristic of high yield as a sound basis for recommending their more general use.

Each year, during the past four years, the Farm Crops Department of the Michigan Agricultural College has cooperated with some farmers in different sections to put out demonstrations where the Robust bean will be planted with local varieties in the same field and receiving the same care. At harvest time equal areas are harvested from each variety, the beans threshed and the yield determined for each. This past year there were four such demonstrations conducted and considerable interest was shown, especially by those farmers who furnished seed for these plots.

Altogether, there were forty varieties, strains, or duplicates other than the Robust seed, which was furnished by the college, planted and, of these forty, only four apparently outyielded

turned under means a lot of plant food available and goes a long way toward insuring a profitable bean crop. Couple this with a well-prepared seed-bed, early planting of good seed, and clean cultivation, and the farmer has the best possible insurance on his bean crop.

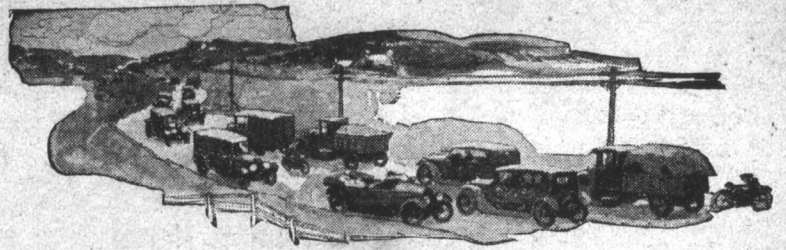
It is the yielding ability of the Robust which is making it gain so rapidly in popularity. Each year it is placed on trial in similar demonstrations where it can win only on its merits, and each year, as in the past, it "brings home the bacon."

The Great Northern variety was tried out last year for the first time. It is a new variety introduced from Minnesota and came well recommended. However, it fell down badly the first year. It will receive further trial as one year's results are not conclusive, merely an indication. "As an average of all tests, the Great Northern yielded only eighteen bushels per acre compared to twenty-eight bushels for the Robust."

An increase of six bushels of beans per acre will not make bean growing profitable for some men, but it will mean that much "velvet" for some others. The farmer who is dependent on his farm for a livelihood and trying to make money in these times, finds it necessary to pay careful attention to the variety of crop he raises, as the difference between some high-yielding varieties and other low-yielding ones may make the difference between a little profit and a considerable loss on the undertaking.

Sam says: Some folks have come to believe that their heads are merely hat-racks.

Tons of lead roll along every highway

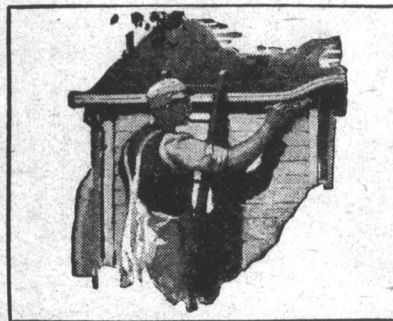


HOW much lead is in your automobile—your truck—your tractor? In all the new motor vehicles built annually there are about 110,000,000 pounds of lead.

The storage battery in automobile, truck, and tractor is mostly lead. Lead-tin solder seals the seams of the gasoline tank and radiator. It is used in the generator that charges the lead storage battery.

Lead is in the hard rubber switch button in your automobile, the soft rubber insulation about the wiring of your engine. Your rubber tires, the rubber top of your car, and the rubber mat on your car step contain lead. Electric light bulbs on your car are made of lead glass.

Lead serves you long and faithfully in your motor vehicle. But as paint, lead is more widely used. As white-lead in paint, it helps to protect your house, your farm buildings and farm equipment.



This man is giving the farm house white-lead protection against the attacks of the weather

In one year approximately 350,000,000 pounds of white-lead paint are used in this country on wooden and other non-metallic surfaces. This record shows the awakening of property owners everywhere to the necessity and economy of paint protection.

White-lead a standard protective paint

White-lead paint is the most effective protection for farm buildings against rot and decay. Pure white-lead mixed with pure linseed oil makes a paint for exterior painting that has been a standard for generations. Skilled professional painters swear by it. Paint manufacturers use it in making their best paints.

Pure white-lead mixed with flattening oil gives a paint that protects and beautifies interior walls and woodwork. This paint can be tinted to any color desired to harmonize with the decorative scheme in your rooms.

Just as white-lead protects wood and non-metallic surfaces about your farm, so red-lead keeps your metal from rusting. Unless protected, metal framework of windmills, iron fences, iron and steel implements and machinery often rust out before they have a chance to wear out.

If you don't belong to the ever-increasing army of property owners who believe in the maxim, "Save the surface and you save all," join now. Save the wooden and non-metallic surfaces with white-lead and your metal with red-lead.

Handy Book on Painting

If you want to know how to save the surface of wood, masonry or metal on your farm with paint, write for our *Handy Book on Painting*. This book is a storehouse of paint facts and formulas and will be sent at your request.

Producers of lead products

Dutch Boy white-lead is the name of the pure white-lead made and sold by National Lead Company. On every keg of Dutch Boy white-lead is reproduced the picture of the Dutch Boy Painter shown below. This trade-mark guarantees a product of the highest quality.

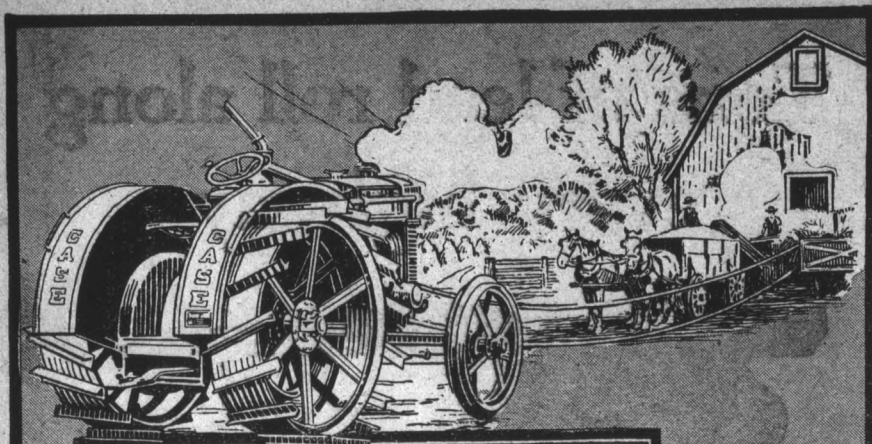
Dutch Boy products also include red-lead, linseed oil, flattening oil, babbitt metals, and solder.

National Lead Company also makes lead products for practically every purpose to which lead can be put in art, industry and daily life. If you want information regarding any particular use of lead, write us.



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TIME was when a farmer could make money by doing fair work with any kind of power and machinery.

Today—your earnings and profits are very largely governed by the quality and timeliness of your work. Therefore, *highly efficient power and machinery are essential to success.*

Through larger yields at lower cost, increased crop acreage or profitable custom work you can increase your earnings by the use of Case machinery. This is the invariable experience of Case tractor owners, because:

With plenty of power in one compact unit, well adapted to both traction and belt work, they save labor, speed up all the work and improve its quality and timeliness.

The unfailing dependability and durability of Case tractors enable them to do more and better work season after season for many years.

These are sure ways to increase farm earnings. A new book, "*Modern Tractor Farming*," tells how farming can be and is being made more profitable. Write for it TO-DAY.

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AGRICULTURAL NEWS

TO FURTHER PROTECT THE DAIRYMAN:

A MOVEMENT has been started, backed by the big creamery and dairy organizations, to secure an amendment to the Fordney-McCumber tariff law, placing a tariff on copra from which coconut oil is made, and raising the tariff rates on butter and other dairy products. It is planned to enlist the support of all the dairy and farm organizations for this bill, which is to be introduced by Congressman Young of North Dakota.

WOULD MARK IMPORTED SEEDS.

THE Department of Agriculture is making an effort to secure legislation which will enable it not only to prevent the sale of impure misbranded seeds, but to prevent the sale of imported seeds to be planted in sections where they are not adaptable. A bill to permit the department to dye imported seed not generally adaptable to the production of good crops in this country has been introduced by Congressman Haugen of Iowa.

TO CONTROL FOREIGN MONOPOLIES.

SENATOR Arthur Capper has introduced a bill in the Senate aiming at government control of foreign monopolies in imported raw materials essential to American industry. In a letter to Senator Capper urging the enactment of this proposed measure, Secretary of Commerce Herbert Hoover says that as a result of an investigation made by his department, abundant evidence is in hand to prove unquestionably that foreign monopolies or combinations are potentially or actually in control of prices and distribution of various commodities in which the farmers are especially interested.

SENATE TAKE UP SHOALS FIGHT.

THE Muscle Shoals fight is now transferred to the Senate with all the opposing forces, including the power and fertilizer interests, led by Senator Norris, chairman of the committee on Agriculture.

Senator Norris has already undertaken to forestall acceptance of the Ford offer by presenting a bill providing a "super-power system to conserve, develop and operate," at government expenses, all natural resources. He undoubtedly is well aware that neither this bill or any other government ownership and operation proposition stands the slightest chance of getting through Congress.

It is well known, however, that Senator Norris will not carry the Senate Farm bloc with him. Senator Ladd of North Dakota, Senator Capper of Kansas and other senators who are good friends of the farmers and leaders in agricultural legislation are strong supporters of acceptance of the Ford offer, believing as they do that it presents an opportunity for the practical development of an air nitrates fixation industry in this country for the benefit of both producer and consumer.

POTATO CO-OPS. ADOPT CONTRACT.

AT a joint meeting in Cadillac Wednesday of the Board of Directors of the Potato Growers Exchange, representatives of the Market's Department of M. A. C., managers of local Co-Operative Associations, and County Agents in potato producing Counties, plans were laid for a drive that will give the Exchange an assured volume of business and a product of such high quality that they can command a pre-

mium in the open markets. Mr. Hale Tenant proposed a campaign whereby 50,000 acres of potatoes would be signed up to a five-year contract with the Exchange, thus assuring this organization of the necessary volume. He pointed out that this is not an attempt to control prices but to regulate the flow of the commodity to market and to maintain the organization which is chiefly responsible for protecting the growers' interests in dealing with the independent buyers.

Mr. Gifford Patch presented a form of contract between the grower and his local association which is a combination of the desirable features in contracts in use all over the country, adapted to Michigan conditions. It provides for the 5-year contract, for a seasonal pool, as determined by the Board of Directors of the Exchange, for no handling of non-member produce, a penalty for breaking the contract, delivery of the potatoes AT THE DIRECTION of the Exchange, and that it would not be binding unless 50,000 acres signed up. This proposed contract received a vote of approval from those present and it seemed to be the consensus of opinion that a drive for membership should be initiated if the organization is to develop into a genuine sales agency for the farmers.

Prof. J. E. Horner stressed the fact that the organization could accomplish the greatest good by demanding and turning out a higher quality article and by strict observation of the grading laws. Independent buyers in many cases are disregarding these grading laws and are hurting the reputation of the Michigan potatoes.

Robert Wiley who has been identified with the cooperation, marketing of potatoes since the beginning of the Michigan Exchange, was chosen as organization manager. The membership campaign will begin in the Grand Traverse region.

HOUSE ACCEPTS OFFER FOR MUSCLE SHOALS.

AFTER a hard-fought contest over more than two years the House of Representatives has voted to accept Henry Ford's offer for the purchase of the Muscle Shoals nitrate plant and leasing the water power, by a vote of 227 to 142. The bill is now before the Senate for discussion and action.

The bill as passed provides that Ford will have the right to lease for 100 years the water power at Muscle Shoals, and purchase and operate the nitrate plants. For the power he is to pay the government an annual rental of 4 percent plus \$55,000 for maintenance and repairs. He is to pay \$5,000,000 for the nitrate plants. He is to organize a \$10,000,000 corporation to develop the nitrate plants, and agree to manufacture a minimum of 40,000 tons for fertilizer annually and sell it to farmers at a profit limited to eight percent of the annual operations.

WHEAT TARIFF INCREASED.

BY Proclamation of President Coolidge the tariff on wheat has been raised to 42 cents a bushel as compared with 30 cents the present rate. The rate on flour is raised from 78 cents to \$1.08 a hundred pounds; and millfeeds were cut from 15 to 7½ percent ad valorem.

This is the first change in the duties of the Fordney-McCumber tariff act since it became a law, under the flexible tariff provision. The new rate increase is based on the difference in cost of production in the United States and Canada.

1924 → 1928

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THE real test of a comfortable shoe is to bend the sole back as illustrated on this page. Consider this fact: In walking, each of your feet uses up as much or as *little* energy in bending the soles of your shoes (depending on the kind you wear), as both of your hands exert in this test.

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Solid leather construction throughout, using only the very best grades of leather, the finest workmanship in every detail, and years of manufacturing skill and experience are other factors that enter into the creation of *Comflex satisfaction*.

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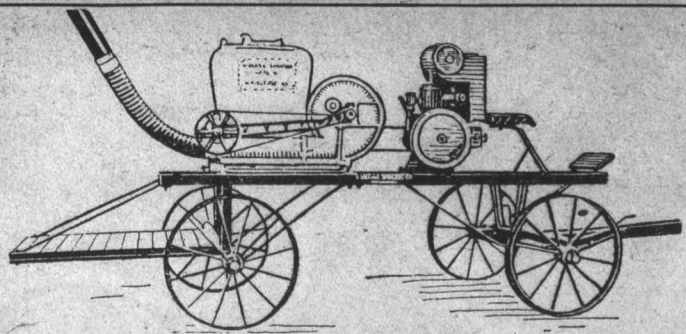


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Look Out for Seed Corn

Situation Is Worse than Any Time Since 1917

By H. C. Rather

MICHIGAN farmers are this year confronted with the most serious seed corn situation that has faced them since that fateful season brought about by the immature corn crop of 1917. A droughty summer seemed to slow up the development of corn in mid-season. This, coupled with a rainy fall left it at harvest time with a very high moisture content and much of it decidedly immature.

Many farmers, too, by the favorable corn years just preceeding, had been falsely led to a belief that they could mature a corn much larger than that which was really adapted to their locality. One farmer in southern Michigan capitalized the size of his corn with his neighbors and, on the basis of the promising appearance of large rough ears, sold them much seed. The result was nearly 2,000 acres of immature corn grown from that seed.

Immature corn has other dangers besides its unfitness for seed. Several of the sheep feeders reported serious losses as soon as they started feeding new corn high in moisture. The difficulty of drying it down gave excellent opportunity for mold to set in and much of it has actually rotted with this and similar growths.

This article, however, is primarily concerned with the present available seed supply and the insurance of the safety of the 1924 crop.

At harvest time, several members of the Crops Department of the Michigan Agricultural College gathered corn in widely scattered sections of the state and had moisture tests made. The lowest test recorded at this season was 35% moisture. They ranged from this to 47%. Corn with such high moisture content needs the utmost care if it is to make satisfactory seed the next spring, and only in rare instances has such care been given.

The Michigan Crop Improvement Association, in its inspection of seed corn for certification, has had an opportunity to follow this further. Since January, its inspectors have been looking over prospective seed corn and making moisture and germination tests. Invariably, corn not artificially dried has contained more than 20% moisture and invariably, too, at this season such corn has failed to give a satisfactory germination.

The danger is not entirely one of freezing. Crib corn, of course, is very unsatisfactory for seed, because the high moisture content has made possible serious freezing injury. With this, however, had gone an equally serious loss because of mold and this injury has taken place only recently and is still taking its toll.

One lot of seed showed a germination of 95% in December, but since that time has molded so badly it would only germinate 77% on a recent test. Other lots dried without ventilation have had mold spread thru them and are germinating only from 50 to 80 percent. Neither can such a loss of vitality be counteracted by heavier planting for it involves not only a low percentage of viable seed, but it also means a lack of vigor sure to cause serious losses where such seed is planted.

The remedy for the situation is obvious. The farmer who harvests a good corn crop next fall will be the one who plants only seed which has been carefully tested this spring and shows a strong and vigorous germination. The sprout should be clean with a well developed root system and a complete absence of moldy or diseased growth. Even though careful drying precautions have been taken the farmer will be wise to ear-test all of his seed. The rag doll tester or the sand box germinator are easily made use of on any farm and full directions on handling

these tests are in Bulletin No. 289, which may be secured from the Michigan Agricultural College, at East Lansing.

Many farmers are going to find themselves with no suitable seed corn on hand. Their only alternative is to buy good seed from some one who has taken care of it. Good seed corn of a desirable variety is always cheap. Even at six or seven dollars a bushel, it costs only \$0.80 to \$1 to seed an acre of corn, less than the cost of planting an acre of wheat or oats with just common seed. Dependable certified seed can be purchased for two or three dollars less than these prices.

While more corn has been rejected because of poor germination than ever before, the Michigan Crop Improvement Association with headquarters at East Lansing, has available information as to reliable sources of seed corn of such prominent varieties as Duncan and Laughlin corn, for southern Michigan; M. A. C. Yellow Dent and Pickett corn, for central Michigan; and Golden Glow and Early Pickett for the sections further north. The certified seed available this season is all fire-dried to a safe moisture content and in recent tests it all has germinated 95% or better.

A recent article appearing in a national farm publication suggested a danger that farmers might over-do the corn acreage in the coming season. In view of the seriousness of the seed corn situation, which is even more acute in the central part of the corn belt than it is in Michigan it would seem that there is little likelihood of there being too much corn produced in 1924. Certainly such a condition will not prevail in Michigan. The extensive dairy business of this state as well as the large feeding interests have always made Michigan a corn importer. Prices for the crop here are relatively higher than in the states to the south of us, due to protective freight rates, and the acre value of corn in Michigan is higher than it is in Iowa, Illinois, or Missouri—the three leading corn states.

With this in view, Michigan farmers will be acting wisely to put in at least a normal acreage of corn the coming spring and they should take every insurance, especially as regards seed, to see that the crop returns a maximum per acre, for therein lies the greatest profit in their enterprise.

THIS FARMER GROWS CHICKORY.

CHICKORY does well on soils that are a little too light for growing sugar beets. We have grown this crop for the past four years. It has paid us as well as any crop we have grown. During dry seasons there is less likelihood of failure than with many crops, and, in wet years, it also brings favorable returns for us.

The crop is grown and harvested in much the same manner as beet. The care is not so great and stock like the tops, although we have not been so disposing of them, but have spread them over the land as fertilizer. The crop does not appear to be hard on the land, particularly where the tops are plowed under.

Last year we received \$10.20 per ton delivered at the station. The company for which we grow advanced money on the crop after the rows had been thinned. This has been appreciated by those who are growing the crop in this section (Gratiot Co.)

Some farmers object to the crop because the roots left in the field grow the following season. This has not given us trouble since we cut the plants down before they go to seed.—Elmer Hevel.

BEEES MAKE BETTER FRUIT

To secure best yields you should have bees. Most of the "June Drop" is due to a lack of bees. Our Free Booklet "Bees and Fruit" tells you how to stop this loss.

WRITE FOR FREE BOOKLETS:

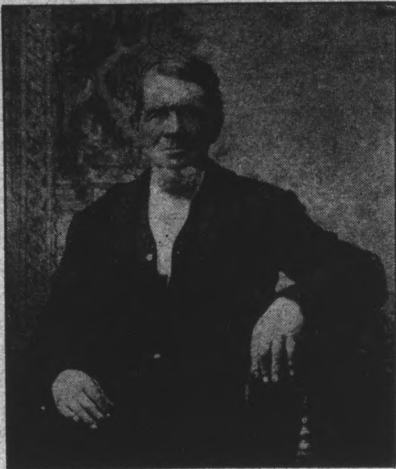
"Bees for Pleasure and Profit" for you who want to begin beekeeping. "Better Beekeeping" for you who want to keep your bees better. Our Big Catalog for you who are experienced beekeepers. Tell us your occupation.

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ONE FARM IN ONE FAMILY FOR THREE GENERATIONS.

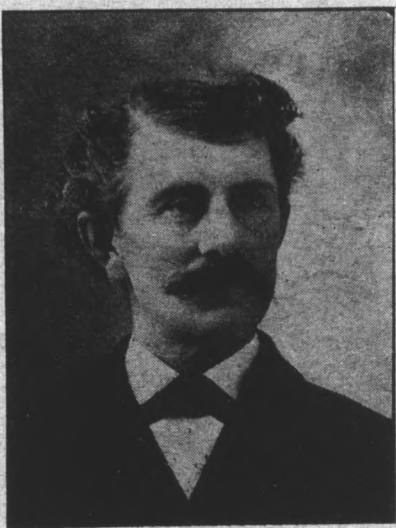
It is not a common thing in America for people to "stay put." There has been so much room in America, such vast richness to be exploited, such a wide range of opportunity, that her adventurous, ambitious, restless inhabitants are ever on the move, stopping her for a year, there for a decade and sometimes for a generation, then



Elder Bray Came in the Forties. on to distant pastures which always look greener.

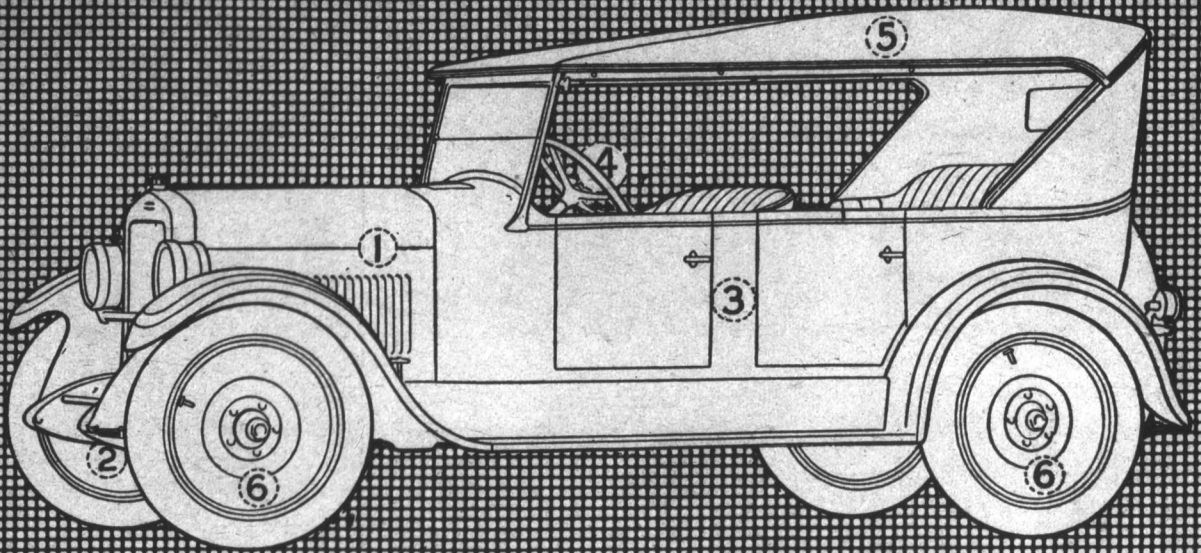
But there are exceptions. Here and there we find farms that have remained in one family since they were homesteaded. Much less often we find families that have remained on one farm generation after generation since Indian days. It is this type of farm life that stands for sustained soil fertility and permanent agriculture. Not until we accept the old farm as a permanent home and a family possession to be handed down to posterity after we are gone, are we inclined to conserve its natural wealth. When we come to look upon it as such, however, it is but human and natural that we strive to leave it better, richer, more capable of sustaining life than when it came into our possession.

The Pioneer Stock Farm in Ingham County which has been under the stewardship of the Bray family for close onto a century is a good example of this system that means permanent



The Second Generation. agriculture. The elder Bray came as a young man and settled on the land among the Indians, the first white man in that section. He built his log cabin on the banks of the Cedar river and began to carve out his fortune. He was a friend to the Tribe of Chief Okemas, after whom the little town that later sprang up beside his farm was named. His son took up the work that he had started so well, and during his generation the farm became widely known as one of the leading stock farms of the state.

Charley, the grandson, now has charge and is carrying on in regular order, proud of the fact that his people have had vision enough to protect and preserve the land. He handles a great deal of line stock of good breeding and takes much satisfaction from seeing the old farm produce abundantly.



Check these advanced features of the True Blue Oakland

- 1 Plenty of power—for hills, mud and sand, a new smoothness, and a wonderful economy—these things make Oakland's six-cylinder engine, of the most advanced construction, ideal for country driving.
- 2 Four-wheel brakes—simple, long-wearing, and easily adjusted—furnish complete safety. Oakland alone, at its price, provides this proved safety feature!
- 3 No need to wait till spring to clean an Oakland. Mud and dirt can be rubbed off its new finish—DUCO—with a dry cloth, without marring its beauty. This feature appeals strongly to farmers.
- 4 Driving controls are centralized on the steering wheel. The horn, choke, light-dimming lever and throttle are always at your finger tips. Farmers appreciate this exclusive convenience feature.
- 5 Only Oakland, at its price, gives you a permanent top—side curtains fit more snugly; and for \$60 more you can get the new Glass Enclosure, which transforms the touring car into an attractive and comfortable all-season model.
- 6 Five disc wheels are standard equipment on all models. Cord tires are of generous size. What other car gives you so much—for so little?

Check the True Blue Oakland—point by point and feature by feature—against any other car at anywhere near its price. The more carefully you do this the more quickly and certainly you will discover that here indeed is a car that is ideal for country driving.

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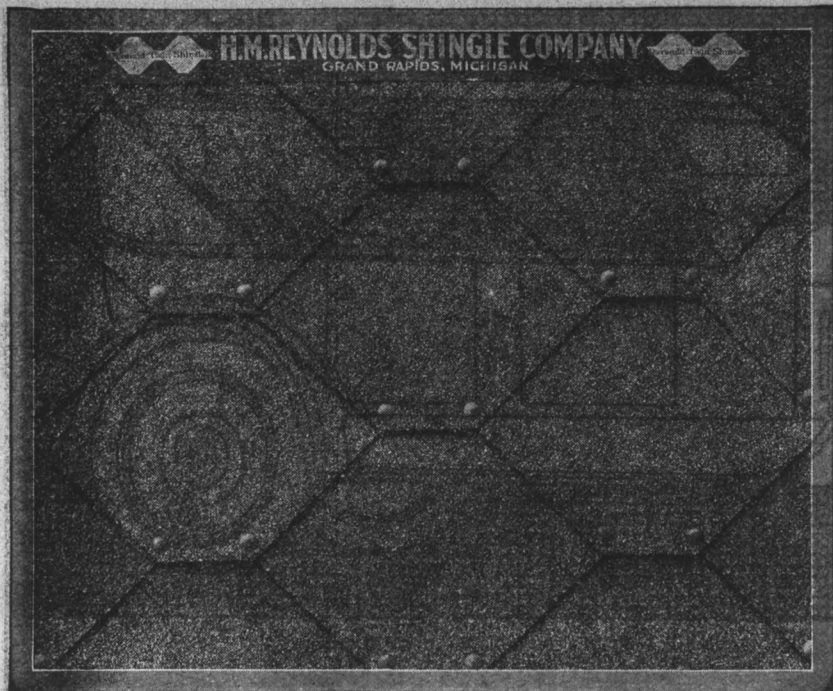
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They Like Sweet Clover

NOT a single person who replied to our question on sweet clover is quitting the crop. They like it. It has been adopted as a part of their rotation. Further, sweet clover enthusiasts may be found in every part of the state. The crop is in general favor. Replies even came from Ohio and Indiana. Here are the letters selected to receive the awards:

A GOOD SOIL BUILDER.

ABOUT three years ago I had 4 acres which I sowed to oats and seeded to sweet clover, sowing a bushel and one peck of oats and 14 lbs. of sweet clover seed to the acre.

The next year I cut the hay about June 10, just as the blossoms start to appear, leaving stubbles about 6 in. high. This yielded about 3 ton to the

poor piece of soil after taking both hay and seed crop off.

If any one can beat that with any one crop other than sweet clover, I'll surrender. I started with one-half of an acre and this year I will have thirty acres to harvest.

The only difficulty up in this Northern country is to get the seed thrashed and hulled. Someone tell us how.—O. P. Churchill.

HOW I DEFEATED THE GRASS-HOPPERS.

FOR two or three years, the grasshoppers cleaned up on my seedlings of mammoth and common red clover. I was about discouraged when someone informed me that the hoppers would not eat sweet clover. I knew nothing about it, but decided to make a trial.

I was happily surprised. It solved my feed problem on the upland. Everything on the farm liked it, even to the pigs and chickens. I have four workhorses that have eaten sweet clover the year around and they are always as good as any horses in the neighborhood, always ready for business, and have had no sickness.

I grow twenty acres or more each year and never fail to get a catch when seeding early with oats. I think the country agent referred to should carry his good work to every farmer in his county. No farmer can go amiss with this crop on the average Michigan soil.—M. E. Stearns.

WHY SWEET CLOVER.

I GROW some crops of necessity, and others for profit. I find that sweet clover, however, fills the bill in both cases and then some.

With a good supply of sweet clover hay, properly cured, I can face the winter confident that I will come through on the right side of the ledger; the horses will be in good condition, cows will give more milk, sheep will be strong and raise better lambs, hogs will make cheaper gains, calves will be thriftier, hens will lay more eggs and the geese will live on it alone.

As pasture, it is unexcelled. If turned into and kept short it will furnish green feed throughout the dry weather in mid-summer and carry more head of stock per acre than any other crop.

Last, but not least, is the effect on the soil. Sweet clover stores up large quantities of nitrogen for the use of future crops, and leaves an enormous quantity of decayed roots to improve the mechanical conditions of the land. There is no land as easy to plow as a good thrifty sweet clover sod after the roots have died in the fall.

The seed being relatively cheap and the crop a biennial encourages short rotations and tends to correct one evil in our farming practice, that of leaving a sod to draw upon the fertility of the soil.—C. W. Johnson.

SOWED SWEET CLOVER IN POOR WHEAT STAND.

I SOWED 17 acres of wheat in the fall of 1921. A fine stand came through the winter but in the spring freezing and thawing killed a lot of it. The first field work we did that spring was to take the grain drill, go over this field to stir the soil a little and sow about 18 pounds of sweet clover to the acre in this poor stand of wheat.

The writer has doubled the crop following sweet clover on a very sandy

(Continued on page 455.)

CROSSING MELONS AND "CUKES."

Even at the risk of appearing to be a kicker, I can not help calling your attention to the article, "Farm Vegetable Garden," and the plan of a "Model Farm Garden," by E. P. Lewis. This writer ought to know better than to suggest the planting of cucumbers, muskmelons, watermelons and squashes adjoining one another. Of course, we old-timers know about this—but let the newcomer try your advice and it will be about the last advice he will take from you.—Z. Steinhäusser.

There is a common belief that various species of the Cucurbitaceae family will inter-cross if planted side by side. This is entirely erroneous and in no place in the literature is there reference to a successful cross between melons, cucumbers or squashes. Crosses may occur within the species such as summer squash and pumpkins but it is not possible to cross two different species, such as melons and cucumbers.

Varieties of a curbit will cross. For example, if Osage and Hoodoo melons are planted side by side there will be inter-crossing. Even then the effect does not appear the first generation and the crossed fruits will resemble the female parent in every respect. It is only when the seed is used for next year's planting that any evil effects are found.

Many attempts have been made by horticulturists and plant breeders to cross melons, squashes and cucumbers, but all are agreed that it is not possible. Melons which taste like pumpkins, etc., result from the use of poor strains, the effect of insects or diseases, or to climatic conditions, but never to any crossing with cucumbers, squashes or pumpkins.

Therefore, since there is no possibility of crossing between these plants, they are grouped together as their cultural methods are the same. This simplifies the work in planting and caring for the crop in the home garden.—E. P. Lewis.

PRUNING GRAPES.

I trim my grape vines back from one to three buds every spring. By fall they have grown from 20 to 25 feet and have few grapes, but are loaded with foliage. Have several different kinds, but they all grow the same.—C. W. Y.

You do not tell just how you trim back your grapes but we judge that you are cutting them back too severely for such vigorous vines. A normal vine should be cut back to about forty buds, that is about ten buds on each of the four arms. If the vines are especially vigorous more buds should be left on.

As you are cutting back to one or three buds, you are undoubtedly using the spur system of pruning. This system is not nearly as efficient as the four-arm Kniffen system. Investigations have shown that the best producing buds are those from the fourth to the eighth. Those buds bear the largest and nicest bunches. In using the spur system, you cut off the best producing buds.

The growth of your vines indicates that your soil is quite rich. Keep fertilizer from it for a year or so and leave more fruiting buds on your vines, then see what happens.

Read the report of Professor Partridge's talk in the write-up of the mid-winter meeting of the Michigan Horticultural Society which appeared in last week's issue. It will interest you.

If the vines set to fruit and the fruit drops, then spraying will be necessary. If you wish information on that subject let us know.

Professor Gardner says that the last two weeks in June is the time when the fruit buds form on apples, during September and October on strawberries, and during the latter part of July for peaches. The use of nitrogenous fertilizers on core fruits may vary the time somewhat.

MCCORMICK-DEERING

EVERY Spring, more farmers are turning to the tractor as the real key to farm profit. The need for more yield, the need for saving precious time, the need for cutting out all surplus expensive labor—for these the logical remedy is *tractor power*.

Tractor owners have increased over 7500 per cent in the United States in the past ten years. The trend of farm power goes onward, never backward. The man who returns to old methods, after tasting the flexibility, the freedom, and the profit in tractor

farming, is so rare that he may be looked upon with curiosity.

McCormick-Deering 10-20 and 15-30 Tractors are built for all-around practical farm use. They are designed and equipped to work with many machines—to handle both field and belt work to best advantage. They are simple, easy to handle, and they will serve their owners many years.

Remember that *the crankshaft and the main ball bearings in McCormick-Deering 10-20 and 15-30 are guaranteed for the life of the tractor*.

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\$4.80 per Bu. Red Clover and Timothy mixed -- the standard grasses cannot be surpassed for hay and pasture. Contains 10 to 15 per cent clover, just right to sow. Thoroughly cleaned and sold on approval, subject to government test. Ask for this mixed seed if you want our greatest bargain. Have Pure Clover, Sweet Clover, Timothy and all Field and Grass Seeds. Buy now. Prices are advancing. Ask for SAMPLES and 116-page catalog. Free. Can ship eastern orders from eastern warehouse if desired. A. A. BERRY SEED CO., Box 631, Clarinda, Iowa.

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Don't let this happen to your apples

Kill the aphids before they have a chance to do serious damage to fruit or trees. Spray with Hall's Nicotine Sulphate. It contains 40% pure Nicotine—the deadliest aphid-poison known.

Being a vegetable extract, it does not harm blossom, fruit or foliage; but it does kill aphids every time.

A ten-pound tin makes 800 to 1100 gallons of spray. The cost is less than 2c a gallon.

When spraying for scab, codling moth, etc., mix Hall's Nicotine Sulphate with the solution and make one spray do double duty.

Buy from your dealer. If he cannot supply you, send us your order along with his name.

Note—Hall's Nicotine Sulphate is also deadly effective against thrips, red bugs, leaf hoppers, psylla and many similar insects on fruit trees and truck crops.



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A grade Berry Baskets (wood) and 16 quart crates. 40% cash discount till May first. Send for price card. ONE GALLON MAPLE SYRUP. CANS, 50 TO CARTON, \$7.45 PER CARTON.

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can be kept on their feet and working if owners give "SPOHN'S" for Distemper, Influenza, Shipping Fever, Coughs and Colds. Cheapest and surest means of escaping these diseases. Occasional doses work wonders. Give "SPOHN'S" for Dog Distemper. Used for thirty years. 60 cents and \$1.20 at drug stores.

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COW FAILS TO BREED.

A sells to B a cow representing her to be with calf and to be fresh in April. Cow comes in heat again within a week after sale, and regularly since. Veterinarian says cow is not with calf, and is doubtful if she ever would be again. Cow is now in better condition than when sold. Can A be forced to take the cow back again and return purchase price? Can B demand bill for the time he kept her?—J. S.

If return was offered as soon as the condition was discovered and no waiver has since been made, recovery of the full price may still be had, together with expenses incident to keep; otherwise only the difference between the value if as warranted and the value as is.—Rood.

PAYING HIGH SCHOOL TUITION.

A has two children who put in application for tuition to go to high school. A and family pack and move out of district to town. Can the school where they attend collect tuition from the district where they moved from?—T. J. I.

Public Acts 1921 No 79 makes the duty to pay the tuition depend on the residence at the time of giving notice, and no reference is made in the statute to the residence during the remainder of the year.—Rood.

BRUSH HOLDS SNOW AND BLOCKS ROAD.

What steps could I take to compel a man across the road from my farm to cut the brush on his roadside. In the winter the snow drifts is so as to make roads impassable. Have spoken to highway commissioner, but have lived here 3 years and he has done nothing yet. The man's buildings are on another road, so he does not care whether the road is passable or not.—F.

By Public Acts 1919 No. 83 it is the duty of the highway commissioner and the overseers of highways to cut all brush in the highway every year. We are not aware of any law requiring the owner of the appurtenant land to do so. The sections in the old law imposing that duty are repealed by the statute above mentioned.—Rood.

MONEY IS BURNED.

Would you advise me if I could get my money refunded which has been burned in a fire. It was in the form of bank notes. I mean by the government. If so, where should I call for it?—R. B.

It is believed that the only way that refund can be obtained is by producing at the treasury of the United States the residues of the destroyed money in some form that it can be identified for redemption.—Rood.

CAN WILL BE BROKEN?

Can a will be broken after it is made? Can a legal heir bring in a bill for caring for her father after the mother is dead?—C. E. L.

A will may be revoked by the maker any time while he lives without the consent of anyone, by merely destroying it, or by making a different disposition. After the maker is dead no rights can be maintained under the will till it has been duly offered and received in probate after due notice of the time of hearing of the question whether it is the will; and anyone adversely interested may oppose the probate. After it has been received and allowed by the probate court it can be avoided only by appeal to a higher court within the time allowed for such appeal, as a general proposition.

Unless there is an express agreement to pay for support, a child is not entitled to anything for the support of a parent.—Rood.

SEPARATE MAINTENANCE.

If a woman, who has children and has a good reason for leaving, leaves her husband, can she compel him to support her and the children without obtaining a divorce?—M. H.

If the separation is without her fault she may have separate maintenance.—Rood.

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NEWS FROM CLOVERLAND

WILL ASSIST DAIRYMEN IN CLOVERLAND.

AN appointment of much significance to the dairy farmers of the Upper Peninsula was made during the first week of March, when the Michigan Agricultural College assigned Mr. J. G. Wells, of the college staff, to the Upper Peninsula as dairy specialist. Mr. Wells made his debut in the Upper Peninsula on March 10, when he addressed the farmers'-business-men's conference at Wakefield in the place of Prof. O. E. Reed.

Mr. Wells is a graduate of the University of Missouri, where he specialized in dairying. He later ran a dairy farm in that state. For the past eighteen months he has been associated with Prof. O. E. Reed in the dairy department of the Michigan Agricultural College.

Mr. Wells will have his headquarters at Marquette, working out of the office of the extension department of M. A. C., located in the Marquette County Court House. He will have general supervision of the better-sire campaign, will be actively connected with the dairy train that is to be operated this spring on several railroads of the peninsula, and will in general promote the dairy industry here as much as possible.

The assignment of Mr. Wells to the Upper Peninsula, following the appointment of Dr. F. K. Hansen as assistant-state veterinarian for this region, indicates the growing importance of the dairy and animal industry phase of Upper Peninsula agriculture. The increased interest in the agricultural welfare of this section thus manifested by the college and the State Department of Agriculture is much appreciated locally.

PROVES VALUE OF PURE-BREDS.

THE superiority of pure-bred over grade cattle as milk producers is revealed in figures recently given out by Mr. Herman Berg, cow tester of the Dickinson County Cow Testing Association. The herd where this comparison was made belongs to Mr. Ben Spencer, a prominent dairy farmer of that county.

Mr. Spencer started in the dairy business nine years ago, primarily to be able to provide good milk for his family. He gradually added to his herd and found himself furnishing milk to his neighbors. Eventually he was persuaded to invest in a few pure-bred cows, and was surprised to find that these were doing much better than his grade stock.

As a member of the cow testing association his records are well and regularly kept, from which it appears that, during the past year, eight grade cows produced an average of 5,954 pounds of milk and 287 pounds of butter-fat; the eight pure-bred cows produced 10,028 pounds of milk and 411 pounds of butter-fat. The highest producer among the pure-bred cows made in nine months, 14,184 pounds of milk and 575 pounds of butter-fat; the best grade cow produced in the same time 8,172 pounds of milk and 405 pounds of butter-fat. Mr. Spencer now has a herd of thirty-two cattle, with his own pure-bred bull, and of this herd twenty-one are pure-breds.

SUCCEEDS AT BEEKEEPING.

THE success of Mr. Maurice Geary, Gogebic county beekeeper, in this line of activity, is revealed in figures recently published in the Ironwood Times. It appears that Mr. Geary has for years been invalided from rheuma-

tism and took to beekeeping as the best work available in his situation.

From small beginnings he has expanded his apiary until now he has seventeen colonies. In 1922 he produced 1,772 pounds of honey from twelve colonies; in 1923 he produced 2,300 pounds from eleven colonies. A good home market was found for his product, chiefly in the crystallized form, for which there is said to be a good demand. His blend of clover and basswood honey is described as very fine.

Mr. Geary produces his own queens and winters his bees chiefly on sugar syrup. Several Gogebic county boys have learned beekeeping from Mr. Geary, who has assisted in starting them in the business.

TUBERCULOSIS WORK WILL CONTINUE.

IT is announced from the office of Mr. W. H. Norton, director of the Bureau of Animal Industry of the State Department of Agriculture, that among the counties of Michigan which will receive their initial tests for bovine tuberculosis, are Marquette, Delta, Schoolcraft and Chippewa in the Upper Peninsula. The second complete test will be given Ontonagon county during the year. Gogebic county has completed its two tests.

LOCATES THE SCRUBS.

MR. ARTHUR LONSDORF, county agricultural agent of Dickinson county, has conducted a survey of his county with the cooperation of the rural schools to ascertain the number of scrub bulls in that county. The returns show about 100 of these animals, but during 1923 twenty-six pure-breds replaced as many scrubs there. In 1915 there were only nine pure-bred sires in Dickinson county, it is stated. There were twenty in 1920, and twenty-nine in 1923. The first problem now is to finance the replacement process that it is hoped to promote this year. There are ninety-seven scrubs reported by the survey, that it is hoped to eliminate.

LAND CLEARING TAKES ON NEW LIFE.

THAT Dickinson county means to resume land-clearing operations in the coming season, is indicated by the placing of orders for explosives which amount to an average of 105.1 pounds per farm, it is announced. Last year no explosives appear to have been used for this purpose, the explanation given being that farmers were employed in building and other operations at the Ford plant at Iron Mountain and did not find time to carry on land-clearing activities.

In Alger county the orders thus placed amount to 186.5 pounds of explosive per farm. This is the highest average for the peninsula. Iron county ranks second with an average order of 160 pounds of explosives per farm. Luce county's orders average thirty pounds per farm—the lowest reported. In 1921, it is reported, Houghton county consumed 86,600 pounds of explosives; none was used in 1922 and about 50,000 pounds in 1923. During the past three years Menominee has used more explosives for land-clearing than any other Upper Peninsula county, her total being 145,750 pounds.

Several cities in the United States now forbid the sale of gasoline on Sunday, according to the Firestone New Service. The latest municipality to put on the ban is Youngstown, Ohio.

Dairymen Attention!

One-half century of milling experience, expert investigation, and practical application have resulted in the Sugared Schumacher Feeding Plan. This Plan maintains the health of the herd, produces profitable production and secures success in dairying. Thousands follow it. No man can afford to depart from it. We are including nine important points of this Plan:

- 1—If possible, supply liberal quantities of good alfalfa or clover hay.
- 2—Supply silage or roots. Succulence is essential. Silage or roots form the sources for it in winter. Grass and silage meet the need for succulence throughout the summer. The vitamins in silage, roots, and grass are especially valuable.
- 3—Always use Sugared Schumacher Feed as the carbohydrate portion of the ration. It supplies variety, palatability, digestibility and efficiency.
- 4—Balance it with Boss Dairy Ration, or balance it with the least expensive protein feed.
- 5—Balance the ration according to each cow's need. Do not try to feed the same ration to the entire herd.
- 6—Make the ration bulky, palatable, digestible, varied and profitable.
- 7—Feed liberally.
- 8—Feed according to production. Weigh or measure the feed. Give approximately 1 lb. of grain to every 3 lbs. of high testing milk. Give approximately 1 lb. of grain to every 3½ lbs. of medium testing milk. Give approximately 1 lb. of grain to every 4 lbs. of low testing milk.
- 9—Remember that almost all cows require at least five times as much carbohydrate material as they do protein.

Carbohydrates furnish energy and heat, maintain health, furnish the greater proportion of the solids in milk and contribute largely to growth in young stock.

Sugared Schumacher Feed is the distinctive Carbohydrate Feed to use as the base for all dairy rations.



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To the Farmers of Michigan!

IN a recent issue of the Michigan Farmer, we gave you a summary of a special Clover Seed Report prepared for The Albert Dickinson Co., by J. F. Cox, Professor of Farm Crops of the Michigan Agricultural College. The entire report contains matter of interest to every Michigan farmer, and consequently we are pleased to quote it in full, as follows:

"Experiments conducted by this station, in co-operation with the United States Department of Agriculture during the past four years, have convinced us of the worthlessness of Italian Clover Seed under Michigan conditions. Our comparative tests have shown Michigan-grown Red Clover Seed to give, consistently, the best results. Domestic Red Clover Seed from other northern states, Canada, and Red Clover areas in the 'corn-belt,' is well adapted to Michigan. Of the imported seed, the seed from England, and northern European countries, gave good results, but not as good as native grown seed. The French and Chilean seed gave fair results. (Seed from Oregon proved unadapted)."

In cases where domestic Red Clover Seed, produced in regions of proper adaptation, is not available, imported seed from England, northern Europe and France is acceptable, if the source of production is definitely known. The difficulty rests with the fact that much Italian seed is being shipped from France, Germany and other European ports, and its identity is more or less clouded. The January (1924) report of the Seed Testing Department of the United States Department of Agriculture showed that at least 200,000 lbs. of imported seed from other countries than Italy was apparently Italian seed.

We consider that Michigan farmers, in case they cannot get dependable, native grown seed, will do well to use Alsike, Sweet Clover, and Alfalfa, rather than knowingly purchase Red Clover Seed of unknown origin. Alsike is relatively cheap and fairly plentiful. Dependable domestic Alfalfa Seed is cheaper than Red Clover and is plentiful. Sweet Clover can occupy the same place in rotation as Red Clover, and good seed is much cheaper. Soy Beans, Field Peas, and Winter Vetch are leguminous crops which can be used in furnishing large yields of forage, in case of Clover failure or shortage of good seed.

Without doubt, the production of dependable domestic Red Clover seed would be on a much more stable basis were it not for the competition of cheap and often unadapted, inferior, imported seed. The proper distribution of imported Clover according to adaptation, and in such a way as to maintain the identity of the seed, will help the situation. Clover growers, seed producers, and American seed trade alike, will undoubtedly be on a much better footing, when all of our Red Clover seed is American grown.

The matter is, of course, not one of germination, as stated by Toledo Produce Exchange, but rather of the comparative productivity and adaptation of imported seed from various regions, as compared to our own."

Farmers!

We are glad to publish at any time, recommendations of Prof. Cox, of the Michigan Agricultural College. He suggests that it would be well for the farmers to purchase Michigan-grown or other dependable, native Red Clover seed.

Federal and State Experiment Stations were founded in the interests of the farmer. Their work is disinterested and their workers are unselfish. Dickinson does not offer recommendations on the question of adaptability of seeds, but depends upon the Experiment Stations for results of their experiments, and based upon these results, their recommendations we are glad to pass along to you for your guidance.

Good seed is available from Michigan concerns. Hundreds of merchants each year distribute to the farmers of Michigan, Dickinson's Seed. In accordance with your State Law, the merchants obtain from us, tags clearly showing analysis, as required by your State Law, which includes the "locality grown" of Clovers, Alfalfa, Soy Beans, and Corn.

FARMERS! *The question for you is
What you buy and What you pay.*

The Albert Dickinson Company

Wholesalers and Refiners of Good Farm Seeds

CHICAGO, U. S. A.

PINE TREE SEEDS

RELIABLE Known Origin PRODUCTIVE

Sugar Beet Soils

The Location and Composition of the Different Soils Adapted to the Culture of this Crop

By M. McCool

SUGAR beet production in this State in general is pretty closely confined to soils that are well adapted naturally to the production of this crop.

The majority of the beets is produced on four groups of soils, all of which belong to the group of clays or heavier soils. Each type, however, possesses some chemical and physical peculiarities distinct from the others. The four soils comprise the Brookston, the Kewaunee, the Napanee and Miami. The accompanying map shows the location of these groups of soil in a general way.

The Brookston Group.

The Brookston soils as a general rule should be drained for the most satisfactory production of this crop; on many farms where the fields are tiled the laterals are placed at four to ten rods intervals. These soils are usually low lying. They were originally timbered with elm, ash, hickory, swamp white oak, and soft maple.

From the surface to a depth of about 8 inches the soil is made up of a very dark gray or nearly black material high in vegetable matter and slightly alkaline in reaction. From a depth of about 8 to 12 or 15 inches the material is rather dark in color, quite plastic clay loam and alkaline in reaction. From these depths to 30 or 40 inches the layer is made up of mottled yellow and gray sandy clay, also alkaline in reaction. Below this section the material is composed of clay or sandy clay very high in lime.

It is probably the best sugar beet producing soil in the State since yields of from ten to sixteen tons per acre

able heavy clay loam to clay, alkaline in reaction. Below this layer exists a reddish clay very high in lime. Alfalfa, sweet clover and June clover are successfully produced without liming. Although the immediate surface soil may be slightly acid, the subsoil near the surface is alkaline and this condition seems to account for the successful production of these crops without the use of lime.

In Central and Southern Michigan Miami Group Predominates.

The Miami group is the most extensive of the heavy soils in Central and Southern Michigan. The total amount of the mineral elements of plant food in the Miami soils is somewhat lower than that in the two groups just mentioned. Yet this group is composed of very good general purpose soils and a considerable total tonnage of sugar beets is produced on them.

The surface layer to a depth of about 7 inches is grayish brown in color, friable, mellow loam, slight to medium acid in reaction. From 24 inches to 36 to 48 inches a yellow-brown friable silty clay loam, alkaline in reaction. Below this layer exists a clay very high in lime.

It varies in productivity much more than either the Brookston or Kewaunee. This is due in part to their more irregular topography. In many fields surface erosion of these soils moreover have been under cultivation for a longer period than those of the other two groups mentioned and, therefore, the amount of active plant food that they provide for the crops is usually lower and fertilization becomes more necessary and doubtless more profitable than in the other cases.

Many fields are near the turning point so far as the need for lime is concerned. As yet not a great deal of lime is applied to the Miami group of soils but it is coming into use quite rapidly. In many instances alfalfa and clover may be produced successfully without the use of lime and in other cases especially where the active elements of plant food are low the use of lime is profitable. The forest trees that predominated on the Miami group of soils consisted mainly of beech, hard maple and oaks.

Napanee Group.

The Napanee soils are most widely distributed in the eastern and in the southwestern parts of the State in association with the Brookston and Miami types. The original timber consisted mainly of hickory, elm and oak. Their natural drainage condition is intermediate between that of the two types mentioned.

The surface to a depth of about 6 inches is composed of grayish silt loam and clay loam and has a tendency to become cloddy. The reaction is slight to medium acid. From 6 inches to 8 or 12 inches exists gray loam or silt loam which is slight to medium acid. From these depths to 30 or 40 inches lies mottled yellow and gray clay, tight plastic, highly retentive of moisture, alkaline in reaction. Below this is found a very tight clay with a very high lime content.

It is difficult to keep the land in good tilth, and drainage is advisable in most instances. The natural fertility is not low, with the possible exception of phosphorous although experience has indicated that commercial fertilizers can be profitably used. Liming may be beneficial in many instances although the clay subsoil is commonly alkaline in reaction at shallow depths.

Relaxation takes time, but it's building for the future. It pays to spend a few minutes each day really relaxing—in a comfortable rocking-chair, with eyes closed, jaws relaxed, and a calm mind.



1. Largest acreage of Brookston and Napanee. 2. Largest acreage of Miami, with Brookston and Napanee subordinate but in considerable acreage. 3. Principal bodies of Kewaunee. 4. Scattered bodies of Miami, Napanee and Brookston.

are obtained. This soil is not yet in need of lime for the correction of soil acidity. The principal proof of this is that when the land is drained satisfactory yields of alfalfa may be obtained without any treatment whatever. It may be advisable, however, to use sugar factory lime or other forms to improve the tilth of the heavier types.

The Kewaunee Soils.

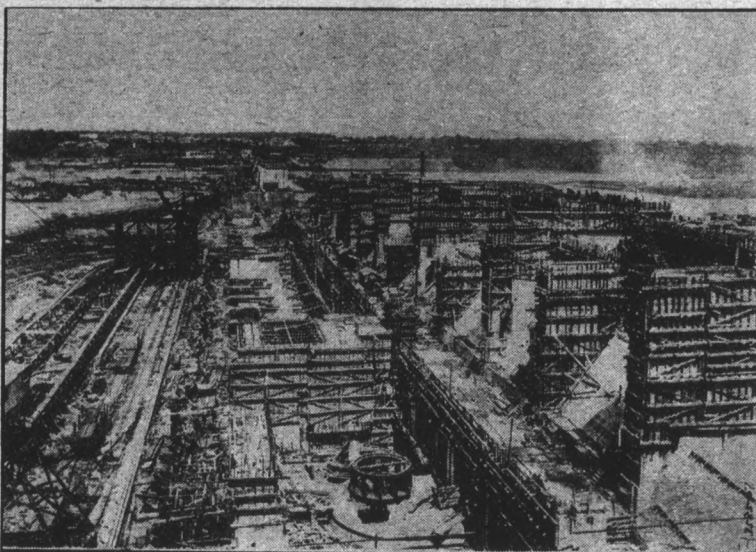
The Kewaunee group of soils is also excellent for the production of sugar beets having a very large amount of potential plant food. Owing to the somewhat rolling condition, at least more than the Brookston, the drainage condition is not so acute as that on the former group of soils. The yields of the various crops approach closely those on the Brookston. They were originally timbered with beech, hard maple, oak and some pine.

The surface layer to a depth of about 6 inches is a grayish brown friable loam, ranging in reaction from slightly acid to neutral. From a depth of 6 inches to 15 inches is composed of gray and pale yellow mottled clay loam, medium to alkaline in reaction. From a depth of 15 inches to about 36 inches it is composed of a reddish fri-

WORLD EVENTS IN PICTURES



Two of a kind! Van Campen Heilner and Zane Grey, both prominent writers of the day.



The Wilson dam across the Tennessee River, near Florence, Alabama, is a part of the Muscle Shoals power development for nitrates production and will cost approximately \$50,000,000.



Mrs. Frank Patrick is seen on her royal throne of ice as Queen of Canadian Winter Carnival.



Jackson Island, shown in the center of the river, will be submerged when the Wilson dam is completed in October. It will form a lake 18 miles long and a mile wide.



This world-famous high school basket ball team of Passaic, New Jersey, recently won their 137th consecutive game. Their wonderful team work is the result of nine years' training.



Hudson Maxim, famous inventor of explosives, contends that tea and coffee are intoxicating beverages and undermine the health.



Eugenie Dennis, of Kansas, is said to have located oil wells by her "psychic" powers.



The Hon. Joseph G. Cannon, ex-speaker of the House, enjoys listening in on the radio presented to him by fellow townsmen.



The officers of the American branch of the International Law Association met in Washington recently to discuss plans for the International league to be held in Stockholm next summer.



Miss Elsie Proctor made a perfect score of ten consecutive bulls-eyes from fifty yards in a recent match against the Oklahoma Agricultural College.

TELEGRAPH poles reared only their cross-arms above the mammoth drifts. Haystacks became buried, lost things. The trees of the forest, literally harnessed with snow, dropped their branches like tired arms too weary to longer bear their burdens. The whole world, it seemed, was one great, bleak thing of dreary white—a desert in which there was life only that there might be death, where the battle for existence continued only as a matter of instinct.

And through—or rather over—this bleak desert went the men of the West Country, silent, frost-burned men, their lips cracked from the cut of wind, their eyes blood-red with inflammation, struggling here and there with a pack of food upon their back that they might reach some desolate home where there were women and children; or stopping to pull and tug at a snow-trapped steer and by main effort, drag him into a barren spot where the sweep of the gale had kept the ground fairly clear of snow; at times also, they halted to dig into a haystack, and through long hours scattered the welcome food about for the bawling cattle; or gathered wood, where such a thing was possible, and lighting great fires, left them, that they might melt the snows about a spot near a supply of feed, where the famished cattle could gather and await the next trip of the rescuers, bearing them sustenance.

Oftimes they stopped in vain—the beast which they sought to succor was beyond aid—and a revolver shot sounded, muffled in the thickness of the storm. Then, with knives and axes, the attack came, and struggling forms bore to a ranch house the smoking portions of a newly butchered beef; food at least for one family until the relief of sun and warmth would come. It was a never-ending agony of long hours and muscle-straining work. But the men who partook—were men.

And side by side with the others, with giant Ba'tiste, with the silent woodsmen, with the angular, wiry ranchmen, was Barry Houston. His muscles ached. His head was ablaze with the eye-strain of constant white; his body numbed with cold from the time that he left the old cannon-ball stove of the boarding house in the early morning until he returned to it at night. Long ago had he lost hope—so far as personal aims and desires were concerned. The Crestline road was tied up; it had quit completely; Barry Houston knew that the fury of the storm in this basin country below the hills was as nothing compared to the terror of those crag tops where altitude added to the frigidty, and where from mountain peak to mountain peak the blizzard leaped with ever-increasing ferocity. Far out on the level stretches leading up to the plains of Wyoming, other men were working, struggling doggedly from telegraph pole to telegraph pole, in an effort to repair the lines so that connection might be made to Rawlins, and thence to Cheyenne and Denver—to apprise the world that a great section of the

country had been cut off from aid, that women and children were suffering from lack of food, that every day brought the news of a black splotch in the snow—the form of a man, arms outstretched, face buried in the drift, who had fought and lost. But so far, there had been only failure. It was a struggle that made men grim and dog-

"No. Lost Wing has found wood. We're keeping warm. Tell me—" and there was the politeness of emergency in her tones—"Is there any need for women in Tabernacle? I am willing to go if—"

"Not yet. Besides, a woman couldn't get in there alone."

"I could. I'm strong enough. Be-

too horrible for Houston even to remember that there was an estrangement between them. Dully, his intellect numbed as his body was numbed, he went back to his tasks—tasks that were seemingly endless.

Day after day, the struggle remained the same, the wind, the snow, the drifts, the white fleece flying on the breast of the gale even when there were no storm clouds above, blotting out the light of the sun and causing the great ball to be only a red, ugly, menacing thing in a field of dismal gray. Night after night the drifts swept, changing, deepening in spots where the ground had been clear before, smoothing over the hummocks, weaving across the country like the vagaries of shifting sands before they finally packed into hard, compressed mounds, to form bulwarks for newer drifts when the next storm came. Day after day—and then quiet, for forty-eight hours.

It caused men to shout—men who had cursed the sun in the blazing noonday hours of summer, but men who now extended their arms to it, who slapped one another on the back, who watched the snow with blood-red eyes for the first sign of a melting particle, and who became hysterically jubilant when they saw it. Forty-eight hours! Deeper and deeper went the imprints of milder weather upon the high-piled serrations of white, at last to cease. The sun had faded on the afternoon of the second day. The thaw stopped. The snowshoes soon carried a crunching sound that gradually became softer, more muffled. For the clouds had come again, the wind had risen with a fiercer bite than ever in it; again the snow was falling. But the grim little army of rescuers, plodding from one ranchhouse to another, had less of worry in their features now—even though the situation was no less tense, no less dangerous. At last the meager stores of the small merchandise establishment in Tabernacle could be distributed with more ease; a two-inch crust of snow had formed over the main snowfall, permitting small sleds to be pulled behind struggling men; the world beneath had been frozen in, to give place to a new one above. And with that:

"It's open! It's open!" The shout came from the lips of the telegrapher, waving his arms as he ran from the tunnel that led to the stationhouse. "It's open! I've had Rawlins on the wire!"

Men crowded about him and thumped into the little box car to listen, like children, to the rattling of the telegraph key—as though they never had heard one before. So soon does civilization feel the need of its inventions, once they are taken away; so soon does the mind become primitive; once the rest of the world has been shut away from it. Eagerly they clustered there, staring with anxious eyes toward the operator as he hammered at the key, talking in whispers lest they disturb him, waiting for his interpretation of the message, like worshippers waiting for the word of an oracle.

The White Desert

By Courtney Ryley Cooper

Food for Thought

By James Edward Hungerford

We're blessed with "thinkers," with which to think;
They're given to us to use;
Our eyes were made both to see, and blink;
Our feet to walk on, in shoes;
We have two hands that are useful, too—
To use 'em as we might need,
And "thinkers" to think out the things to do—
Just do 'em—and you'll succeed!

We have to think, if we want to know
The things that are worth-the-while;
If we go somewhere, and think where we go—
We're likely to save a mile!
If we start at random, without a thought,
We may wind up anywhere,
And all our effort will come to naught,
And we're nowhere—when we're there!

We're given "thinkers" to think out things;
The answers are there to get;
True thoughts are angels, without the wings—
Just think—and they're yours, you bet!
There's no one else who can think for you—
And here is a thought to heed:
Just think out the things that's the thing to do—
And do 'em—and you'll succeed!

ged; Barry Houston no less than the rest. He had ceased to think of the simpler things of life, of the ordinary problems, the usual worries or likes and dislikes. His path led once by the home of Medaine Robinette, and he clambered toward the little house with little more of feeling than of approaching that of the most unfamiliar ranchman.

Smoke was coming from the chimney. There were the marks of snowshoes. But they might mean nothing in the battle for existence. Houston scrambled up to the veranda and banged on the door. A moment more, and he faced Medaine Robinette.

"Just wanted to see if you're all right," came almost curtly.

"Yes—thank you."

"Need any food?"

"I have plenty."

"Anybody sick?"

sides, I've been out—I went to the Hurd Ranch yesterday. Mrs. Hurd's sick—Lost Wing brought me the word."

"Then keep on with that. There's nothing in Tabernacle—and no place for anyone who isn't destitute. Stay here. Have you food enough for Hurd's?"

"Yes. That is—"

"I'll leave my pack. Take that over as you need it. There's enough for a week there. If things don't let up by that time, I'll be by again."

"Thank you."

Then the door was closed, and Houston went his way again, back to Tabernacle and a fresh supply for his pack—hardly realizing the fact that he had talked to the woman he could not help wishing for—the woman he would have liked to have loved. The world was almost too gray, too grim,

AL ACRES--Al Went to Get a Match But Got a Surprise

By Frank R. Lect



WILLYS-KNIGHT



MILEAGE

Big mileage! Smooth mileage! Economical mileage! The beautiful Willys-Knight gives you more miles of complete motoring satisfaction than you ever dreamed you could get from a car.

Here is a car that keeps youth in your veins and age out of mileage. Beauty that keeps you proud. Faithful, enduring performance that keeps you happy. As the months and months go by, and seasons follow seasons, you grow gladder and gladder in the benefits of your ownership.

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Willys-Overland, Inc., Toledo, Ohio

Willys-Overland Sales Co. Ltd., Toronto, Can.

The Day of the



Knight is Here!

5 Passenger Touring
\$1175 *f.o.b. Toledo*

TELEGRAPH poles reared only their cross-arms above the mammoth drifts. Haystacks became buried, lost things. The trees of the forest, literally harnessed with snow, dropped their branches like tired arms too weary to longer bear their burdens. The whole world, it seemed, was one great, bleak thing of dreary white—a desert in which there was life only that there might be death, where the battle for existence continued only as a matter of instinct.

And through—or rather over—this bleak desert went the men of the West Country, silent, frost-burned men, their lips cracked from the cut of wind, their eyes blood-red with inflammation, struggling here and there with a pack of food upon their back that they might reach some desolate home where there were women and children; or stopping to pull and tug at a snow-trapped steer and by main effort, drag him into a barren spot where the sweep of the gale had kept the ground fairly clear of snow; at times also, they halted to dig into a haystack, and through long hours scattered the welcome food about for the bawling cattle; or gathered wood, where such a thing was possible, and lighting great fires, left them, that they might melt the snows about a spot near a supply of feed, where the famished cattle could gather and await the next trip of the rescuers, bearing them sustenance.

Often they stopped in vain, the beast which they sought to succor was beyond aid—and a revolver shot sounded, muffled in the thickness of the storm. Then, with knives and axes, the attack came, and struggling forms bore to a ranch house the smoking portions of a newly butchered beef; food at least for one family until the relief of sun and warmth would come. It was a never-ending agony of long hours and muscle-straining work. But the men who partook were men.

And side by side with the others, with giant cattle, with the silent woodsmen, with the angular, wiry ranchmen, was Barry Houston. His muscles ached. His head was ablaze with the eye strain of constant white; his body numbed with cold from the time that he left the old cannonball stove of the boarding house in the early morning until he returned to it at night. Long ago had he lost hope—so far as personal aims and desires were concerned. The Crestline road was tied up; it had quit completely; Barry Houston knew that the fury of the storm in this basin country below the hills was as nothing compared to the terror of those crag tops where altitude added to the rigidity, and where from mountain peak to mountain peak the blizzard leaped with ever-increasing ferocity. Far out on the level stretches leading up to the plains of Wyoming, other men were working, struggling doggedly from telegraph pole to telegraph pole, in an effort to repair the lines so that connection might be made to Rawlins, and thence to Cheyenne and Denver, to apprise the world that a great section of the

The White Desert

By Courtney Ryley Cooper

country had been cut off from aid, that women and children were suffering from lack of food, that every day brought the news of a black splotch in the snow—the form of a man, arms outstretched, face buried in the drift, who had fought and lost. But so far, there had been only failure. It was a struggle that made men grim and dog-

"No. Lost Wing has found wood. We're keeping warm. Tell me—" and there was the politeness of emergency in her tones—"is there any need for women in Tabernacle? I am willing to go if—"

"Not yet. Besides, a woman couldn't get in there alone."

"I could. I'm strong enough. Be-

too horrible for Houston even to remember that there was an estrangement between them. Dully, his intellect numbed as his body was numbed, he went back to his tasks—tasks that were seemingly endless.

Day after day, the struggle remained the same, the wind, the snow, the drifts, the white fleece flying on the breast of the gale even when there were no storm clouds above, blotting out the light of the sun and causing the great ball to be only a red, ugly, menacing thing in a field of dismal gray. Night after night the drifts swept, changing, deepening in spots where the ground had been clear before, smoothing over the hummocks, weaving across the country like the vagaries of shifting sands before they finally packed into hard, compressed mounds, to form bulwarks for newer drifts when the next storm came. Day after day—and then quiet, for forty-eight hours.

It caused men to shout—men who had cursed the sun in the blazing noonday hours of summer, but men who now extended their arms to it, who slapped one another on the back, who watched the snow with blood-red eyes for the first sign of a melting particle, and who became hysterically jubilant when they saw it. Forty-eight hours! Deeper and deeper went the imprints of milder weather upon the high-piled serrations of white, at last to cease. The sun had faded on the afternoon of the second day. The thaw stopped. The snowshoes soon carried a crunching sound that gradually became softer, more muffled. For the clouds had come again, the wind had risen with a fiercer bite than ever in it; again the snow was falling. But the grim little army of rescuers, plodding from one ranchhouse to another, had less of worry in their features now—even though the situation was no less tense, no less dangerous. At last the meager stores of the small merchandise establishment in Tabernacle could be distributed with more ease; a two-inch crust of snow had formed over the main snowfall, permitting small sleds to be pulled behind struggling men; the world beneath had been frozen in, to give place to a new one above. And with that:

"It's open! It's open!" The shout came from the lips of the telegrapher, waving his arms as he ran from the tunnel that led to the stationhouse. "It's open! I've had Rawlins on the wire!"

Men crowded about him and thumped into the little box car to listen, like children, to the rattling of the telegraph key—as though they never had heard one before. So soon does civilization feel the need of its inventions, once they are taken away; so soon does the mind become primitive; once the rest of the world has been shut away from it. Eagerly they clustered there, staring with anxious eyes toward the operator as he hammered at the key, talking in whispers lest they disturb him, waiting for his interpretation of the message, like worshippers waiting for the word of an oracle.

Food for Thought

By James Edward Hungerford

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They're given to us to use;
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Our feet to walk on, in shoes;
We have two hands that are useful, too—
To use 'em as we might need,
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Just do 'em—and you'll succeed!

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"Yes, thank you."

"Need any food?"

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"I'll leave my pack. Take that over as you need it. There's enough for a week there. If things don't let up by that time, I'll be by again."

"Thank you."

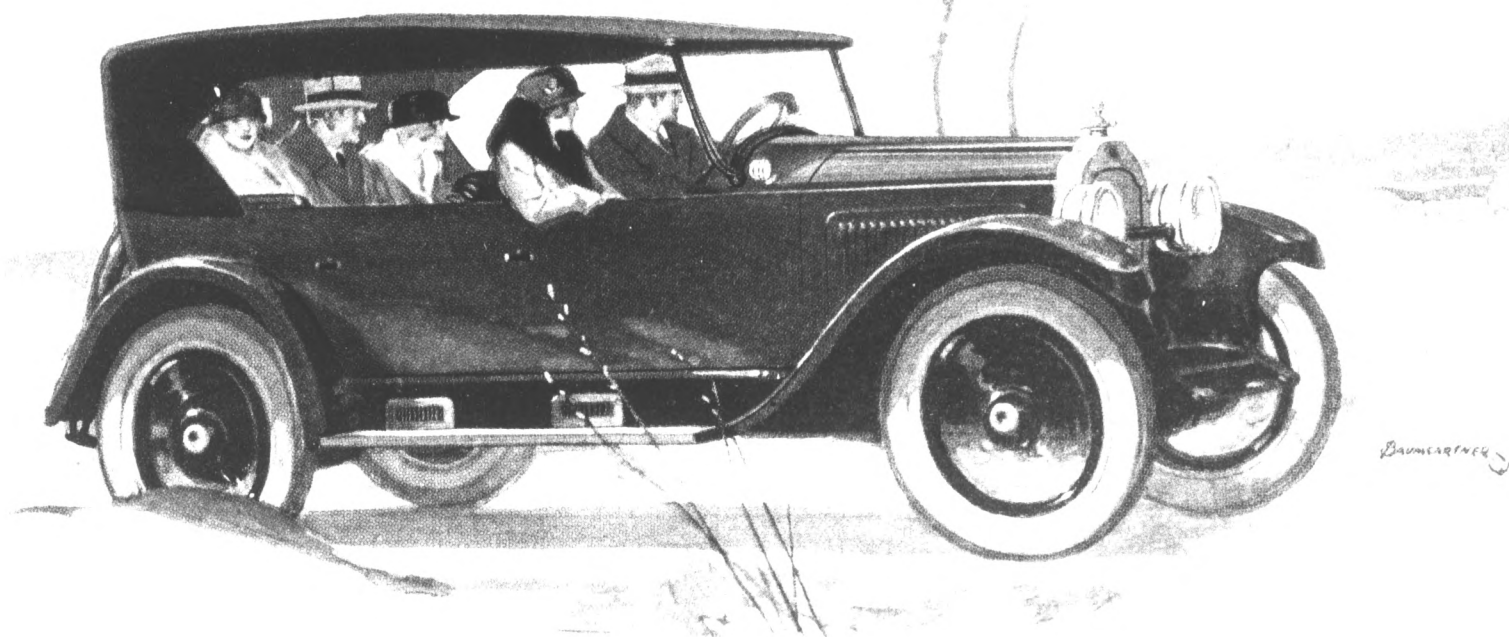
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Which
Color
do you
want
?



VALENTINE'S VALSPAR VARNISH-STAIN
Will Not Turn White

CLEAR VALSPAR
LIGHT OAK VALSPAR
DARK OAK VALSPAR
WALNUT VALSPAR
MAHOGANY VALSPAR
PERRY VALSPAR
PINE GREEN VALSPAR
ROUND COLOR VALSPAR



VALENTINE'S VALSPAR ENAMEL

VERMILION VALSPAR
LIGHT RED VALSPAR
DEEP RED VALSPAR
IVORY VALSPAR
BRIGHT YELLOW VALSPAR
GRAY VALSPAR
MEDIUM GREEN VALSPAR
DEEP GREEN VALSPAR
BROWN VALSPAR
LIGHT BLUE VALSPAR
MEDIUM BLUE VALSPAR
DEEP BLUE VALSPAR
Also White, Black, Aluminum, Gold and Flat Black Valspar

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WITH VALSPAR-IN-COLORS you not only put a beautiful new finish on all floors, furniture and woodwork, but you can have or match any color scheme you wish. And the permanence of this finish will amaze you!

The colors in Valspar Varnish-Stains and Enamels are as durable and waterproof as Valspar Varnish itself. Not even the famous boiling water test will harm them! They can be washed freely with soap and hot water—and will retain their beauty and lustre almost indefinitely.

VALSPAR VARNISH-STAINS are Valspar itself—the waterproof, weatherproof, accidentproof Varnish—plus transparent wood-colors. You Valspar and Stain with one stroke of the brush, bringing out the beautiful grain in the wood.

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Stand. F. P. 3-24

The White Desert

(Continued from page 440.)

"I'm putting it all on the wire!" he announced at last, with feverish intensity. "I'm telling 'em just how it is over here. Maybe they can do something—from Rawlins."

"Rawlins?" Houston had edges forward. "There's not a chance. It's hundreds of miles away; they can't use horses, and they certainly can't walk. Wait—will you give me a chance at something?"

A gleam had come into his eyes. His hands twisted nervously. Voices mumbled about him; suddenly the great hands of Ba'tiste grasped him by the shoulders and literally tossed him toward the telegrapher.

"Ah, oui! If eet is the idea—then speak it."

"Go on—" the telegrapher had stopped his key for a moment—"I'll put it through, if it'll help."

"All right. Get Denver on the wire. Then take this message to every newspaper in the city:

"Can't you help us? Please try to start campaign to force Crestline Road to open the Pass. Women and children are starving here. We have been cut off from the rest of the world for two weeks. We need food—and coal. Road will not be open for four or five weeks more under ordinary circumstances. This will mean death to many of us here, the wiping out of a great timber and agricultural country, and a blot on the history of Colorado. Help us—and we will not forget it."

"The Citizens of the West Country."

"Ah, oui!" Old Ba'tiste was addressing the rest of the crowd. "The newspapers, they can help, better than any one else. Eet is our chance. Bon—good! Mon Baree, he have the big, what-you-say, sentiment."

"Sounds good." The telegrapher was busily putting it on the wire. Then a wait of hours—hours in which the operator varied his routine by sending the word of the stricken country to Cheyenne, to Colorado Springs, to Pueblo, and thence, through the news agencies, to the rest of the world.

"Might as well get everybody in on it," he mused, as he pounded the telegraph instrument; "can't tell—some of those higher-ups might be in New York and think there wasn't anything to it unless they could see it in the New York papers. I—" Then he stopped as the wire cut under his finger and clattered forth a message. He jumped. He grasped Ba'tiste in his lank arms, then turned beaming to the rest of the gaping crowd.

"It's from the papers in Denver," he shouted. "A joint message. They've taken up the fight!"

A fight which had its echoes in the little railroad box car, the center of the deadened, shrouded West Country, the news of which must travel to Cheyenne, to Rawlins, thence far down through the northern country over illy patched telegraph wires before it reached the place for which it was intended, the box car and its men who came and went, eager for the slightest word from the faraway, yet grudging of their time, lest darkness still find them in the snows, and night come upon them struggling to reach the little town and send them into wandering, aimless journeys that might end in death. For the snows still swirled, the storms still came and went, the red ball of the sun still refused to come forth in its beaming strength. And it was during this period of uncertainty that Houston met Ba'tiste Renaud, returning from a cruising expedition far in the lake region, to find him raging, his fists clenched, his eyes blazing.

"Is eet that the world is all unjust?" he roared, as he faced Houston. "Is eet that some of us do our part, while others store up for emergency? Eh? Bah! I am the mad to tear them apart!"

"Who? What's gone wrong?"

"I am the mad! You have no seen

the M'sieu Thayer during all the storm?"

"No."

"Nor the M'sieu Blackburn? Nor the men who work for them. Eh? You have no seen them?"

"No, not once."

"Ah! I pass today the Blackburn mill. They have shovel out about the sawshed. They have the saw going—they keep at work, when there are the women and the babies who starve, when there are the cattle who are dying, when there is the country that is like a broken thing. But they work—for themselves! They saw the log into the tie—they work from the piles of timber which they have about the sawmill, to store up the supply. They know that we do not get our machinery! They think they have a chance—for the contract!"

It brought Houston to a sharp knowledge of conditions. They had given, that the rest of the country might not suffer. Their enemies had worked on, fired with the new hope that the road over the mountains would not be opened; that the machinery so necessary to the carrying out of Houston's contract would not arrive in time to be of aid. For without the ability to carry out the first necessities of that agreement, the rest must surely and certainly fail. Long before, Houston had realized the danger that the storm meant; there had been no emergency clause in the contract. Now his hands clenched, his teeth gritted.

"It almost seems that there's a premium on being crooked, Ba'tiste," came at last. "It—"

Then he ceased. A shout had come from the distance. Faintly through the sifting snow they could see figures running. Then the words came—faint, far-away, shrill shouts forcing their way through the veil of the storm.

"They're going to open the road! They're going to open the road!"

Here, there and back again it came, men calling to men, the few women of the little settlement braving the storm that they too might add to the gladful cry. Already, according to the telegram, snow-fighting machinery and men were being assembled in Denver for the first spurt toward Tollifer, and from there through the drifts and slides of the hills toward Crestline. Ba'tiste and Houston were running now, as fast as their snowshoes would allow, oblivious for once of the cut of the wind and the icy particles of its frigid breath.

"They open the road!" boomed Ba'tiste in chorus with the rest of the little town. "Ah, oui! They open the road. The Crestline Railroad, he have a heart after all, he have a—"

"Any old time!" It was a message bearer coming from the shack of the station. "They're not going to do it—it's the M. P. & S. L."

"Through the tunnel?"

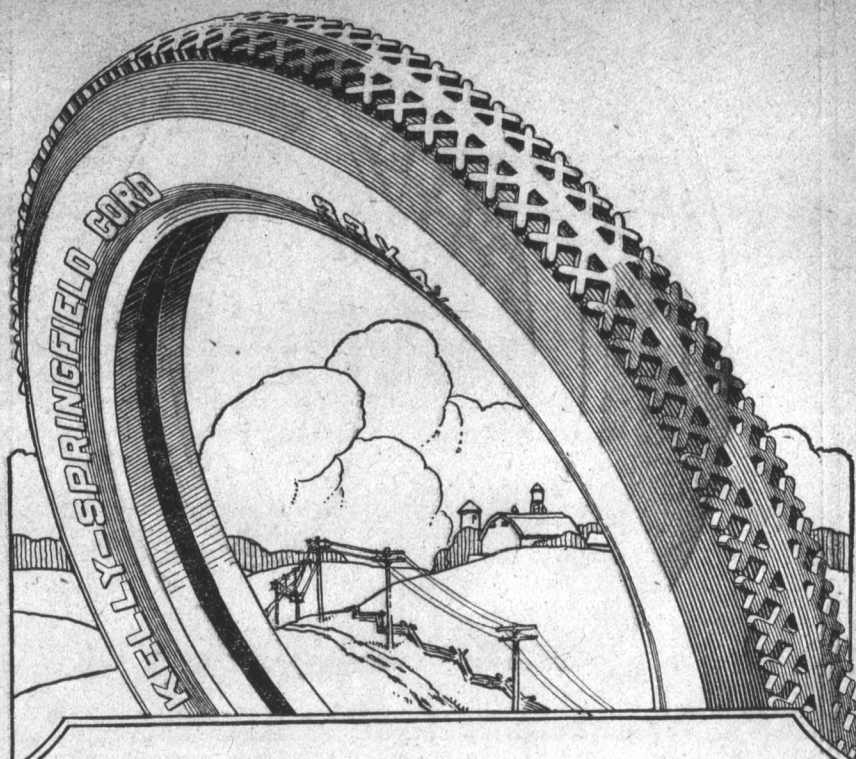
"No. Over the hill. According to the message, the papers hammered the stuffing out of the Crestline road. But you've got to admit that they haven't got either the motive power or the money. The other road saw a great chance to step in and make itself solid with this country over here. It's lending the men and the rolling stock. They're going to open another fellow's road, for the publicity and the good will that's in it."

A grin came to Houston's lips—the first one in weeks. He banged Ba'tiste on his heavily wadded shoulder.

"That's the kind of railroad to work for!"

"Ah, oui! And when eet come through—ah, we shall help to build it." (Continued Next Week.)

Charles Farley who traded his ten thousand dollar farm for an eight thousand dollar house in town is now looking for a farm. He says he can get a six thousand dollar farm for the house.



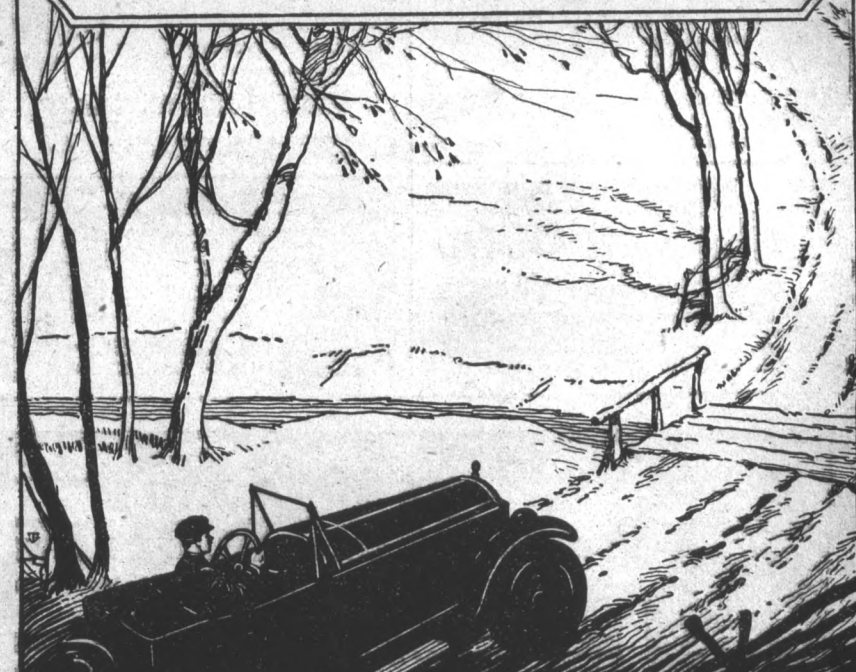
The man who buys the best is never sorry

When you buy a cream separator, a plow, a reaper, a binder or any other piece of farm machinery, you insist, if you are wise, on one particular make because you know that that make, whatever it may be, is the very best in its line.

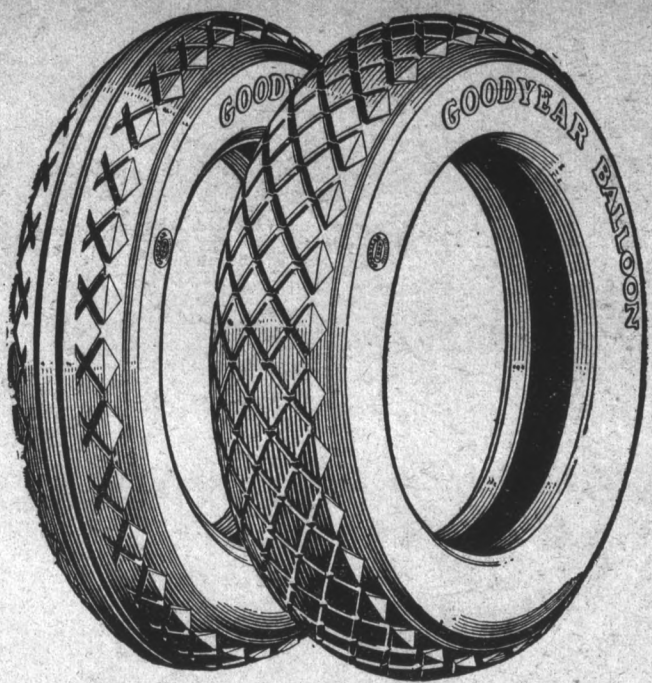
Inferior farm equipment does not pay and neither do "cheap" tires. In tires as in everything else, it pays to buy the best.

For over a quarter of a century Kelly-Springfield tires have had an enviable reputation for high quality. Until quite recently they sold at considerably higher prices than other tires, but now greatly increased production has brought the prices down. Now—

It costs no more to buy a Kelly



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What do balloon tires cost? Not so much, if they're Good-years. We make them to fit present rims. Also in the smaller diameter 20-, 21- and 22-inch rim sizes. That saves the average motorist real money. Your Goodyear Dealer will tell you how much it saves you.

GOODYEAR

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The Second Generation

Our Weekly Sermon—By N. A. McCune

THE biography of Solomon is a story of the second generation. Ever read David Graham Phillips's, "The Second Generation?" The father, by a life of toil and shrewdness has built up a fortune, and still retains his old habits of thrift. His son goes to an eastern university and spends more time at his club than in the classroom, and finally leaves college without finishing. He can spend more money in a week than his father, at his age, could have earned in six months. And the old merchant cannot understand why his son, with all his advantages is developing into such a perfectly splendid fool. The story might almost have been written of Solomon.

Poor old King David's sorrows came fast, once they began. His sons must have been a continual nightmare to him. His favorite son plotted to seize the throne, organized a wide-spread movement to that end, and was killed in the midst of it. Then came Solomon to the throne, and celebrated his advancement by murdering one of his brothers. But Solomon did other things. He loved display, luxury, to such a degree that he bankrupted his



people in taxes, and was scarcely dead until the powerful northern tribes revolted, never to be reunited to the southern kingdom. What is the matter with the second generation of successful families? Their fathers lived simply, worked hard, maintained good health, enjoyed the acquaintance of honest neighbors. But when money has come in large amounts the children do not live simply, do not work, and have traded off wholesome neighbors for a lot of prehensile parasites. Suppose Lincoln had attended a university where he lived at an exclusive club, had his breakfast served to him in bed, rode to his classes in an expensive automobile, and hired a tutor to get him past his examinations. Would he have been Lincoln as we know him?

It is impressive to recollect that when England was in a death grapple with a remorseless foe, no son of a noble family, no scion of the aristocracy was equal to the hour, but she was saved by a Welshman who had been reared by a cobbler uncle, who did not have the necessary fifteen dollars with which to buy gown and wig, when he graduated in law. This does not mean that education, colleges, universities, money are not desirable. They are. But it reminds one of the dangers which wait on the young man who is born with too many gold spoons dangling within reach.

NOW let us hasten to state with emphasis that not all second generations are disappointing, and let us dwell on that fact with joy. The second generation is sometimes a very great improvement on the first. A few examples come to mind. There was Mattathias, who lived the second century before Christ. He refused to surrender his religious belief to the fury of a depraved monarch, and organized the Jews to fight for their faith. When he died, his last request was that his sons should carry on. They did. The story of the Maccabees is one of the undying tales of human struggle. Judas Maccabaeus, the oldest, held the leadership of his people for five years, until killed in battle. The next brother, Jonathan, assumed the mantle of authority until his death, when the burden fell on the youngest of the brothers, Simon.

I think of two American fathers who lived to see their sons achieving vastly greater triumphs than they themselves ever had. David Dudley Field was a clergyman in Connecticut, who was prominent in his day and died at the age of eighty-seven. He had four sons, all of whom lived to be old men, and all were famous. Cyrus W. Field made a fortune and immortalized himself by laying the Atlantic cable, after repeated failures that would have stopped an ordinary man. David Dudley Field, Jr., was a lawyer of international fame. Henry M. Field was, like his father, a Congregational clergyman, and wrote many books, and Stephen J. was chief justice of the supreme court of the United States. His service on the bench of the supreme court was the longest on record. If that preacher-father was a bit proud in his old age, he could be pardoned for it.

When Edwin A. Abbey, the artist, was asked how he got his first big commission, he replied, "Through my grandfather." "But you are going to decorate the capitol of Pennsylvania; did your grandfather get you that commission, too?" He replied, "If I do the work, he will be the cause." The grandfather was a merchant whose happiest hours were spent at his easel. His son likewise liked to dabble in painting, and his son, Edwin A., became one of the artists that Americans mention with pride.

THE difficulty with the pleasure-loving king of Judah and Israel was that he had passed through no effort for his advancement. He was pampered and petted from birth. If King David had turned his sons out to grass and made shepherds out of them, such as he himself had been, they would have been more useful men, while the nation would have benefited immeasurably. The reason why the children of ministers and professors and others who think much but are not rewarded with overmuch of gold, travel as far as they do, is because they learn economy and toil in early life.

It is tragic that Solomon the old king was not as wise as Solomon the young king. It is the portrait of a superb young man, fully appreciating the burdens resting on him, that we first behold. But it is the portrait of a man who has seen better days that we see at last, whose head has been turned by the flattery of those who have nothing else to do, and by the vain foreign women he imported. When we lose the visions of youth we are about as poor as if we lived at the poorhouse.

A wise man has said that youth gathers together the materials for a bridge to the moon, but age uses them for building a woodshed. The Solomon who asked God for wisdom was a different man from the Solomon who had seven hundred wives, princesses, and three hundred concubines. It is a fearful come-down to have said of one, "his wives turned away his heart after other gods." But to have as many wives as Solomon had is enough to turn any man's heart after strange gods. He would need the gods to protect him from his wives.

The most human of books, the Bible is straight and true in its account of its heroes. Good and bad are told of Saul, David, Solomon and all the rest. Of what other religious books can this be said?

SUNDAY SCHOOL LESSON FOR MARCH 23.

SUBJECT:—The Reign of Solomon. I Kings, Chaps. 3 to 11.
GOLDEN TEXT:—The fear of Jehovah is the beginning of knowledge, Prov. 1:7.

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SAVE 50¢ A ROLL
Ward's RADIO ROOFING

Regular 85-pound standard weight

Don't confuse this full-weight 85-pound roofing with cheaper, lighter roofing sold at the same price. Lay it over old roofs. There is enough in one roll to cover 100 square feet—yet a roll costs only \$1.85, with nails and cement.

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Radio Roofing is surfaced with red or green slate that beautifies as well as protects it. Resists fire. Not affected by heat and cold.

WARDS 85lb Slate Surfaced ROOFING
\$1.85 PER ROLL
Guaranteed 15 Years

We guarantee it for 15 years—it should last many more.

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Examine it! Cut it open! Test it. Judge its remarkable quality. Write for free Building Material Catalogue.
Order the roofing you need. Catalogue No. 174-M00. State color—red or green.
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Add 10¢ for extra long nails
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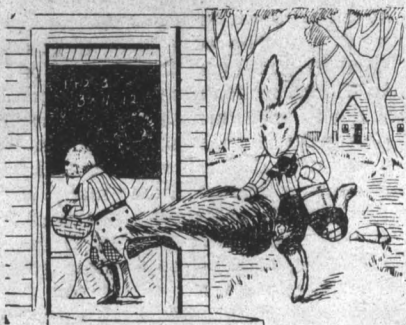


Doings in Woodland

Jackie Rabbit and Sammie Squirrel are Almost Late to School

JUST how it happened, I don't know, but one morning Jackie Rabbit left home for school a little later than usual. It might have been because he over-slept, or broke his stoestring, or perhaps both. But, as he ran out of the door with his books under his arm, he felt quite sure he was going to be late for school.

At the gate he remembered he hadn't kissed his mother, so he ran back. At the gate the second time he



"Grab my tail," said Sammie and Jackie did it.

remembered he had no handkerchief, and so had to run back for one, then started for school as fast as he could go.

But he had lost so much time going back to kiss his mother and to get his

handkerchief that he felt more sure than ever he was going to be late for school.

When he had gone quite a way, he met Sammie Squirrel waiting for him.

"We'll be late for school," said Jackie, "Oh, Sammie, why didn't you go without me. I was late, for I forgot to kiss mother and forgot my handkerchief and I'll be late for school and so'll you. Oh, why didn't you go on without me?"

"Couldn't think of it, Jackie," said Sammie. "If you are late for school, I'll be late for school, too. But perhaps either of us won't be late. Come along, come along." And off they ran side by side as fast as they could go. Just as they were nearing the school-house, the last bell was ringing, and how they did run. If they could only get inside the door before the last ding-dong, they would not be late.

They reached the schoolyard and the bell was still ringing. Jackie was lagging a little behind, for he was getting out of breath. But just as Sammie Squirrel put his foot on the doorstep, the last ding sounded. Jackie was coming a few paces behind.

"Grab my tail," said Sammie, and Jackie did. Sammie jerked him into the door just as the last dong sounded.

Neither of them were late for school, but very much out of breath.



SUNLIGHT IS GOOD MEDICINE.

SUNLIGHT is the best medicine for tuberculosis. This is true in all forms of the disease, but seems especially so in treating the stubborn ulcers, sinuses and abscesses that were formerly considered incurable except by surgery.

Sun treatment for these forms of tuberculosis has been used in Europe for a long time, but the doctors of this country did not attempt much with it until about ten years ago. In that decade, however, many of our tuberculosis specialists have been able to show that its startling effects in healing the tubercular abscesses and ulcers that formerly crippled so many children may also be applied to remedy other forms of tuberculosis.

Giving sun treatment is not so simple a matter as it sounds. It is possible for the sun to do harm if exposures are made without caution. The first treatment is nothing more than the exposure of the bare feet to the rays of the sun for five minutes. The next day the exposure is carried to the knees. But each day the length and strength of treatment is increased and after a little time the patient is in the sun all day unless its rays are too intense, and the clothing that he wears would not save the blushes of a Kaffir. The degree of pigmentation speaks in some measure of the success of the treatment, and the patient who is chinging to a rich chocolate is pretty sure to be on the high road to recovery. Screened from the wind, the hardy children, even in winter, wearing practically nothing but the chocolate coating. And the results are fine.

Tuberculosis is being conquered, and the most efficient remedies in winning

the victory have always been the priceless free agents of Nature: Fresh air, rest and sleep. And now we add the rays of the sun.

HAS HARDENING OF ARTERIES.

Will you please give me information on high blood pressure. Also hardening of arteries. I am 62 years old. Do you think a person that old can be cured of those diseases. I also have arthma.—A Subscriber.

If you have hardening of the arteries it is probably responsible both for the high blood pressure and asthma. Sixty-two is not too old to hope for improvement but I must tell you frankly that when once hardening of the arteries had well begun there is no real cure at any age. A good doctor can give you much relief if you place yourself entirely in his hands and allow him not only to give you medicines but also to prescribe your diet and your exercise.

SHEDS TEARS EASILY.

My eyes always get watery when I yawn or laugh hard. What is wrong and what can I do for it?—J. P. G.

This is not a disease but simply a peculiarity. So long as your vision is good and nothing more serious happens you need pay no attention to it. But have your vision tested at some time soon.

TUBERCULOSIS GLANDS.

What are the chances of a child with tuberculosis of glands of the neck getting over it. One doctor recommends operation on the glands.—Y. T.

Give the child general treatment, ment, consisting of rest in bed, fresh air, and nourishing food and the chances of recovery are very good. It is seldom advisable to operate on tuberculous glands.

Why Pay the Penalty of Lying Awake?

MANY people spend hours at night, restlessly tossing from side to side, waiting for sleep. All because they drink coffee with their evening meal.

If the caffeine in coffee irritates your nervous system and keeps you awake when you should be asleep, recuperating your energies, why not stop coffee and drink Postum?

Postum is a pure cereal beverage, absolutely free from caffeine or anything that can disturb health and comfort. Many prefer Postum for its delightful aroma and flavor.

If you want to know the truth, change to Postum for a month or so, and see how much better you will sleep and feel.

Postum for Health

"There's a Reason"

Your grocer sells Postum in two forms: Instant Postum [in tins] prepared instantly in the cup by the addition of boiling water. Postum Cereal [in packages] for those who prefer the flavor brought out by boiling fully 20 minutes. The cost of either form is about one-half cent a cup.



A good old Friend

Remember the good old-fashioned mustard plaster Grandma used to pin around your neck when you had a cold or a sore throat?

It did the work, but my how it burned and blistered!

Musterole breaks up colds in a hurry, but it does its work more gently—without the blister. Rubbed over the throat or chest, it penetrates the skin with a tingling warmth that brings relief at once.

Made from pure oil of mustard, it is a clean, white ointment good for all the little household ills.

Keep the little white jar of Musterole on your bathroom shelf and bring it out at the first sign of tonsillitis, croup, neuritis, rheumatism or a cold.

To Mothers: Musterole is also made in milder form for babies and small children. Ask for Children's Musterole.

35c and 65c jars and tubes; hospital size, \$3.

The Musterole Co., Cleveland, Ohio



BETTER THAN A MUSTARD PLASTER



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Write for price and shipping tags. None better.

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Frank S. Edwards, R. 1, Camden, Mich., says:

"Saved 15c to 20c a Rod."

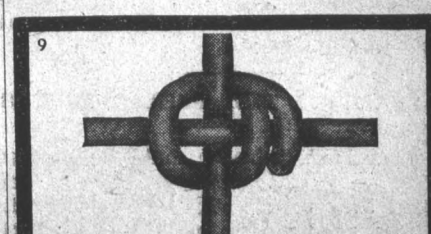
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BOND STEEL POST CO., 31 East Naussee St., Adrian, Mich.



Woman's Interests



Choose Becoming Colors for Style

The Maxim of Black or Gray in Dress for the Older Woman is Over-ruled

WOMEN early in life decide that certain colors are "becoming" to them. In later years they never bother to re-edit their first impressions of themselves, even though complexions have faded and eyes that once reflected the favorite colors so radiantly are now paled and dimmed. Personal coloring changes with health and happiness, with sickness and sadness, so that a shade or tint that is very becoming to you at one time

ed deep but they should have a shallow trench prepared for them so they may be filled in after they come up, for they should have five or six inches of soil over their roots when they are filled. Two to three at first if firm is enough, but it depends on the soil whether mellow or more clayey. Sandy soil will warm deepest. All the tubers should have a piece of the old stalk attached for the eye is not in the tuber but in the old stalk where the tuber attaches to it.—A. Hilco.

Smile

IS it not a thing divine to have a smile which, none know how, has the power to lighten the weight of that enormous chain which all the living in common drag behind them?—Victor Hugo.

may be very trying at another. Under such circumstances a readjustment of color is necessary.

But there is no reason to look drab and dowdy.

It used to be considered out of place for an older woman to wear anything but gray or black. Fortunately this cruel notion has been swept away with sundry old-time ideas and to-day we see our grand mothers wearing whatever touch of color will best bring out the beauty that was concealed under black.

A good rule is that all hard, cold colors be avoided by the woman past her youth.

Black also emphasizes age and adds years to any face that isn't glowing with youth. "Black should not be worn after a woman is thirty, unless for mourning, nor again until after she is sixty," is an old saying in France, that country of fashions.

Black should always be relieved with a light color at the neck line. Black satin has too high a finish to be really becoming, where soft-finished stuffs might be lovely.

A gray haired woman rarely looks well in tan or brown tones.

Colors, such as green, which accentuates sallowness should be avoided. Blue and purple, in the dull, warm tones, with some yellow in them, are frequently becoming.

With iron gray hair beige is usually good, while with clear skin and pure white hair gray may be worn.

From youth to old age every woman can wear white, but, of course, it should not be pure white, which is "hard" and brilliant. But then there are many of the soft milk, cream and pink whites from which to choose.

Pink is usually for youth, but heliotrope, mauves, etc. are usually becoming.—Julia Wolfe.

PLANTING THE DAHLIA TUBERS.

DAHLIA tubers should be planted very early for best results and yet they must not freeze. April will be a good month, and early in April when the season is normal will give you flowers by July and from that time until fall. They will be at their best just before frost. Early in the season the tubers should not be plant-

PROMOTES CHILD HEALTH.

AS I pick up one paper or another I am impressed with the importance of the children's health. More than ever before are foods being studied and their relative values told. It seems quite natural, then, for us to welcome the package groceries to insure more cleanliness in our foods. Even in the best of stores foods sold in bulk cannot be kept strictly free from all dust and dirt, and many are still not of the best.

We are glad to know when we use a food it has not been touched since sealed at the factory. The foods themselves are in a better condition, the crackers crisper, the rolled oats flakier, the coffee stronger and the macaroni unbroken. These packages are far more convenient to carry from the store, no string is breaking or sack tearing. Last, but not least, how neat our cupboard or pantry shelves look with the neat array of attractive boxes in place of the untidy sacks.

TRY A BACON SANDWICH TODAY.

BACON sandwiches are appetizing, economical, wholesome and nutritious. The fine flavor and aroma of the bacon literally make the mouth water and aid materially in the flow of digestive juices, making other ingredients of the sandwich even more desirable. However, it should not be forgotten that bacon also adds to the food value of the sandwich by adding energy and protein.

Parsnips in Variety

WHEN spring first peeks around the corner, our appetite is about the first to tell us of it. Nothing tastes as good as usual, and it becomes necessary to make changes in our winter diet. In this nothing helps quite as much as spring vegetables. They tone up the system, give us the required vitamins and make us again to feel that it is good to live.

Here are some varied ways of serving that ever-popular spring vegetable, the parsnip, that the family is sure to like.

Parsnip Stew.

Dice and fry to a golden brown three small pieces of pork, three medium-sized parsnips and one potato. After frying five minutes, cover with a quart of water and cook until the vegetables are tender. Season with salt and pepper and thicken slightly. In the meantime, make light biscuits of one and one-half cups of sour milk, one-half cup of sweet cream, half teaspoon of soda, two teaspoons baking

Here are a few recipes for bacon in appetizing combinations.

Club Sandwich.

Toast slices of bread to a nice brown, and while hot, spread with butter. On one slice place a lettuce leaf covered with a teaspoon of salad dressing, then a slice of cold chicken, chopped olives and pickles, then a lettuce leaf with dressing and on top of this strips of hot, crisp bacon. Place the remaining piece of toast on top and garnish with slices of tomatoes with a spoonful of mayonnaise on each slice.

Bacon and Egg Sandwich.

Toast two slices of bread, either white or graham, and fill with scrambled eggs and a slice of crisp bacon.

Mother's Hope

Youth fades; love droops; the leaves of friendship fall;
A mother's secret hope outlives them all.
—Oliver Wendell Holmes.

Fried bacon cut into cubes may be added to the egg mixture while it is being cooked.

Scrambled Eggs New.

2 eggs
1-8 tsp. celery salt
1 tsp. onion
1 lb. chopped pimento
1 lb. green pepper, chopped
2 lb. cooked bacon cut
fine (or bacon may be added later in the stir)
2 tb. milk
½ lb. bacon fat
1-3 tsp. salt
1-8 tsp. paprika

Add onion, pimento, and green pepper to the hot bacon fat. Let cook slowly for a minute. Then add the beaten egg, to which has been added the milk, celery salt, salt, paprika, and chopped bacon (if bacon is to be chopped). Cook, stirring until thick and creamy.

HOME-SPUN HINTS.

TO remove paint stains from clothing, after it has hardened, mix turpentine and ammonia in equal parts and soak the fabric in it for about two

hours before rubbing with the hands to loosen the paint. Wash in hot soap suds.

An excellent rainy-day book for the children may be made by saving the funny section of the newspapers and stitching them together on the sewing machine. The edge may be strengthened by putting a thin piece of muslin in the same seam with the paper.

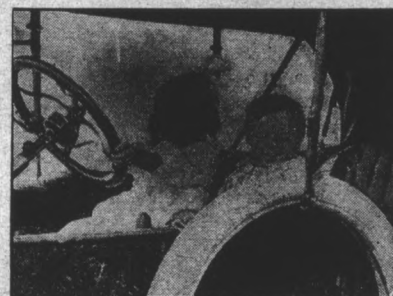
If you will varnish your dinner candles with plain shellac you can paint them with delicate water colors. The shellacing makes them more attractive, beside preventing the wax from dripping down the sides of the candle.

Getting about time to store some of the heavy comforters. If you do not have a special bedding cabinet, put a pole in one end of the closet and spread the comforters over this. Cover with a sheet of unbleached muslin.

ELIMINATES HANDLING FOOD.

I PREFER to buy my groceries in the package because of the following reasons:

Sanitary.—We know that goods, such as oatmeal, rice, bulk teas and coffees, etc., are subject to all the dust and disease germs that invade our stores.



Taking little brother for a joy ride.

Our cookies, dried fruits, candies, etc., that are set on the counters in open boxes are being constantly handled by the various customers and by this very practice some innocent purchaser has contracted some disease.

Economy.—The package articles are weighed "net" and when buying bulk articles we pay for the container instead of getting our full measure of the articles bought. We find our better quality groceries in the package and in the long run our best foods are the most economical, although the initial cost may be a trifle more.

Convenience in having the package goods on our pantry shelf, rather than numerous sacks.—Mrs. F. C. O., Flushing, Mich.

FAVORS DUST-PROOF AND AIR-TIGHT PACKAGES.

I DESIRE to make a strong appeal in favor of the sealed package foods. The modern sealed, dust-proof and air-tight containers for food of all varieties are a blessing to every household. Sanitary, attractive and appealing are these thousands of sealed packages.

This method of selling food stands for cleaner food, cleaner on account of less handling, and entirely free from insects and dirt that naturally sift into the open bulk containers.—Mrs. O. B., Mendon, Mich.



Use this department to help solve your household problems. Address your letters to Martha Cole, Michigan Farmer.

KEEPING THE KITCHEN BRIGHT.

I have a new linoleum in my kitchen. Can you tell me how best to take care of it to keep it looking well?—Mrs. B. M.

To keep linoleum bright and clean, wash with equal quantities of milk and water. If the milk has begun to sour a little, it will do no harm. Once a month rub with a cloth, moistened with this solution:

4 oz. turpentine 4 oz. gasoline
1 pt. liquid paraffin 4 oz. linseed oil

First wash the oilcloth perfectly clean in warm water. When dry, apply the polishing mixture to the surface and rub well. Keep off the linoleum, if possible, for an hour or two until most of it has been absorbed into the surface. Any preparation containing gasoline is inflammable and should not be used where there is a fire. Gasoline may be substituted with kerosene.

TO BLEACH FLOUR SACKS.

IN the issue of March 8, of Michigan Farmer, Mrs. J. D. asked how to remove prints from flour sacks. I just wash the flour out in lukewarm water then throw them in the boiler in which I have put about half a teaspoon of lye and boil. If it is not all out I make a new lye suds and boil again.—Mrs. W. H.

TO MAKE SOAP.

I have a lot of cracklings and old salt pork. Can you tell me how to use them in making soap?—Mrs. J. M.

If you wished to make soap of this material, it would be necessary to try out the grease in the salted pork. Use this and the cracklings in the following recipe:

Pour two gallons of water into an iron kettle and empty three cans of lye into it. Let cool one hour. Place the lye mixture on the stove and add fourteen pounds of fryings or cracklings. Let boil until every particle of grease is dissolved. Add cold water from time to time, adding just enough to keep the quantity of liquid the same all the time. The addition of cold water also keeps the mixture from boiling over.

When all the grease is dissolved, set the mixture aside to cool overnight. In the morning skim off the

white crust and brown jelly, leaving the sediment in the bottom. Dispose of the sediment and wash the kettle and boil two hours. Then add boiling water until the soap becomes the consistency of honey when dropped from a stick. Be careful not to add too much water. Pour into molds or boxes, which have been wet first in cold water, and cover the soap while cooling. Do not let freeze before it is hard.

SALT RISING BREAD.

Will you please send me a recipe for making salt rising bread?—Mrs. E. O. K.

The following is a tested recipe for salt rising bread:

In the evening, take three table-spoonfuls of cornmeal, one-half spoonful of salt, one-half of a raw potato scraped fine, and scald with enough water to make quite a thin mush; set in a warm place until morning; then take a pint of flour, one-half teaspoonful of salt, and enough lukewarm water to make a thick batter; then add the mush made the night before, and stir briskly for a minute or two. Set in a warm place; when light, stir down and let rise a second time. When risen, put four or five quarts of flour in a bread bowl, make a hole in the center, and pour in three pints of warm water. Then add your rising; knead, and when light mix in loaves. When risen to top of pan, bake. This will make three loaves.

IS BOBBED HAIR STYLISH?

Is bobbed hair and bangs going to be popular this summer?—Miss R. D.

Bobbed hair will be quite popular this summer. Regarding the bangs, that is more of a personal inclination. To some bangs are becoming while to others they do not fit the lines of the face.

Jesus, like all great souls, loved the country. He saw the dry trellises of the vine greened over with leaves, and from the trellises the white and purple clusters hanging down for the joy of the vintage. He saw the seed of grain buried in the earth, and its resurrection in the form of the full ear.—Papini's "Life of Christ."

The best way to clean the glass on your automobile is to dip a clean cloth in gasoline and lightly rub over surface. Then use a dry cloth.

Consider the Child's Motive

CHILDREN are like grown people; the experience of others is never of any use to them," says Daudet. But many times it seems that we force our experiences upon them or punish them for attempting to gain their own experience. Always we cannot see the child's motive that prompts him to do the act.

In my past relation with children, I recall the incident of a little boy who threw the pet kitten into the pond near the house. His two young sisters went running to tell mamma.

"How did it happen?" questioned the mother wearily, for she had to whip Junior nearly every day for some misdemeanor.

"Why he just threw her right into the water," answered the oldest sister.

"On purpose, too," added little sister.

At this juncture Junior appeared. With a severe reproachful look, the mother questioned, "Junior, did you throw the cat into the pond?"

Junior admitted that he did, but made the tattle-tale grimace at his sisters. Of course, Junior got his usual whipping, made his usual fuss over it and promised never to do it again.

Later in the day I asked Junior why he threw the cat into the pond, and confidentially he answered, "To see if she could swim. I didn't know if cats could swim or not, but they can!" he added triumphantly.

It was all very clear to me then. This child had acted with a right purpose, even though by a questionable method. He had performed an experiment in natural history and his objective had not been a cruel one.

Parents would do well to seek to develop the natural trend of the child's mind when it takes a legitimate course. Usually if we can spare time to go to the bottom of things, we shall find that it is not meanness which prompts the child's naughtiness, but rather some undeveloped talent struggling for expression.

Just for Curiosity

If you are curious about the results that come from using Calumet—bake a cake and use some other baking powder, then use the same recipe and employ

CALUMET BAKING POWDER

Compare the texture of the two cakes—the way they look—the way they taste. The difference will cause you to join the millions who use Calumet daily. You will then realize why it is called the most economical of all leaveners.

There are never any losses—no last-moment disappointments where Calumet is employed—everything comes from the oven baked "just right."



Don't buy an unreliable brand of baking powder simply because it costs a trifle less than Calumet—it only means false economy. Made in the world's largest and most sanitary baking powder factories—never touched by human hands and positive for results.

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"Dandelion Butter Color" Gives That Golden June Shade which Brings Top Prices

Before churning add one-half teaspoonful to each gallon of cream and out of your churn comes butter of Golden June shade. "Dandelion Butter Color" is purely vegetable, harmless, and meets all State and National food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely tasteless. Large bottles cost only 35 cents at drug or grocery stores.

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Strawberry Plants Dunlap, \$3.00 per 1,000; Gibson, \$3.25 per 1,000. Seven other varieties. RASPBERRY PLANTS—Cumberland and Plum Farmer, \$12.00 per 1,000. King Red, \$15.00 per 1,000. FRED STANLEY, Bangor, Michigan.

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or wood when you can burn gas in your stove or heater by installing a Uni-Hete Kerosene Burner (with exclusive 1924 features) in five minutes time. It gasifies common kerosene to the hottest and cheapest fuel known. Does away with dirt and high fuel cost. Heat regulated to any degree by valve. Increases stove efficiency 100%. Has brought joy and economy to thousands. FREE TRIAL. Saves its cost in 30 days. Write quick for full particulars and introductory price.

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Careful breeding, type-testing and trap-nesting has produced our world-famous Karsten's Quality Laying Hen—A Utility Bird With Standard Requirements

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POSTPAID, 100 PER CENT LIVE DELIVERY. Give us your order for OUR RELIABLE CHICKS and we will prove to you, IF BETTER CHICKS COULD BE HATCHED FOR THE MONEY WE WOULD BE HATCHING THEM.

FLOCKS PURE BRED CULLED BY EXPERTS
FINE ILLUSTRATED CATALOG FREE. Tells how we produce RELIABLE CHICKS that have pleased thousands of customers. We hatch 13 Varieties. COMBINATION OFFERS. VALUABLE BOOK GIVEN FREE with each order. HUBER'S RELIABLE HATCHERY, East High St., Fostoria, Ohio.

PURE BRED BIG VALUE CHICKS

Best paying standard varieties from healthy free range utility flocks, carefully inspected, culled, and Hogan tested. Quick maturing. High Egg Production. Each

	25 Chicks.	50 Chicks.	100 Chicks.	500 Chicks.	1000 Chicks.
S. C. White L. B. L. Buff L.	\$3.25	\$6.25	\$12.50	\$60.00	\$120.00
S. C. B. Minorcas, S. C. M. Anconas, Barred Rocks, S. C. R. I. Reds	3.75	7.50	15.00	72.50	140.00
White Wyandottes, R. C. R. I. Reds	4.00	8.00	16.00	77.50	150.00
S. C. White, S. C. Buff Orpingtons	4.25	8.50	17.00	82.50	160.00
Mixed, All Breeds	2.50	5.00	10.00	50.00	100.00

Wolf Hatching & Breeding Co., Dept. 5, Gibsonburg, Ohio

CHIX FREE CHICK OFFER

Our Tom Barron Strain White Leghorns pay big dividends. We breed and hatch only one kind—the best. Our pure-bred chicks are strong, husky and easy to raise. Get our circular and FREE CHICK OFFER before buying eggs, chicks or breeding stock. It will surely pay you. PROGRESSIVE POULTRY FARM, P. Ver Hage, Mgr., Zeeland, Mich.

Great Northern Hatchery Pure Bred Selected Flocks 100% Live Delivery

Strong, Sturdy, Northern-grown Chicks. Selected, pure-bred stock. Healthy Flocks on free range insure strength in every Chick. Order from this Ad.

	Prices on 50	100	300	500	1000
Leghorns (S. C. White and Brown)	\$7.00	\$13	\$38	\$62	\$120
Barred Rocks	8.00	15	43	72	140
White Rocks	8.50	18	53	85	165

Mixed Broiler Hatched under best conditions in Newtown Incubators. Every Chick carefully inspected. 100 per cent live delivery guaranteed. Reference, State Commercial Savings Bank, this city. Write for prices on special matings. GREAT NORTHERN HATCHERY, Box 56, Zeeland, Michigan.

Highest Quality Certified Baby Chicks

From Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State. Pure-bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, well-hatched Chicks from tested Hoganized free-range stock that make wonderful winter layers. Chicks sent by Insured Parcel Post, Prepaid to your door. 100 per cent live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks, giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality chicks before placing your order.

W. VAN APPELDORN, R. 7, Holland, Mich

BABION'S QUALITY CHICKS

Varieties.	Prepaid Prices on 25	50	100	500	1000
Pure English White, Brown & Buff Leghorns	\$4.00	\$7.00	\$13.00	\$62.00	\$120.00
Barred Rocks, Reds, Anconas	4.25	8.00	15.00	72.00	140.00
Wh. & Buff Rocks, Wh. Wyandottes, Minorcas	4.75	9.00	17.00	82.00	160.00
Sil. Wyandottes, Orpingtons	5.50	10.00	19.00	92.00	180.00

Prices quoted are for chicks hatched from OUR GOOD UTILITY FLOCKS. Chicks from OUR EXTRA SELECTED FLOCKS will be \$3.00 per 100 higher and Chicks from our Fancy anted. Bank references. You cannot go wrong. Order from this ad. Thousands satisfied. Ten years' experience. Our Slogan, the best chicks are cheapest, not the cheapest chicks the best. BABION'S FRUIT AND POULTRY FARMS, Flint, Michigan.

CHICKS

We can save you money on Ancona and White Leghorn Chicks. Send at once for catalog and prices. We insure your chicks for one week.

M. D. WYNGARDEN
R. 4, Box 80 Zeeland, Mich.

Large, Husky Chicks

Pure-bred, high-quality chicks from certified, tested flocks on free range.

Varieties.	Prices on 25	50	100	500	1000
S. C. White & Brown Leghorns	\$3.50	\$6.75	\$13.00	\$62.50	\$120.00
Anconas	3.75	7.25	14.00	67.50	130.00
Barred Rocks, R. I. Reds	4.50	8.50	16.00	77.50	150.00
Assorted Chicks	2.75	5.50	10.00	50.00	100.00

Extra Select Stock, \$2.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid. 100 per cent live delivery. Bank reference. 1924 catalog ready.

WINSTROM POULTRY FARM & HATCHERY, Box A-6, Zeeland, Mich.

MEADOW BROOK One Of The Founders Of The Chick Industry

Henry DePree & Sons. 21 years in business

Pure-bred stock carefully developed for years. Order from this ad and get chicks just when you want them.

Prepaid prices on 50	100	500	1000	
White and Brown Leghorns	\$7.00	\$13.00	\$62.50	\$120.00
Rocks, Reds, Buff Leghorns	8.00	15.00	72.50	140.00
Wh. Wyandottes	11.00	20.00	95.00	180.00

Mixed Chicks (all varieties), \$10 per 100
You take no chances. Ref. First State Bank, Holland, 97 per cent live delivery guaranteed.
Wh. Leghorns headed by male birds of 285-303 egg record strain. Other breeds highly bred. Circular free.

MEADOWBROOK FARM HOLLAND, MICH.

Raising Baby Chicks

IN his talk before the Michigan Poultry Producers' Association meeting, R. D. Ure, of the college extension department, emphasized many practical points that will help in producing thrifty chicks. He states that the old hen is being discarded because the brooder saves work. The poultryman must be ready with his equipment when the chicks arrive. The early chicks often grow as much in two months as the later hatches do in three months, and the early chicks are the most profitable.

The records on the cost of production from seventy-five farms during one month in the fall showed that the cost of eggs varied from fourteen cents to \$11 per dozen. On the farm where the cost was \$11 per dozen most of the birds were late hatched pullets that were not laying. As soon as that flock came into production the story was different. So it proves that the pullets should start production the last of October or in November when the farm flocks slow up in production and eggs become high in price.

Disinfect House Thoroughly.

Always disinfect the brooder house to kill lice and mites before the brooder is started. Then the chicks will be free from the pests for six or eight weeks. Set up the stove to twenty-four to thirty-six hours before the chicks come. Around the canopy the temperature should be about one hundred degrees.

It is good policy to use an inch of sand on the floor with a little clover or alfalfa chaff on the sand. It is best to only place 300 to 350 chicks in a flock. A movable brooder house ten feet square is satisfactory. Avoid raising the chicks on the same ground year after year.

A circle of hardware cloth a foot high around the canopy about a foot from the edge is useful to keep the chicks near the source of heat. The temperature should be 100 degrees near the edge of the canopy the first day and later can be reduced. Watch the chicks, if they huddle they are cold, and if they avoid the stove there may be too much heat. The fence of hardware cloth can be taken away in a few days and the chicks allowed to run all over the house.

Prevent Huddling.

To prevent huddling in the corners of the house, a screen framework can be used, on all sides of the house. It should reach from a point a foot up on the wall to a point one and one-half feet out on the floor. This prevents the growing chicks from huddling near the wall and being smothered. Placing wooden strips on the wire frame helps to induce early roosting. The Leghorns learn to roost easily at an early age, while the larger breeds may be slower in taking to the roosts.

When roosting is learned, remove stove and fill the house with roosts. If the birds are crowded they are overheated and this may result in runts. All the runts are not caused by the parent stock.

Feeding the Chicks.

The feeding of the chicks the first ten days to two weeks is very important. Nothing is needed for from twenty-four to sixty hours as the yolk supplies nourishment. Turn down the lamp and leave the chicks in the machine for twenty-four hours. Day-old chicks can be placed at once in the brooder house. All they will need is sour milk the first day. Do not use galvanized iron or zinc vessels or poisoning results from the lead impurities in the iron or zinc. Use porcelain or earthenware vessels to feed sour milk to chicks.

The first feed can consist of two handfuls of bran and three of rolled oats mixed with raw egg for each 100 chicks. On the fourth day a little scratch feed can be introduced by giving three feeds of the mash and two of fine scratch feed. Leg weakness is

Baby Chicks Sick and Dying

If they're weak, wobbly, "pasted up", with no appetite, don't waste a minute!

WHITE DIARRHEA

Easily stopped in 48 hours

White diarrhea kills half of nearly every hatch of chicks. It's strange how many people do nothing either to prevent the trouble or end it, thinking this loss can't be stopped. But it can be stopped, without extra work, without troublesome dosing, and at almost no cost. For years, thousands have saved their sick chicks and raised nearly every chick in every hatch, by merely dropping an Avicol tablet in the drinking water. Successful poultry raisers say there is nothing else like Avicol for this purpose.

Trouble gone in 2 days

Chas. N. Kittinger, Willows, Calif., writes: "Twelve of my chicks had diarrhea by the time I received my Avicol. I immediately gave them some, and by the second day, the trouble disappeared and now they are all as lively as crickets. If I had only known of Avicol sooner, I would have saved lots of chicks."

It is wonderful how sick, droopy chicks, within 48 hours after they get Avicol, become just as lively as Mr. Kittinger says. No matter how rapidly the trouble is spreading, they stop dying almost the very day Avicol is put in their drinking water.

"Stopped dying at once"

"Last spring I bought 25 baby chicks," writes Mrs. John Shaffer, Owen, Wis. "When about a week old, they began dying, would get droopy and in a few hours would die. When I had 15 left, I began giving Avicol and they stopped dying at once. I did not lose another one."

Costs nothing to try

Why should anyone sit back and let baby chicks die? It costs nothing to try Avicol. Readers are urged to write to the Burrell-Dugger Co., 54 Allen Ave., Indianapolis, Ind., sending 50 cents, as a deposit, for a package by mail prepaid (or pin a dollar bill to your letter for the extra large size holding nearly 3 times as much). If you prefer, send no money, but deposit the money with the postman on delivery. Either way, you won't risk a cent. If Avicol doesn't stop your chick losses immediately, if it isn't superior to anything else you ever heard of, if it doesn't satisfy you in every way, every cent of the money you have deposited will be promptly refunded by the manufacturers.

Burrell-Dugger Company,
54 Allen Avenue, Indianapolis, Indiana

--CHICKS--

Investigate

Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. SINGLE COMB, ENGLISH STRAIN, WHITE LEGHORN, BARRED ROCKS, ANCONAS, 100 per cent live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information. STAR HATCHERY, Box 22, Holland, Mich.

STURDY CHICKS

From high grade, heavy egg producing strains of S. C. White Leghorns, S. C. Rhode Island Whites and White Wyandottes. All from pure bred, healthy, vigorous stock, carefully culled and tested to insure your getting chicks that will be easy to raise, develop rapidly and become heavy winter layers. Shipped postpaid, 100% live delivery guaranteed. Catalog free.

COLUMBIA HATCHERY, HOLLAND, MICH.

Start them Right and keep them healthy with DICKINSON'S Globe Chick Mash
(With Dried Buttermilk)

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 507, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa.

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for package of Walko—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

WALKER REMEDY CO., Dept. 507,
Waterloo, Iowa

Send me the [] 50c regular size (or [] \$1 economical large size) package of Walko White Diarrhea Remedy to try at your risk. Send it on your positive guarantee to instantly refund my money if not satisfied in every way. I am enclosing 50c (or \$1.00). (P. O. money order, check or currency acceptable.)

Name.....
Town.....
State..... R. F. D.....

Mark (X) in square indicating size package wanted. Large package contains nearly three times as much as small. No war tax.

usually due to a deficiency in the ration. Tomato juice is useful when the chicks are confined to the house and can be given as a drink or used in a mash in place of the raw egg for one feed each day. If there are any carriers of white diarrhea in the flock it may be safest to feed the eggs boiled.

Tomatoes can be saved in large quantities for chicks by being scalded and placed in a barrel with one-half of one per cent benzoate of soda. The tomatoes are scalded but not cooked. The barrel must be thoroughly scalded.

Sprouted oats and lettuce are fine green feeds for chicks and the sprouted oats can be given when the chicks are only three or four days old. A good dry mash for chicks after they are two weeks old consists of thirty parts bran, twenty parts corn meal, twenty parts fine ground oats, twenty parts middlings and ten parts of meat scrap. Later both the mash and grain ration can be hopper-fed.

To stop the toe-pecking habit dip the bloody toes of injured chicks in tar or asphalt. Place more mineral matter in the mash, such as two per cent ground bone meal. Overheating of the incubator is one cause of weak-legged chicks. Every sick chick does not have white diarrhea, but it pays to remove sick chicks so that disease will not spread.

OBJECTIONS TO LIGHTS FOR BREEDING FOWL.

THERE are two angles of importance to the artificial lighting of poultry houses as a means of increasing egg production. One is that it increases egg production during the winter when prices are high, and thereby increases the revenue without necessarily boosting the total crop yield, and the other angle is the effect that forced production has on the fertility and hatching ability of eggs.

In California eggs produced by hens kept under artificial lights from five o'clock to daylight each morning were used in a hatching test. The result of the experiment shows that eighty-seven per cent of the eggs were fertile and fifty-two per cent of them hatched. To check on this, eggs from flocks that were not kept under artificial lights were tested and they gave ninety-six per cent fertility and seventy-one per cent hatched.

This test substantiates the opinion of many breeders that it is advisable to keep layers under artificial lights where the eggs are being produced for the market, but where they are to be used in the incubator forced production under lights is a dangerous practice. This is in keeping with the belief, supported by practical tests, that breeding birds should not be forced to produce more eggs, but allowed to build up strength in winter.—Mills.

LAME HENS.

I have some chickens—a few hatched late—I am bringing them up by hand, and think lots of them. Now, one got lame and kept getting worse 'til it got so it couldn't walk, but could eat like a pig. Then it was accidentally killed. Now another is lame. They don't seem sick. I think so much of this little one, I call it "Tiny." Please tell me what to do for it.—M.T.

Lameness accompanied by rapid emaciation is apt to be due to tuberculosis. Sometimes lameness is due to rheumatism caused by dampness and exposure. The condition may improve by keeping the birds in a dry sunny house. Perform a postmortem on any that die and note the condition of the internal organs. The greyish spots on the liver are a symptom of tuberculosis. If this disease is present in the flock it often pays to consult a veterinarian. He can make recommendations after inspecting the flock. There is no cure for hens with tuberculosis.

Maybe a bent front axle is prematurely wearing the treads of your front tires.

New Low Prices On Miller Baby Chicks—Season 1924

Buy your chicks this season from an established hatchery. MILLER HATCHERIES is one of the finest in America. We hatch twenty popular varieties from stock which have been culled and bred for heavy egg production. 1,500,000 chicks via prepaid parcel post at the following low prices:

Varities	50 chicks	100 chicks	500 chicks	1,000 chicks
Barred Rocks, R. and S. C. Reds, Anconas, R. C. Brown and S. C. Buff Leghorns	\$7.50	\$14.00	\$65.00	\$125.00
White and Buff Rocks, W. W. and Black Langshans	8.50	16.00	75.00	140.00
S. L. Wyandotte, White Orpington, S. C. Black Minorca	9.00	17.00	80.00	150.00
Buff Orpingtons	8.00	15.00	70.00	135.00
Golden Wyandotte	11.00	20.00	95.00	175.00
Light Brahmas and W. F. Black Spanish	13.00	25.00	115.00	200.00
S. C. White and S. C. Brown Leghorns	7.00	13.00	60.00	110.00
Assorted	6.50	12.00	55.00	100.00

Order direct from this advertisement or send for our FREE CATALOG. 21st SUCCESSFUL Season. Over 12,000 pleased customers in United States and Canada. Member, Missouri State, Mid-West and International Baby Chick Associations.

MILLER HATCHERIES

BOX 651

LANCASTER, MISSOURI

CHICKS From World's Greatest Layers

If you want pure bred chicks that are bred right, hatched right, and shipped right, that grow and will make you a profit, get our new low prices and free catalog before you buy.

Tom Barron White Leghorns Heavy Type Brown Leghorns
R. C. & S. C. Rhode Island Reds Park's Barred Rocks

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected, no cripples or weaklings. Every one strong and healthy. Satisfaction and 100% live delivery guaranteed. Postage paid. Write now for our low prices and free catalog. White Leghorn and Barred Rock pullets after May 1, at low prices.

KNOLL'S HATCHERY, R. R. 12, Box M, HOLLAND, MICH.

EARLY MATURING BABY CHICKS

Quality Type Dependability Production
Our chicks are from flocks selected for their early maturing habits. This means high-producing individuals. These flocks are headed by cockerels from high-producing blood lines. Culled by experts. Each flock personally supervised. Pure-bred. From \$12.00 per hundred and up. We have a limited number of superior grade chicks from special matings. 230-302 egg strain. B. P. Rocks, R. I. Reds, W. P. Rocks, W. Wyandottes, W. Leghorns, Anconas. We can supply you chicks from the pens of B. P. Rocks and R. I. Reds which we now have in the 2nd International Egg Laying contest, or we can supply them from the matings which produced these.
Write for description and prices. 100 per cent live delivery. Ref., Milan State Savings Bank. MILAN HATCHERY, Box 4, Milan, Mich.

Royal Egg-Bred Chicks

S. C. English Type White Leghorns and Brown Leghorns

You want strong, healthy chicks that grow fast into heavy producing Leghorns. You can have these chicks from us at a very reasonable price. Old customers took over 65 per cent of our chicks last year. H. A. Burke, of Green Bay, Wis., writes he had 70 per cent production during Dec. and Jan., 22 below zero, of chicks bought from us May 1st, 1923. 12 years of breeding for heavy egg production. Carefully selected breeders, headed by large, vigorous males and many years of successful hatching and shipping chicks, gives you chicks that will bring you success. 100 per cent live arrival guaranteed. Catalog price list free. Write today. ROYAL HATCHERY AND FARMS, S. P. Wiersma, R. 2, Zeeland, Mich.

Better Chicks & More of Them

From well kept, well fed, free range heavy laying flocks. Barred Rocks, 50, \$7.75; 100, \$15; 500, \$72.50; Anconas, 50, \$6.75; 100, \$13; 500, \$62.50 White Leghorns, 50, \$5.75; 100, \$11; 500, \$52.50. Order direct from ad. saving time and money. Our nine years' experience hatching and selling Chicks, your best protection. 100 per cent live delivery guaranteed. Good reference.

DILIGENT HATCHERY, Holland, Mich.

Dundee Chicks

Are from pure-bred flocks culled by M. A. C. graduates. Only choicest breeders kept. Best utility and exhibition matings. Barred Rocks, 230 to 302 egg strain. R. I. Reds from Liddicoat's best. Anconas direct. Sheppard's White Leghorns direct M. A. C. Get 1924 catalog, price list. Reference, Dundee State Savings Bank.

THE DUNDEE HATCHERY

Box A,

Dundee, Michigan

QUEEN QUALITY CHICKS

from Best Blood Line Free Range Flocks.

Developed and Culled by Experts—Barron Strain English White Leghorns, Brown Leghorns and Sheppard's Anconas. Sturdy, Healthy Chicks. Just a little more for your money. Safe delivery guaranteed. Write for Catalog.

QUEEN HATCHERY & POULTRY FARM :: ZEELAND, MICH.

750,000 CHICKS \$10.00 PER 100 AND UP

Select, culled flocks of heavy layers on free range and properly cared for to produce vigorous, sturdy chicks.
Varities
White, Brown & Buff Leghorns, Anconas 25 50 100 500 1,000
White & Barred Rocks, Reds, Black Minorcas \$3.75 8 13 50 120
White Wyandottes, Buff Orpingtons 4.25 8 15 72 140
Buff Minorcas, Silver Laced Wyandottes 4.50 8.50 16 77 ...
Mixed chicks \$10.00 per 100 straight.
Postpaid. 100 per cent live arrival guaranteed. Order right from this ad.
Bank references. Circular Free.

TRI-STATE HATCHERIES

Box 533

ARCHBOLD, OHIO

HUNDERMAN'S First-Class Chicks \$10 AND UP

We are heavy producers of pure-bred Chicks. Flocks on free range. Culled by an expert. 100 per cent Live Delivery Guaranteed. Order today from this Ad. and get Chicks when you want them.
Varities Prices on 25 50 100 500 1,000
English S. C. White Leghorns.....\$3.50 \$6.50 \$12.00 \$57.50 \$115.00
Barred Rocks, S. C. Reds..... 4.25 8.00 15.00 72.50 140.00
Odds and Ends..... 3.00 5.50 10.00

Blue Hen Incubators. Reference: Zeeland State Bank. Order today. You take no chances. Orders booked for 10 percent down balance 10 days before chicks are to be shipped. Catalog free. HUNDERMAN BROS., POULTRY FARM, Box 25, Zeeland, Michigan.

Keystone Quality Chicks

From Early Maturing Stock. Bred in Michigan—Hatched in Michigan
Early maturing means that our stock has been selected and mated to produce fowls capable of making high yearly records. Great winter layers from pure-bred flocks under our own personal supervision. They are carefully culled and mated and from flocks headed by cockerels of high producing blood lines. Our best quality chicks have record breeding on both sides. B. P. Rocks, R. I. Reds, W. P. Rocks, W. Wyandottes, W. Leghorns, Anconas. Sent prepaid to your door. 100 per cent live delivery guaranteed. Write for illustrated catalog and price list. Low prices on quality chicks, \$12.00 per hundred and Bank References.

The Keystone Hatchery and Poultry Farms, Lansing, Michigan

PURE BRED CHICKS

Real producers. Flocks culled by expert. Beautiful breeding stock.
Barred Rocks, R. I. Reds, 50, \$8; 100, \$15; 500, \$72.50. W. Leghorns, Anconas, 50, \$7; 100, \$13; 500, \$62.50. Leghorns are Barron stock. None better. 100 per cent live delivery guaranteed. Order from this ad and get chicks when you want them. You take no chances. Ref., McLachlin State Bank, this city.
Petersburg Hatchery, Petersburg, Mich.

Breckenridge Chicks Are Winners

Day-old chicks from strong, vigorous flocks which have been carefully culled and extra selected standard male birds—Barred Rocks, R. I. Reds and White Leghorns. We guarantee 100 per cent safe arrival. Write us for price list and circular.
BRECKENRIDGE HATCHERY, J. C. Barnse, Prop.
Box 351, Breckenridge, Mich.

Wingarden Strain WHITE LEGHORN BABY CHICKS EGG BRED for 18 YEARS

Here's what you get when you buy
**Guaranteed Wingarden
BABY CHICKS**

(1) Pedigreed stock, sired by males whose dams had records of 280 to 290 eggs per year, and granddams 298 to 304 eggs. (2) 100 per cent live delivery. (3) Chicks guaranteed to be healthy. (4) Absolutely pure-bred. (5) Absolutely no culls. (6) Stock that withstands winter cold as well as summer heat. (7) Free entry in our annual flock performance contest, whereby you may obtain 200 of our best Barron English White Leghorns free.

We know the quality of our stock because we maintain 42 hatchery farms of our own, instead of buying eggs wherever available. Sired by Hollywood and Fink Farms Males. White and Brown Leghorns, Anconas.

Send for our catalog and read full particulars of the Wingarden Strain.

Wingarden ZEELAND, MICH.
HATCHERY & FARMS Box M

PURE BRED CHICKS

Tom Barron Imported and Hollywood strains S. C. White Leghorns, Sheppard's Famous S. C. Mottled Anconas and Park's Bred to Lay Barred Rocks. All Free range flocks, carefully culled and certified by experts and bred many years for high egg production. Pedigreed males from 280 to 290 egg strains and from hens that produced leading pen in Michigan's International Laying Contest, head our flocks. Eggs from these famous strains hatched with scrupulous care in our Modern Mammoth Incubators produce strong, husky, peppy chicks that are easy to raise and become marvelous layers. Chicks are shipped postpaid. 100% live delivery guaranteed. Write for our big free illustrated catalog.

Silver Ward Hatchery, Box 29 Zeeland, Mich

BRED TO LAY CHICKS Certified

100,000 Highest Quality Certified Baby Chicks. Improved Sheppard Strain S. C. Anconas—hard to beat. Winter and Summer. English Strain S. C. White Leghorns. All our Leghorns mated with Cockerels from E. B. Shaw Champion winning pen at M. A. C. 1923 laying contest. Personally culled and rated by experts and certified by Michigan Baby Chick Association. Guaranteed 100 per cent live delivery. Catalog Free. Take no chance with just as good, but get your best foundation pure-bred stock from The Reliable Poultry Farm & Hatchery, Paul De Groot, Mgr., R. 1, Dept. P, Zeeland, Mich.

OVIE'S BABY CHICKS

PROFIT MAKERS
Breeders of high egg production, combined with sturdy free-range stock of exhibition quality assures you of fine success with Ovie's Healthy Chicks.
BLOOD TESTED
Tested for White Diarrhea and elimination of infected birds assures Profit Makers.
12 leading money-making breeds. Shipped prepaid and live delivery guaranteed. Write for Big Free Catalog. 30,000 chicks weekly.
OVIE'S POULTRY FARM & HATCHERY
218 Boots Street Marion, Indiana

Wishbone Hatched CHICKS

The finest day-olds money can buy. Strong, big from free-ranged stock. All popular varieties. Shipped by parcel post. Write for moderate price list.

Wolff's Hatchery, R. 11, Holland, Mich.

Chicks with Pep

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg-laying habit bred into them. A trial will convince you.
All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big, illustrated catalog free.

Holgate Chick Hatchery, Box M, Holgate, Ohio

Certified Chicks

at popular prices. We won 1st and 4th prize this year on English strain White Leghorn Hen at the National Poultry Show, Chicago, also first at Zeeland Poultry Show. Other breeds have had same careful supervision in developing and breeding. Pure-bred stock carefully culled. 100 per cent live arrival guaranteed. Our chicks are money makers and will improve your flock. Write for catalog and prices. A trial will convince you. All flocks certified.
AMERICAN CHICK FARM, B. 115-A, Zeeland, Mich.

Baby Chicks \$12.00 per 100 and up. We are listing 12 varieties of pure-bred fowls, chickens, ducks and guineas. Send for prices and circulars. Clinton Hatchery & Poultry Farms, Wilmington, Ohio.

OUR BOYS AND GIRLS

A Few Lucky Letters

Some Merry Circle Correspondence

Dear Uncle Frank:

I bet Louise Peters has lots of fun with a auto race in her school, don't you?

In our room at school we choose sides in spelling. At the end of three weeks they count off the words misspelled and the side that loses has to furnish an entertainment for the others.

We have a community club in Vickeryville. We are having a "Sparrow Hunt" now. The men choose sides and have until the twentieth to hunt sparrows. Then the captains count the sparrows and the side that has

I have put in some letters one week, and next week some more, but they never get to be all gone. And I hope they never will. I like to see them coming to read if not to print.

Dear Uncle Frank:

Of all the thrilling experiences on the farm, trying to catch an angry turkey on Thanksgiving Day is the

best. If you have not lived on a farm you could never picture what it is.

Skiing is my sport in winter. Fishing and swimming in summer. Have you ever read the story of "The Legend of Sleepy Hollow?" I think of fried ducks and pumpkin pie when I look at ducks and pumpkins, like Ichabod Crane did in the story just mentioned.—Your would-be nephew, John Rytli, R. 36, Bruce's Crossing, Mich.

It's funny, but your letter made me feel that I would like fried duck and pumpkin pie right now. I'll leave the thrilling experience of chasing angry turkeys until some other time.

My Club Experiences

By Verda L. Ransom

IN the summer of 1920 Agnes E. Martin asked all the girls, between the ages of ten and twenty, to meet at her home one afternoon. Nine girls were there, all anxious to belong to a club, especially after we saw Miss Martin demonstrate. Officers were elected. "West Carmel Good Luck" was chosen as the club name. We were to meet every two weeks at each others homes.

In August, we demonstrated at the West Carmel Ladies' Aid Society. One of the state assistant club leaders was there to judge the fruit and our demonstrations.

Achievement day was a big day for us all. We were the only girls' club in the county, which had several clubs of boys. I received the championship of the county, which gave me a free week at the Michigan Agricultural College the following summer. The farm bureau presented each girl with a gold pencil and each girl of the canning club had a new dollar bill given them by the Charlotte Grange.

In June, 1921, we reorganized under the name of the "Grange 4-H Canning Club." Three girls dropped out, so there were only six.

In September three of us demonstrated jelly-making at the State Fair. The night before we were to go, I was taken sick with summer complaint. I thought that would end my going, but I got ready with mother's help. I

organized under the name of "U Tell 'Em." There were only four girls for the club this year, namely, Norma Bust, Henriette Huber, Madalene Smith and myself. We numbered few but we had some fine times.

I canned 900½ quarts of fruit, vegetables and meats, for different ones around the community. I was secretary of the club, which was something new for me, but it was good practice.

We gave a demonstration at the Eaton County Fair on meat packing. We had a very nice place to give it and so we had a large crowd all the time. We won first and second place. I received first premium on my product, which gave me four dollars.

I was awarded the championship of the third-year canning, and this gave me another free trip to Lansing.

I was a club leader also this year, in order to complete my fourth year's work. I am the only one out of the nine girls that started in with the canning work four years ago, so I had no one to work against me, and it was not as enjoyable as it was the other years.

The county agent received word that each club was to send thirty jars of product to Detroit to the State Fair. The "Jolly Workers' Band" sent thirty jars and received eighth place, which gave them five dollars. This is the club of which I am leader. I received fourth place, which gave me twelve dollars. At the Eaton County Fair I received first, second and third place on my product and third place in the club exhibit, which gave me eight dollars. Then I received one dollar from the demonstration on meat packing. I am certainly glad I received the very last place in the demonstration for it encouraged the ones that are coming later to this work. On achievement day I received my money and the county championship.

I have canned 2,078¼ quarts of product, and received twenty-six dollars in money, besides all the lovely trips I have taken during my four years. I am proud to think the county and state have given me these honors.

I have been canning for Dr. Knight's Hospital, here in Charlotte, also for different ones in their homes.

I have gained many benefits through the canning work, because I will use it later in other ways besides helping others. I want to keep on helping the boys and girls of the county in club work. It does not only help them, but also me, for it gives me practice in public speaking.

I think every boy and girl should take up club work because it will help them to talk and work before people. It helps them in later years to carry on their work, but they must work for the club before the club can work for them.



Ethel Fay Sharp, Akron, Michigan.

the least are to get a supper for the other side and their families.

We all have lots of fun at the community club regular meetings. Sometimes I speak pieces.—Your niece, Marie Arntz, C. C., Box 71, Vickeryville, Michigan.

Your spelling stunt is a good one, so is the sparrow hunt. You are lucky to live in a live community.

Dear Uncle Frank:

I don't think it's wrong to wear boys' overalls, do you? I think it must be very embarrassing to have all eyes fixed on one, like those who wear knickers in public have. Nevertheless, I am going to wear them this summer when I go on my "Good Luck Society" club hikes. Last summer I tore my dresses and stockings "roughing" it. Perhaps I'd better not say anything about powder, but it's rather fun using it when it makes boys like Harold Coles angry. Last year we used to sprinkle it on the boys' desks.—Your niece, Marian Pickup, M. C., R. 2, Pontiac, Michigan.

I don't think it wrong to wear boys' overalls. In fact, I have worn them myself. I always thought girls used powder to please boys instead of making them angry. But the way some girls use it would make anybody angry.

Dear Uncle Frank:

I see they have remarked about Latin, and algebra. Well, I'm fairly in love with algebra, but Latin gets on my nerves.

I don't wear knickers and I haven't bobbed hair. I've often wished for bobbed hair, but my daddy and mama don't wish me to have my hair bobbed, so I will have to obey them and keep it long.

I noticed a few around here are M. C.'s. It wouldn't take much to start a club. I think it would be nice, don't you, Uncle Frank?

I'm also in my third year in sewing club. I like club work as I have been in quite a few.—Your loving niece, Vera E. Stiff.

You are a sensible girl to obey your parents. A local M. C. club would be fine. I hope you will start one as soon as I get plans arranged for starting local clubs.

Dear Uncle Frank:

I wrote you some time ago but I guess Mr. W. B. was in his hungry mood. Why can't you, one week, put in some letters, and the next week some more until they are gone?

Well, I guess I will close my chatter. Good-bye, Evelyn Lucille, Bowey, R. 1, Smyrna, Mich.



This is Verda.

was sick all the way and did not feel very good while I was there, but I saw part of the large city which I never expected to see.

Next came the Eaton County Fair. Each girl had to exhibit ten jars of product. It was something new for us and it meant a great deal of work. Later we gave another exhibit in the main part of town.

Achievement day came again. I received second place in the county in canning. I had canned 439½ quarts.

In the spring of 1922, our club was

You Take No Risk in Buying **140 Egg Incubator** **\$13.85**

Ironclad **30 DAYS TRIAL** **EXPRESS PREPAID**

Investigate before you buy. Incubator made of Redwood covered with galvanized iron. Double walls with air space between. Every joint lapped with galvanized iron. Strongest and most durable incubator that can be made. Deep chick nursery, self regulating. Hot water heat. Copper Tanks, in both incubators and brooders.

EXPRESS PREPAID East of Rockies

Money Back IF NOT SATISFIED

140 Egg Incubator with Brooder \$19.75
260 Egg Incubator alone 23.50
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You can use the machine for 30 days and if not satisfactory we will refund your money and pay return freight charges. Both machines shipped complete with all fixtures. Set up ready to use. Write for catalog or order direct from this advertisement.

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\$13.25 **140 EGG** **Don't take any chances** find out what an incubator is made of before you buy. Wisconsin are made of Genuine California Redwood. We give 30 Days Trial 10-year guarantee. This famous 140-Egg Incubator only \$13.25, with hot water Air Brooder both only \$17.75

WHY PAY MORE 30 DAYS TRIAL

180 Egg Size \$15.75, with Brooder \$22.00
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Incubators have double walls, air space between, double glass doors, hot water, copper tanks, self-regulating. Shipped complete with all fixtures. Set up ready to run. Order direct or send for our 1924 catalog, which shows larger sizes up to 1000 eggs.

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Certified White Leghorn CHICKS

HOLLYWOOD
MATED \$15 per 100
Sired by Hollywood males whose dams had egg records of 280 to 290. Stock certified by Michigan Baby Chick Ass'n.

Rural Strain, \$13
Brown Leghorns, \$14-\$15
Anconas, Barred Rocks, Large Illustrated catalog free

RURAL POULTRY FARM
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Certified Pure Bred Baby Chicks

Trapnested direct from world champion layers; the famous Tom Barron and Hollywood strains of White Leghorns. Order these chicks from pedigree stock now at bargain prices! Hatched in the largest and finest hatchery in Michigan at the rate of 150,000 eggs to a setting. Also get our prices on Barred Rocks and other popular breeds. Satisfaction guaranteed or money back. Write for FREE Illustrated catalog and special DISCOUNT PRICES—today.

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Wolverine Baby Chicks

Always Good Easy to raise.

English Type S.C. White Leghorns

High producing, profitable stock. 100% safe arrival guaranteed. Write for our 13th annual catalogue.

Wolverine Hatchery
H. P. Wiersma, Prop. R. 2, Zeeland, Mich.

CHICKS: Strong, Healthy. From Heavy Layers. S. C. Tom Barron Eng. White Leghorns, Brown Leghorns, 12c; Shepherd's Anconas, 13c; Assorted Chicks, 10c. Class A flocks therefore we sell no Class B, but Class A chicks only. 100 per cent safe delivery. Postpaid. No money down with order. Catalog free. **BOS HATCHERY, Zeeland, Mich., R. No. 2 M.**

Read and Win

ABOUT ever so often we have to get back to the old Read-and-Win. It has been some time since we have had one, so this one is due.

You can find the answers to the questions below in the reading matter of this issue.

When you find the answers, write them as short as possible and give the numbers of the pages on which you found them.

Do not repeat the questions. Write on one sheet only, and only on one side of the sheet. Letters may be sent on separate sheets.

Put name and address in upper left-hand corner. If you are a Merry Circle, put M. C. after your name.

The ten correct papers which are the neatest will get prizes. The prizes are two fountain pens, three flashlights and five boxes of candy.

All who are not M. C's. and have correct papers will get Merry Circle buttons and cards.

This contest closes March 28th. Address your letters to Uncle Frank, Michigan Farmer, Detroit, Michigan.

1. What is the best way to clean glass on auto?
2. What is the best supplemental feed the dairyman can grow?
3. Who produces his own queens?
4. When do fruit buds form on apples?
5. Do cows like cooked or raw beans as well as other grains?
6. How long did it take to sell 43 cars at auction?
7. Do Robust beans mature earlier than the common beans?
8. When will dahlias planted in April start to blossom?
9. Does a gray-haired woman look good in tan or brown?
10. What is indicated when chicks huddle together?

More Lucky Letters

Dear Uncle Frank:

How can I thank you for the beautiful fountain pen? It is certainly a dear, and my! so handy. I can hardly wait until the next Farmer arrives, so I can see the list of other boys and girls who had the joy of getting one of the delightful prizes for a reward. I won't say "see the ones that had the luck," as that has nothing whatever to do with winning a prize.

It is work to win, of course it is not classified with hard work, as we are grouped as merry, and our work should be merrily done.

Daddy says the Farmer is getting him so lonesome for farm life again he will, (if all is well), again take up farming. We have a farm in Clare county. It is a delightful little place, with a sparkling brooklet running through, and best of all, a house we can really call "home."

Seems I, too, am getting tired of city life, so will indeed enjoy the calmness and pure open air, where you can see the sun, moon and stars appear and disappear, and can then see all the things God gives us, and realize how good and merciful He is to all. Guess I have the farm spirit just now, it can't be called spring fever as the sun is hidden, and only white blankets of snow are falling, and everything is invisible.

Well, bye-bye, thanking you once more for the prize I so admire, I will close, and remain as ever, your city niece, Goldie Kleinhardt, 3452 Hendricks Street, Detroit, Mich.

I guess your heart is in the country, all right, Goldie. I hope it will stay there all the time, even if you have to live amidst bricks and pavements.

Dear Uncle Frank:
This is my fourth letter to you, but I have not seen any of them in print. I have also answered three contests but have also failed in these. Pretty "tuff" luck, isn't it? They say three times and out, but not so here.

I better ring off and give some one else a chance. Give the waste basket my best regards, but don't give him my letter. Your try again niece, Olga Jensen.

Yes, it is "tuff" luck, but "tuff" luck is what most of us have to get used to. Say, Olga, please put your address on your letter next time. I gave W. B. your regards. He wanted your letter but I said, "Some other time."

—Inspected and Approved

Baby Chicks

From Best Egg Laying Strains in the World

Tancred, pedigree-sired and Tom Barron, S. C. White Leghorns, S. C. & R. C. R. I. Reds, Parks Barred Plymouth Rocks.

Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

Hatched in World's Best Incubator

Our chicks are strong, sturdy and healthy. They live and grow because they are hatched in the best incubator made. 100% live delivery to your door. Illustrated catalog sent FREE.

LAKEVIEW POULTRY FARM, R. 8, Box 5, Holland, Mich.

BABY CHICKS

The season of 1924 opens with some fine breeding pens in the 10 varieties of **PURE-BRED PRACTICAL POULTRY.**

Barred Rocks, White Rocks, Rhode Is. Reds, Orpingtons, Anconas, Leghorns—White, Brown, Buff, Brown, Buff

In the White Leghorns a Superior Egg Quality in the D. W. Young American type and in the English type.

It is now time to be looking after your Chicks for this season. Send for our descriptive matter and price list. You will be interested in the egg records our customers report.

Cockerels—A few unsold in Barred Rocks, and White Wyandottes.

STATE FARMS ASSOCIATION, Masonic Temple, Kalamazoo, Michigan.

CERTIFIED CHICKS

"BRED TO LAY" STRAINS

Best Quality Certified Chicks pay biggest profit. Our Chicks are from our own Free Range flocks of Sheppard's Famous 331 egg strain of Anconas, heavy winter layers of large white eggs; Hollywood and Tom Barron S. C. White Leghorns; and Everly S. C. Brown Leghorns. Park's strain Barred Rocks. Carefully selected and rated by experts and certified by Michigan Baby Chick Ass'n. Bred for quality and high egg yield for 11 years on our own farm. Strong, vigorous, full of vitality. 100 per cent live delivery guaranteed. Low prices. Illustrated Catalog Free.

Zeeland Poultry Farm & Hatchery, Dept. M, Zeeland, Mich. Member Mid-West and International Baby Chick Ass'n.

PURE BRED BABY CHICKS

We have been carefully developing our flocks for eight years. Every chick pure-bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today and get chicks when you want them.

Wh. Leghorns	50	100	500
Bd. Rocks, R. I. Reds	\$7.00	\$13.00	\$62.00
Wh. Wyandottes, Wh. Rocks	8.00	15.00	72.00
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Postpaid. 100 per cent live delivery. You take no chances. Ref. Farmers' & Mechanics' Bank, this city. No catalog. Order from this ad.

WASHTENAW HATCHERY, R. 5, Ann Arbor, Mich.

Buy Your Baby Chicks

from us this year and guarantee your profits

Purchasers of our stock raise 95 per cent instead of only 50 per cent, because we hatch only in tested Mammoth machines, insuring husky chicks with vitality, and because our flocks are the busy and husky kind that know no disease. Order from this ad or write for catalog which tells all about our wonderful egg strain.

Barred Rocks	100	500
S. C. Reds	\$16	\$77.50
Selected W. Leg.	15	70.00
Eng. W. Leg.	13	60.00
Anconas	14	65.00
Broilers	9	45.00

100 per cent Delivery Guaranteed. **PROGRESSIVE POULTRY FARM, Box 1, Holland, Mich.**

Only Trapnested and Pedigreed English S. C. White Leghorns

Chicks, Eggs, 10 weeks old Pullets. From contest and utility prize winners at Fairs and Shows. The stock with breeding to back them. Write for circular.

Pennock Poultry Farm, Nashville, Mich.

Barred Rock Baby Chicks

We hatch only Barred Rock Chicks from choice selected stock shipped by prepaid parcel post to your door, satisfaction and alive delivery guaranteed. Circular on request.

THE KAZOO HATCHERY CO.
R. R. 3 Kalamazoo, Mich.

QUALITY CHICKS AT REASONABLE PRICES

English White Leghorns, Parks' Strain Barred Rocks, S. C. Black Minorcas, Reds and Anconas. My pen (16) at the 1923 Mich. Contest finished third among all heavy breeds, four hens making records over 200 eggs each, and one with a record of 254 eggs was seventh highest individual for the entire contest, 990 birds competing. Catalog free.

PINE BAY POULTRY FARM, HOLLAND, MICH.

QUALITY CHICKS

Strong, vigorous, pure-bred. From heavy lay Barron strain S. C. White Leghorns that have been carefully culled and mated to pure-bred males. The kind that develop quick and lay early. Following prices—25, \$3.50; 50, \$7.00; 100, \$13.00; 500, \$62.50. Postage and live delivery guaranteed. Best reference, Peoples State Bank. **LAKE BLUFF HATCHERY, R. F. D., No. 1, Holland, Mich.**

Whittaker's Reds Chicks

And eggs for hatching. Rose and Single Combs. Michigan's greatest color and egg strain. Bred from fourteen generations of winter layers. Write for free catalog. **Interlakes Farm, Box 39, Lawrence, Mich.**

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Postpaid to your door. Guarantee 100 per cent live arrival. Heavy laying, pure-bred flocks. White, Brown & Buff Leghorns, 50, \$7; 100, \$13. Barred Rocks, Reds, Anconas, Minorcas, 50, \$5; 100, \$10. White and Columbian Wyandottes, White Rocks, Black Spanish, Black Minorcas (choice), 50, \$9; 100, \$17. Catalog Free. **WHY NOT BUY GOOD CHICKS? THE C. M. LOWER HATCHERY, Box 30, Bryan, Ohio.**

Leg's Quality Chicks

Eight varieties, all from pure-bred, selected stock. We guarantee satisfaction and 100% live delivery. Write for our FREE catalog.

Lee's Poultry Farms & Hatchery
Box B, Edison, Ohio

Baby Chicks

Buy ready hatched baby chicks from high egg producing free range flocks. Highest utility qualities, best for general purposes. Nine most popular varieties. Shipped postpaid. 100 per cent live delivery guaranteed. Send for catalog and prices.

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Our own breeding flock of large type American White Leghorns. Laying and standard qualities combined. 13 years' experience in breeding, hatching and marketing. Also high quality Barred Rocks and R. I. Reds. All flocks culled and inspected. Modern hatching plant. 2 hatches weekly. Quality chicks at commercial prices. Write for prices and circular.

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Baby Chicks S. C. W. Leghorns

Pedigreed Certified

Michigans Largest S. C. W. Leghorn Farm, over 2000 Birds. Hatch our own eggs only. Supply limited. Order early. One trial will convince you. Free Circular.

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LAYERS! That's what you want. Standard Chicks are from just that kind of flocks. Our strain of Supreme Laying White Leghorns is the result of our many years experience, breeding and selection. They are large sized, long deep wedge shaped bodies, keen alert eyes, large lopped combs. They will be proud of and eventually buy. Shipped postpaid. 100% live delivery guaranteed. Illustrated catalog sent Free.

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Send for free catalog describing best bred chicks in the country. Tom Barron and Tancred White Leghorns, Michigan's Champion Winter Laying Barred Plymouth Rocks and S. C. R. I. Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

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FREE FEED "Just-Rite" with CHICKS

Most Profitable Varieties. Trapnested-Exhibition, Pedigree, and Utility Matings, direct from prize-winners at New York, Chicago, Nat'l Egg Laying Contests, NABOB Quality. None better. Satisfaction and 97 per cent live arrival guaranteed. Postpaid. Low Prices. Big Catalog FREE. Stamps appreciated.

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Highest Quality Chicks Feb.-March prices. 12c; Barred Rocks or Reds 15c; Anconas 14c; Black Minorcas 10c; White or Brown Leghorns 15c; White Rocks 15½c; White Wyandottes, Buff Orpingtons 17½c. Extra selected chicks, built directly from contest winners, 40 per chick more. Add 30c if less than 100 wanted. Hatching eggs Catalog. Good reference. **Beckmann Hatchery, TMF, 26 Lyon St., Grand Rapids, Mich.**

DAY OLD CHICKS

S. C. White Leghorn Day-old Chicks (English Strain) from 2-year-old hens from our own stock. Strong and vigorous. Best breeding. Also Barred Rock Chicks from 2-year-old hens from best laying strain. Catalog free. Write today. **Hillcrest Poultry Farms & Hatchery, Box A, R. 2, Holland, Mich.**

CHICKS WHITE LEGHORN Heavy laying, pure bred, English strain. Flocks culled and tested for laying ability. Strong healthy chicks. 100 per cent live, delivery guaranteed. Prices right. Catalog Free. **CATALPA GROVE HATCHERY, Box 1 R 2 Holland Mich.**

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PEDIGREE SIRE Eng. W. Leg. (Barron Strain), direct from our farm, delivered 100 per cent alive at your door at \$13.00 per 100; \$60 per 500; \$110 per 1,000. Chix sold from our own flock only. Send for circular. **Model Poultry Farm Zeeland R. 4, Mich.**

CHICKS White and Barred Rocks, White Leghorns, English Strain White Wyandottes, Buff Orpingtons, Reds. 100 per cent live arrival Guaranteed. Postpaid. Order from this ad and get the best. **Durand Hatchery, Fenton, Michigan.**

Leghorn B-A-B-Y---C-H-I-X Heavies

Black, Brown, Buff, White, Brahmas and Orpingtons. Anconas and Minorcas. Reds, Rocks, Wyandottes. Allegan Hatchery on Highway No. 69. Send for 1924 price list. **Crescent Egg Company, Allegan, Mich.**

CHICKS BARRED ROCK English Strain White Leghorns and Brown Leghorns. Guarantee full 100 per cent alive. Free Delivery. **Hillview Poultry Farm & Hatchery, C. Bowen, Prop., R. 12, S. F. Holland, Mich.**



Spring is Here

All out-of-doors is filled with the bleat of the lamb, the bawl of the calf, the grunt of the pig, and the whinny of the colt.

Youth asserting itself everywhere!

Keep their bodies healthy, and stomachs full.

You can then count on good growth—quick development—and begin to cash in on them before the summer-end.



Let

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be your insurance policy

against disease, insurance of good appetite, good digestion. It keeps the worms away.

Then, there are the mothers:

Your COWS need it for its system-toning, bowel-cleansing, appetizing effects. Puts them in fine condition for calving.

Your BROOD SOWS will be relieved of constipation and put in fine fettle for farrowing.

Excellent for MARES in foal—and EWES at lambing time.

It makes for good appetite, and more milk to nourish the offspring.

Tell your dealer what stock you have. He has a package to suit. **GUARANTEED.**

25 lb. Pail, \$2.25 100 lb. Drum, \$8.00

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

DR. HESS & CLARK Ashland, O.



I spent 30 years in perfecting this Tonic.
GILBERT HESS
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For Sheep Ticks - for Hog Lice - for Health

PAPEC The Cutter for Profit

To get the most profit out of your silo, fill it with the simplest, strongest and most economical Cutter made.

The Papec's few parts and correct design reduce draft and lengthen life. Equipped with positive self-feed that is saving a man for hundreds of farmers. The Papec never clogs on any silo. Its performance is continuous. That one fact has made thousands of Papec sales and Papec boosters. The Papec is built by people who have long specialized in ensilage cutter construction. And the output is increasing every year.

Write today for our new Catalog and U.S. Gov't Bulletin "Making and Feeding of Silage." Both free to silo owners.



Throws
And Blows
Saves One
Man

PAPEC MACHINE COMPANY
150 Main St. Shortsville, N. Y.

Many Barren or Aborting Cows Can Be Saved

Don't be too quick to call in the butcher. Often a valuable cow is barren or abortive simply because her genital and digestive organs are in a sluggish condition and fail to function until strengthened through medicinal aid.

Kow-Kare is used successfully in thousands of cases every year where nearly all hope of a cow's future usefulness is abandoned. This cow medicine tones up and strengthens the vital functions of sick and unproductive cows. It helps nature in the processes of production and reproduction. Every mail brings us letters such as these, from enthusiastic users:

H. V. Whitmore, Thurmont, Md. writes: "We have been feeding your Kow-Kare for about three months with very good results. We haven't had one to abort since we began feeding it. We lost about one-half of the calves in the last two years."

Amos B. Miller, Mechanics Grove, Pa. says: "My cows had been aborting, as many as 75 per cent. some years. After using Kow-Kare for a short time only one or two aborted, and after continuing it for some time have had no trouble. It has also improved the general condition of my cows and increased the quantity of milk."

John Watt, Freeport, O. writes: "I have a choice Jersey cow. Heretofore I have had bother to get her with calf. Hearing of Kow-Kare for barrenness, I got a can and gave

her two or three doses. Brought her in all right. After using it the first time she was mated she got with calf, and came around all right after she had her calf."

Some of the heaviest losses in the dairy can be avoided or corrected by the judicious use of this famous cow remedy.

If you are not using Kow-Kare now, ask your feed dealer, general store or druggist about it. Large size package, \$1.25; medium size 65c. If your dealer is not supplied, order direct. We pay postage.

Our valuable free book, "The Home Cow Doctor", tells how to use Kow-Kare in treating Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite and as a general conditioner in increasing milk yield. Write us for this book.

DAIRY ASSOCIATION CO., INC.
Lyndonville, Vt.



FREE BOOK



MUSKEGON COW TESTING ASSOCIATION WEEDS COWS.

A YEAR'S testing work has been completed on the Ravenna-Muskegon Cow Testing Association. This association was organized during February and March, 1923, through Mr. Karl L. Miller, at that time dairy extension specialist of the Michigan Agricultural College. Some of the members, who came into this cow testing association, had desired to have an association of this type for some years but it was not until Mr. Miller and County Agent C. M. Long worked in the Ravenna community that the association became a fact.

Mr. J. F. Bennett was hired as the tester for the association at the completion of his short course at the Michigan Agricultural College in March, 1923. A big field of work opened itself and considerable progress was made, as his report indicates.

During the year, a survey was made of this association. It was found that there were twenty-one grade and eleven pure-bred sires in use. It was found that this association also had the lowest number of pure-bred cows in all Michigan cow testing associations. There were two pure-bred Holsteins and one pure-bred Jersey—three pure-breeds among 308 cows.

Some progress has been made toward improving the sire situation. Nine grade bulls, seven of them being Durhams, were sold to the butcher during the past year. In turn, seven pure-bred sires replaced the nine grade sires sold. Three Holsteins, two Guernseys and two Jerseys were purchased by the cow testing association members.

Further progress was made in disposing of low producing cows. The producing ability of the Ravenna-Muskegon cows is only fair. The association average for the year is 259 pounds of butter-fat and 6,234 pounds of milk on 233 cows tested. However, the cow tester mentions that fifty-six cows were sold as undesirable low producing animals. The members have additional low-producing cows that will be disposed of at an early date. The Ravenna-Muskegon Cow Testing Association cow has produced a hundred pounds more fat and 2,500 pounds more milk when the average production of this association is compared with the production of the average Michigan cow.

Mr. L. Steig had the high herd in butter-fat production. His nine grade Jersey cows averaged 434 pounds of fat and 9,041 pounds of milk. Other

herds making good herd averages are those of I. J. Bennett, A. Vogel and Frank Hass. The average production of the ten high herds, compared to the four poorest herds in butter-fat, is as follows:

	Ten High Herds.	Four Low Herds.
Pounds milk.....	7,863	4,466
Pounds butter-fat ...	351	168
Number cows	75	37

Mr. Carl H. Knopf, county agent in Muskegon county, has succeeded in reorganizing this association. With the coming dairy-alfalfa campaign in Muskegon county, further interest in the cow testing association work will be aroused that will broadcast the benefits to be derived from this type of work.—A. C. Baltzer.

CULL BEANS FOR COWS.

BECAUSE of the fact that many tons of cull beans can be used for stock feeding in certain sections, the Michigan Experiment Station has been trying to find their value in the ration of the dairy cow. They used a bean ration, consisting of 250 pounds of ground cull beans, 250 pounds ground oats, 200 pounds hominy, 200 pounds wheat bran and 175 pounds gluten.

The cottonseed ration was the same with the exception that 124 pounds of cottonseed were substituted for the 250 pounds of cull beans. The cows were changed from one feed to the other on thirty-day periods. It was found that the value of a feed for cows is influenced by its palatability as well as the feeding value of the nutrients which it contains. Cows were fed beans both raw and cooked. They liked the cooked beans the best but did not like either kind as well as other grain feeds.

Our neighbors fed boiled beans to their dairy cows one winter and found them useful in the absence of an abundant supply of other grains. This year when they have plenty of other feed available they have discontinued the use of the beans in the ration. From the results obtained so far I do not believe that beans are desirable in a dairy cow's ration unless only a small quantity are included with other grains. Cows need appetizing feed to induce them to eat the large quantities necessary to produce milk profitably. Little is gained by feeding them any grain that they do not find palatable. In the Michigan experiment the cows produced the most milk and butter-fat, and lost the least weight, when they had the cottonseed ration in place of the cull bean ration.—R. G. Kirby.



Where the Highest Milk Production is Desired, or where Corn Cannot be Grown to Advantage, the Dairyman will find High-yielding Strains of Mangels a Good Crop to Grow for His Cows.

Which Road for You?

For 23 years Blue Valley has given farmers a high direct cream market. No useless profit takers between them and Blue Valley—between Blue Valley and retailers. Blue Valley butter, the National brand, brings farmers bigger cream checks direct.

Another Blue Valley Booster

"We are entirely satisfied with the business we have carried on with the Blue Valley".
Nels Burg, Scottville, Mich.

Thousands of B. V. B's (Blue Valley Boosters) will tell you it pays to ship your cream yourself direct to Blue Valley.

For Bigger Cream Checks
Write for shipping tags and prices, or

Ship to
BLUE VALLEY CREAMERY CO.
Ship to Blue Valley Creamery in City nearest you:
Detroit, Mich. Grand Rapids, Mich. Milwaukee, Wis. Duluth, Minn. Also creameries in 15 other cities. General Office: CHICAGO

BLUE VALLEY BUTTER
is good butter
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STOP WASTING TIME AND MONEY
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Simple, sanitary, efficient, safe milking features to work for you at once. The famous Pump-Pulsator type Milker with the "See-thru" teat cup. Action as smooth and natural as that of a calf. Write at once for descriptive folders and literature.

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No deposits—No notes to sign—No obligation to buy! You try the famous imported Harp Separator entirely at my risk. You alone are the judge and if not thoroughly satisfied return it at my expense.

The Standard in Europe
For More Than 22 Years
You get the closest skimming, easiest handling, greatest to clean separator over thousands of machines in England, France, Germany, Belgium and Denmark. Quality at Bargain Prices! Why? Because European labor and materials are cheaper, we build in tremendous quantities, and sell direct to you. From \$28.80 up. Also on easy monthly payments. Write today for prices and descriptive folder.

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Dept. 6165 St. S. Dearborn St.
Chicago

THE HARP
SIZE FOR EVERY DAIRY
Fully Guaranteed
10 MONTHS TO PAY

You Can Save Money
by buying your implements under the
MOLINE Plan
See a Moline Dealer or write for details

NEW MOLINE PLOW CO.
Moline, Ill.

HIDES TANNED \$3.50 to \$5.50
Tan Hides and Make Robe Complete, using No. 1 Flush Lining, \$10.00 to \$12.50. All work guaranteed. Write for samples and prices.
Badger Robe & Tanning Co., Stevens Point, Wis.

GUERNSEY BREEDERS PLAN ORGANIZATION.

PLANs for the organization of a Saginaw county Guernsey Breeders' Association were discussed last Wednesday, when George J. Hicks, George L. Burrows and Lawrence Bannan, county club leader, met to consider this project, and other matters of interest to Guernsey breeders in the county. It is proposed to call together all Saginaw county breeders of this type of dairy cow, and all other farmers interested in the breed, at another meeting, when organization of the association will be effected.

A novel plan to advertise the breed among farmers has been adopted by Messrs. Hicks and Burrows, two of the foremost breeders of the Guernsey in the county. These men have issued an offer, which will be handled by the trade, on an even basis, a registered pure-bred Guernsey bull calf for any scrub bull that a farmer will bring in to them.

The aims of the association will be to promote interest in this breed and to get more farmers to raise this type. It is believed that, through this plan, not only will pure-bred Guernseys be distributed through the county, but scrub bulls will be gradually exterminated as well. All the bull calves so traded will be registered, some of them from tested dams.—Mills.

GREEN FEED FOR SUMMER.

IF summer dairying is to be made profitable after the flush months of spring pasture have passed, some supplemental feed must be grown to help out the declining pasture supply. I find that as a rule pasture can be depended upon for about three months of the year and then the supply gradually declines.

At Forest Grove Farm we have about forty-five acres of low land pasture which resists drought remarkably well and, under ordinary conditions, will supply my cows with plenty of feed until about the first of August. However, I find it is not safe to depend upon a favorable season, but rather prepare for the opposite and then take what comes. I find it best to always be ready for the worst, then you are never disappointed and, if better conditions come, you are equally as well prepared.

I find it pays to grow plenty of green feed for the cows. The extra time and labor involved is many times repaid in the increased milk flow. Alfalfa is one of the best supplemental feed the dairyman can grow. It is dependable, comes on early in the summer and is ready for feeding before other crops can be grown. In case it is not needed for supplemental feeding, it can be cured and stored.

I always plan to sow sweet corn for late summer and fall feeding. Sweet corn sown thick in twenty-eight inch rows will produce a large tonnage of valuable green feed and materially help out on pasture and increase milk production.—Leo C. Reynolds.

CHIPPEWA FARMERS' REORGANIZE.

IT is announced from Sault Ste. Marie that the Chippewa County Farm Bureau will abandon its marketing activities. The directors of the bureau have so determined. The bureau will continue its educational work, but its marketing activities will be assumed by a new organization known as The Chippewa County Cooperative Company. The milk producers of the county are also organizing an association for improving the quality and price of market milk.

The county farm bureau's financial difficulties seem to be connected with the financial difficulties of its farmers arising out of the one-crop system which hitherto has prevailed in Chippewa county and which it is now hoped to get rid of in favor of diversified farming, including dairying.

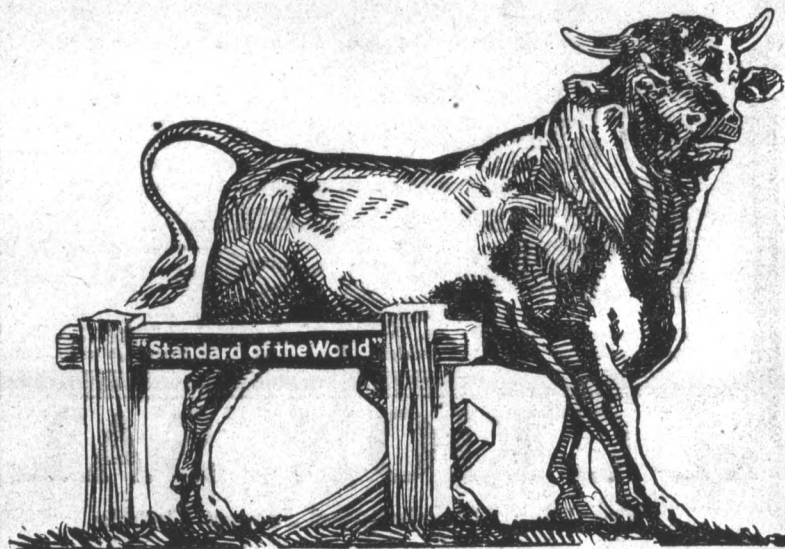
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VALUABLE farm machinery must be cleaned frequently of oil, grease and accumulated dirt of all kinds. Red Seal Lye is the most effective and cheapest cleanser for this purpose. A can of Red Seal Lye goes much further than ordinary low-test lye.

Be Sure and Buy only the genuine Red Seal Lye
Write for FREE booklet, "Home Helps"
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FACTS FOR FARMERS

Things Our Readers Want to Know

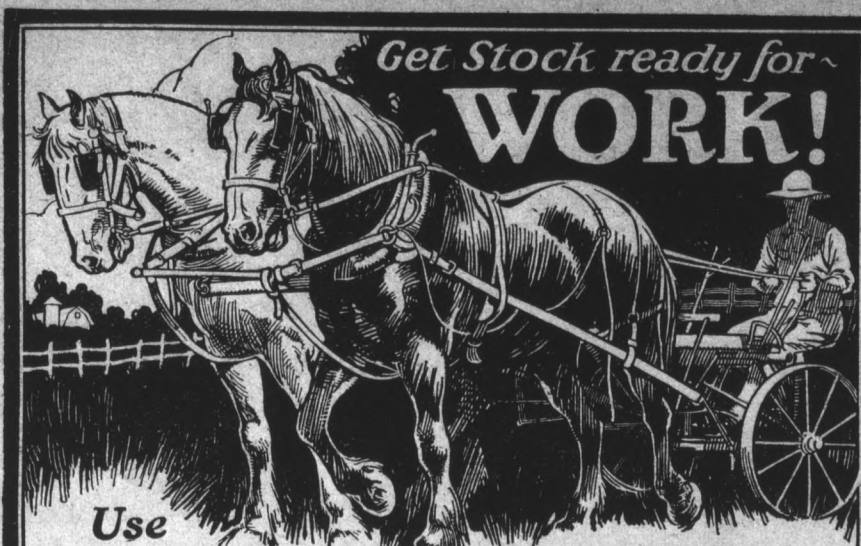
Farm machinery, drains, floors, milk cans, refrigerators, sinks and scores of other things on the farm are made spotless and sanitary by the use of Red Seal Lye.

Red Seal Lye is a powerful disinfectant. It quickly destroys unwelcome visitors in the home and barn, such as rats and other rodents.

In the dairy, Red Seal Lye is a real necessity. Cleans separator bowls and makes them odorless and sanitary.

Red Seal Lye is the best thing known to clean floors, walls, steps, and to make cellars sweet and sanitary.

Red Seal Lye is a very effective odor-destroyer and a powerful disinfectant.



Use Dr. LeGear's Stock Powders

Now is the time to "condition" all your stock, especially all your work animals, with DR. LE GEAR'S Stock Powders. Help them to shed their winter coats quickly and easily. DR. LE GEAR'S Stock Powders will change their coats of rough, dead hair to silky sleekness.

Get out of their systems the "kinks" that come from months of dry feeding—the bad blood, poor digestion, and worminess. DR. LE GEAR'S Stock Powders help to remedy such conditions.

Small, medium and large packages. 25 lb. pails. 100 lb. drums.

Build up their bodies that have been run-down by winter conditions. Watch how quickly they all put on flesh when DR. LE GEAR'S Stock Powders are used in their feed daily.

Your hogs, sheep, cows, horses, all need this conditioner now. Results are sure, satisfying, profitable. Thirty years of use by millions of stock raisers has proved this. Prove it yourself.

Go to my dealer in your town and buy it under my "Satisfaction or money back guarantee."



FREE Sample Coupon

Hand this coupon to my dealer in your town and get FREE Sample of Dr. LeGear's Stock Powders. [Also my 128 page Stock and Poultry book free.] Use sample, then buy the size package you need. If dealer is out of samples, send us 10¢ to mail sample and book to you. Dr. L. D. LeGear Medicine Co., St. Louis, Mo.



Spring work in harness makes shoulders sore. Use Dr. LeGear's Antiseptic Healing Powder

Dr. L. D. LeGear, V. S. (In Surgeon's Robe) Trade-Mark Reg. U. S. Pat. Off.

AUCTION SALE

Ten Head Registered Jersey Cattle Ten Head Chester White Sows and Boars

Bull Springfield Oxford Duke 164547. Six years old.
Bull Owl Interest Jolly Prince 221762. Eighteen months.
Bull calf six months.
Spermielands Dukes Lady 579290. 2 1/2 years.
Spermielands Dukes Louise 579291. 2 1/2 years.
Spermielands Mary of B. F. 579292. 2 years 2 months.
Spermielands Dukes Florence 579292. 2 years one month.
Spermielands Mary 579294. 2 years 1 month.
Spermielands Donna Lass 579295. 2 years.
Above heifers due with first calf in March and April.
1 grade cow seven years old.
T. B. tested on Sept. 26, 1923. State Accredited herd.
SWINE. Three aged sows, 4 spring gilts, 2 fall boars.
At farm seven miles north of Vassar, or 5 1/2 miles East, 1 mile North of Reese.

On Thursday, March 27th, at 1:30

Trains met at Vassar day of Sale

FRED L. BODIMER, REESE, MICHIGAN
BREEDERS' DIRECTORY

Change of Copy or Cancellations must reach us
Twelve Days before date of publication

Registered Aberdeen-Angus 6 heifers, 5 bulls from eight to fourteen months. Best of breeding. The growthy kind that make good. Reasonable. Inquire of F. J. Wilber, Clio, Mich.

ABERDEEN Angus Bull Calf, serviceable age. The right kind to sire baby beef calves. H. O. Ruggles, Milford, Mich.

Brookwood Farm

Registered Guernseys of both sexes for sale at reasonable prices. Young stock from A. R. dams. Herd is Federal Accredited.

JOHN ENDICOTT, Owner
BIRMINGHAM, MICH.

FOREST HILLS GUERNSEYS

For Sale: Three-year-old bull, grandson of Murne Cowan, former world champion in butter-fat production. Bull calf, 12 mo. old, 1st prize West Michigan Fair, dam's record 446 lbs. fat. Bull calf, 8 mo. old, dam's record 450 lbs. fat. Class B. M. HOMPE, R. 5, Forest Hills Farm, Grand Rapids, Mich.

Wallinwood Guernseys

Young bulls from A. R. cows for sale.
F. W. WALLIN, Jenison, Mich.

Reg. Guernseys Two Nice Bulls, nearly ready for service. Special terms if desired. A. M. Williams, North Adams, Mich.

Ready For Service

Holstein bull born March 15, 1923.

Well grown, dark colored calf.

Six nearest dams average 29.45 lbs. butter in seven days.

Sire—A grandson of King of the Pontiacs from a 37-lb. cow.

Dam—A 29.9-lb. cow now on yearly test, with 712 lbs. butter and 17,011 lbs. milk in first 296 days. Her dam is a 26.7-lb. cow.

Pedigree and price on application.

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Department C. Lansing, Michigan

Registered Holstein Bulls

Up to eleven months of age. Good individuals and good breeding, at low prices. Also a few young cows or heifers soon to freshen. A healthy herd. I. M. SHORMAN, Fowlerville, Mich.

Brookwater Jerseys

Bull calves for sale. Majesty breeding. Herd tuberculosis free. Come or write. Brookwater Farm, Ann Arbor, Mich.

FOR SALE Jersey bulls ready for service. All cows Register of Merit. Accredited herd. Would take a bankable note. SMITH AND PARKER, R. 4, Howell, Mich.

Live Stock

ESTABLISH RECORD OF MERIT.

Fine Wool Sheep Breeders Take Forward Step.

THE members of the executive committee of the Michigan Fine wool Sheep Breeders met March 10th and transacted considerable business relative to putting the association in work form. A constitution and set of by-laws were adopted.

As a special line of work to be pursued, provisions were made to afford breeders of all classes of fine wool sheep opportunity to make shearing records of their sheep which will entitle them to a record of merit for each sheep that meets certain requirements as set forth in the by-laws.

Briefly put, these rules are as follows: Any ram of any fine wool breed may be given a record of merit, providing at least five of his lambs make the record. Any ewe may be given a record of merit providing she has produced at least two lambs which have made the record.

Different standards were adopted for each breed at least twenty-five pounds, and the ewe fifteen pounds to secure a record of merit.

For American Merinos, A type: Rams, 28 pounds, ewes 18 pounds; B type: Rams 25 pounds, ewes 16 pounds; C type Rams 22 pounds, ewes 15 pounds.

For Black Top Merinos: Rams 25 pounds, ewes 15 pounds.

May Hold Local Shearings.

In order to make the work of securing these official records as easy as possible for all who are interested, it is provided that local shearings may be held wherever it will be the most convenient for the breeders. Local groups, or even individual breeders, may make a public shearing, secure the assistance of some disinterested party to take the label numbers of the sheep shorn, and to certify that such were shorn on such a date. This certification shall be forwarded to the secretary of the association, Robert J. Noon, of Jackson, Michigan, who will file these certifications and when the sheep are shown the following year and pass the record requirements, they will then be eligible to receive a certificate of record of merit.

While this is a little late to present to the breeders this year, yet it was thought best to take the preliminary steps toward such certification. In counties where there is a county agent, it will probably be possible to secure his cooperation in the making of these records. It has been suggested by one of the faculty of the Michigan Agricultural College that this record work can be incorporated in the extension work of the college. If this is done, this will be a great help to the pure-bred fine wool sheep business and the Michigan Fine Wool Breeders' Association will heartily welcome such assistance and cooperation. Any one desiring to take up the work this year, and who wishes further information regarding the matter can write to the secretary of the association, Robert J. Noon, Jackson, Michigan and the information will be cheerfully furnished.

KEEPS ONE STEER FOR EACH ACRE.

JOHN C. DAY, owner of the Gray Tower farm, south of Grass Lake, makes a practice of feeding one steer for each acre in the farm, which comprises 200 acres.

The principal crop grown on the farm is corn, sixty acres being devoted to this grain last year. A large acreage also produces oats and hay for feeding purposes.

The 200 steers on the place are rounding out very nicely and butchers are bidding competitively for the lot.

Registered Jersey cattle, young bulls, for sale. Tuberculin tested.
J. L. CARTER, Lake Odessa, Mich.

15 Cows, 4 bulls from R. of M. Cows. Chance to select from herd of 70. Some fresh, others bred for fall freshening. Colon C. Little, Coopersville, Mich.

HEREFORDS

Bulls, Heifers and Cows with Calves by side. Most popular strains. Allen Bros., 616 S. Westnedge St., Kalamazoo, Mich.

HEREFORDS

Registered Breeding cattle, T. B. Tested at practical prices for production of Hereford Baby Bevers profitably, all ages. T. F. B. SOTHAM & SONS (Herefords since 1839) St. Clair, Mich.

FOUR heifers of the best Hereford breedings, at reasonable prices, also one young bull. No better anywhere. Ward Dunston, Clarkston, Mich.

Francisco Farm Shorthorns and Big Type Poland Chinas

Now offering three good bulls and a few choice gilts bred to Elvetrand Revelation 2nd. P. P. Pope, Mt. Pleasant, Mich.

BIDWELL SHORTHORNS

Revolution Jr. 573938 heads accredited herd 28917. Now offering 2 January roan bull calves of exceptional merit, reasonably priced. BIDWELL STOCK FARM, Box D, Tecumseh, Mich.

Wildwood Farm Milking Shorthorns. An accredited herd bred for beef and milk. Headed by King Sales, grandson of Glenside Dairy King. Fresh cows and heifers priced reasonably. Visitors welcome. Beland & Beland, Tecumseh, Mich. Paved Road No. 50.

Irvin Doan & Sons, Croswell, Dark red bull calved Aug. 2, 1923. Sire, Countryman's King (by Glenside Dairy King out of Bessie Thorndale, 3rd, 12,754 lbs.) weight 2,400 lbs. Dam Glenside Sunbeam, 5,500 lbs., by General Clay. Price \$200. Light roan bull calved Sept. 20, 1923. Sire, Fremont Roan Clay, by Glenside Roan Clay. Dam, Miss Gloria Morn, by Glenside Bell Boy out of a daughter of General Clay. Price \$150.

When In Need of Red Polled Bulls, Cows or Heifers. Buy from Michigan's leading herd, owned by Westbrook Bros., Ionia, Mich.

Milking Shorthorns all ages, either sex, Central Michigan Shorthorn Breeders' Association. M. E. MILLER, Secretary, Greenville, Mich.

FOR SALE 3 roan scotch Shorthorn bulls, 8 to 12 mos. at \$75 to \$100 each. Come Quick. H. B. Peters & Son, Elsie, Mich.

For Polled Shorthorns Milk Strain, Either Sex. Sault Ste. Marie, Mich.

Red Polled Cattle for sale. Bulls ready for service. Cows with calves and heifers. G. A. Calhoun, Bronson, Mich., R. 1.

FOR SALE a number of head of registered Durhams. T. B. tested. Write FRANK L. KRUPP, Grand Lodge, Mich.

HOGS

DUROC JERSEYS SOWS

Bred and open Sows of the finest practical type. Farrowed April 15 to May 15, 1923. Long, well-rounded body. Send for description and photos. Fred Vreeland writes: "I am pleased with the Sows and assure you that they are satisfactory in every respect." Every shipment guaranteed to be satisfactory. STATE FARMS ASSOCIATION Masonic Temple, Kalamazoo, Michigan

Registered Durocs

FOR SALE—Young boars and gilts bred from the best herds in Michigan and Ohio, at reasonable prices and fully guaranteed. W. E. Bartley, Alma, Mich.

DUROC JERSEYS Spring pigs either sex of March April and May farrow, sired by three outstanding herd boars. If you want size type and quality combined come and see or write us. F. J. Drott, Monroe, Mich. R. 1

FOR SALE Duroc Jersey Fall Boars of the Heavy-boned, low-down type. Chas. A. Bray, Okemos, (Ingham Co.), Mich.

FOR SALE Choice Registered Durocs, Jerseys, fall boars. Matt. Matthyse, Cutserville, P. O. Address, Byron Center, Mich.

Duroc Jerseys Bred Sows, July and September gilts at prices that leave no excuse for breeding scrubs or grades. Reg. and guaranteed. JESSE BLISS & SON, Henderson, Mich.

DUROC fall and spring boars of the best breeding and quality, at prices to sell. Fall pigs at bargain prices. W. C. Taylor, Milan, Mich.

Duroc Jerseys Extra choice bred gilts at reasonable prices. CAREY U. EDMONDS, Hastings, Mich.

CHESTER Benjamin's Big Type WHITE Early maturing, prolific, heavy weight, prize winner kind from bloodlines of Champions and Grand Champions, now making big money for thousands. I have started more breeders on the road to success than any man living. Easy to start. Cost little. Write me today. B. S. BENJAMIN R. F. D. 10 Portland, Mich.

LARGE TYPE Chester White Gilts. Bred for Giant, of Colonel Denby and The Monster Breeding. Prices very reasonable. W. H. Bentley, Lenox, Mich.

O. I. C.'s 75 spring pigs, pairs not akin, from 3 good sires, also fall pigs, recorded free. Otto Schulze & Sons, Nashville, Mich.

25 Reg. O. I. C. Sows. Bred for April and May Farrow. All Stock Shipped on Approval. Priced Right. Fred W. Kennedy, R. 2, Plymouth, Mich.

O. I. C.'s Sept. pigs, sired by "Giant Boy," Senior Champion at West. Mich. State Fair, 1923. Milo H. Peterson, R. 2, Ionia, Mich. "Elmhurst Farm."

O. I. C. 5 young service boars, 8 gilts for April farrow, and Buff Rock eggs, \$1.00 per 15 eggs. Clover Leaf Stock Farm, Monroe, Mich., R. 1.

Hile's Good Polands

Big, easy feeding, quality Polands. That's the kind we like and sell. Bred gilts and sows for sale. A hundred years of constructive breeding back of them. WESLEY HILE, Ionia, Mich.

SPOTTED POLAND China yearling gilts, sired by our 1923 blue ribbon winner Chicago Int'l. Bred to son of Spotted Ranger. Boars and gilts all ages. High quality, low prices. Keller & Jackson, Ohio City, O.

REAL JOBS OPEN

Auto, Tractor and Electrical business offers real jobs paying from \$150 to \$500 per month. No layoffs or strikes. Railroad fare and board free with regular course at lowest tuition ever offered. Write today for big catalog and special offer before it is too late. Address:

J. H. McSweeney, Pres., Dept. 333
The McSweeney Auto, Tractor & Electrical School
 Successor to the Rahe School
 Cincinnati, Ohio

Ford Runs 57 Miles on Gallon of Gasoline

A new automatic and self-regulating device has been invented by John A. Stransky, 2440 Fourth St., Pukwana, South Dakota, with which automobiles have made from 35 to 57 miles on a gallon of gasoline. It removes all carbon and prevents spark plug trouble and overheating. It can be installed by anyone in five minutes. Mr Stransky wants distributors and is willing to send a sample at his own risk. Write him today.

POULTRY

Veri-Best Chicks

Postpaid to your door. 100 per cent Live arrival guaranteed. From Pure-bred, Select, Heavy Layers. Reference: First National Bank. You can order right from this Ad. with perfect safety.

Varieties.	Prices on	50	100	500
Wh. Br. Buff Leghorns, Anconas		\$7.00	\$13.00	\$60.00
Barred Rocks, Reds, Blk. Minors		8.00	15.00	72.00
White Rocks & Wyandottes		8.50	16.00	77.00
Buff Orpingtons		8.50	16.00	77.00
Mixed chicks, 10 cents each, straight. All Heavies.				
12 cents each. You take no chances. Only 3 hours from Detroit. QUALITY CHICK HATCHERY, Box A, Wauseon, Ohio.				

White Leghorn Baby Chicks

TANCRED-BARRON 200 to 300-egg bred line. Wonderful layers of large white eggs that bring premium prices. Over 2,000 selected breeders on free range. Get quality chicks from these tested layers, mated to the choicest pedigreed sires, 11 1/2 cent and up. 100 percent live arrival guaranteed by prepaid parcel post. Write at once for valuable illustrated catalog and latest price list.

J. PATER & SON R-4 Hudsonville, Mich.

RELIABLE CHICKS

S. C. English White Leghorns and Barred Rocks. Every chick from carefully-mated, culled pure-bred flocks, owned and developed by us for 15 years. Flocks mated with males from 200-280 trap-nested hens. Free Catalog. Write for prices.

Reliable Hatchery and Farms
 74 East 16th St., Holland, Mich.

FARMS AND FARM LANDS FOR SALE

PAY NO ADVANCE FEE; don't give option or tie up real estate for any kind of contract without first knowing those you are dealing with are absolutely honorable, responsible and reliable.

140 Acres, Edge Town 3 Horses, Poultry, 17 Cows and

Heifers, implements, tools, crops; prosperous farming district, convenient markets; on improved road, edge depot town; 100 acres loamy tillage, 20-cow brook-watered pasture, woodlot; variety choice fruit; comfortable 10-room house, slate roof, big barn, stable, etc. Owner unable to operate; all for \$1,900, only \$1,500 needed. Details page 57 New Illus. Bargain Catalog money-making farms, best section United States. Copy free. **STROUT FARM AGENCY, 205BC Kresge Bldg., Detroit.**

HOMESTEAD FOR SALE Price attractive. 120 acres on state road, 1 mile from Tecumseh, Michigan. Big brick house suitable for Overnight Inn. Fine location for roadside Stand. Land will grow anything. Write Mrs. C. A. Payne, Watkins, N. Y.

240 ACRE FARM. Large dwelling, lights and water, two large doorways, porches and bay window, shade and lilac bushes. Large barn, productive soil, well located. To close estate will be sold for \$6,500, best of terms. Isoco County Bank, Whitmore, Mich.

1400 ACRES 2 1/2 miles from depot. 300 cleared, 2 dwellings, 3 tenant houses, outbuildings, 6 tobacco barns. Land is good, lies well. Write for particulars. Only \$14,000. Owner, Box 36, Buffalo Station, Va.

Would you Buy a Home? With our liberal terms. Write people only, good land, healthy progressive country. Write for list. Mills Land Co., Booneville, Ark.

FOR SALE 80 acres, 4 miles from Gaylord. 60 acres cleared, balance wood lot, mostly sugar maple trees. Good buildings and well. Near school. Henry Widger, Gaylord, Otsego Co., Mich.

For Sale or exchange, 400 acres Alpena county farm. Ray Sagar, Lambertville, Mich.

IF YOU WANT TO LIVE in California write Kings County Chamber of Commerce, Hanford, California, for free booklet.

80 Acres Newaygo Co., Good farm home. For particulars address—Alex K. Martin, 9783 American, Detroit. Phone Gar. 1559-R.

FOR SALE or Exchange: Meadow Brook Dairy Farm, 275 Acres. Stock and Tools. Joseph M. Tuttle, Battle Creek, Mich.

WATCH THE EWES AT LAMBING TIME.

EWES require additional care at lambing time. I think it wise to watch every ewe closely to make sure she is coming along all right.

Very frequently a little ailment will attack a ewe following lambing such as caked udder, indigestion and inflammation of the bowels, which, if taken in due time, can be restored without causing a setback to the ewe and lamb. Ailments that get two or three days the start, are more difficult to overcome than if treated immediately when first symptoms appear.

It has been my experience that it pays to keep the ewes near by where they can be gone over ever morning and carefully examined. Ewes that lamb along about the first of May usually are turned to pasture. This is a splendid place for them, but I like to get the flock up at night and keep them near at hand. Then I can look them over and, in case of sudden change in the weather, they can be protected.

It is very common for ewes that have been well fed during the winter to have udder trouble at lambing time. Every flock-owner has his particular remedy for this trouble, but I have had excellent success with rubbing the udders twice daily with vaseline to which is added one-fourth part spirits camphor and the same amount of ammonia.

I think some of the local ailments following lambing are due to the lack of laxative food in the ration. I like to double up on the amount of bran in the ration at this time. Bran keeps the system open and assists digestion. —Leo C. Reynolds.

SOWED SWEET CLOVER IN POOR WHEAT STAND.

(Continued from page 434.)

the land inoculated. We followed the drill with the roller.

We got a perfect stand. This field would have given us a big crop of hay but we turned the cows in instead, and pastured it a reasonable amount. Last spring we divided the field and pastured the cows nights on about two acres of it along with about four acres of low land pasture. The cows laid in this sweet clover every night and there was a fair amount of pasture when it froze up in the fall.

The remaining fifteen acres, which, on account of rain was cut the last of June when three to five feet high, allowed it to wilt, bunched it carefully to shed water and then forgot it till the big bunches were thoroughly cured. It then went to the mow as green as could be, but a little coarse. But not a stalk has been wasted, most of it having been fed to the cows.

Another field sowed on well-fitted soil the fore part of August with 15 pounds of sweet clover seed drilled in and 20 pounds of sand vetch broadcasted. From this we cut a ton to the acre of the finest quality of hay early in June. The spike harrow and roller should bring forth another good stand of sweet clover from the shattered seed on this field.—George McKay.

Jim Rohan's Latest Bulletin

For smaller capacity get my 80-egg Champion Belle City Incubator for \$9.95; my 80-chick Hot Water Belle City Brooder for \$4.95; or both ordered together for only \$12.95—Express Prepaid East of Rockies.

\$13.95 Champion Belle City \$21.95
140-Egg Incubator 230-Egg

Hot-Water, Copper Tank, Double Walls Fibre Board, Self-Regulated Safety Lamp, Deep Nursery, Thermometer & Holder, Hatches chicks, ducks, turkeys and geese \$6.95 buys 140-Chick; \$9.95 buys 230-Chick Hot-Water Double-Walled Brooder. Save \$1.95 — Order Both. A complete hatchery.

140 Size Incubator and Brooder, \$18.95
230 Size Incubator and Brooder, \$29.95

Express Prepaid

East of Rockies and allowed to points beyond. Low prices on Coal and Oil Canopy Brooders come with catalog. With either of these Guaranteed Hatching Outfits and my Guide Book, your success is assured. Save Time—Order Now—Share in my \$1000 in Prizes

Or write me for Free Poultry Book, "Hatching Facts." Jim Rohan, Pres. Belle City Incubator Co. Box 14, Racine, Wis.



Silver Anniversary Model New Idea Spreader

TWENTY-FIVE years of leadership in the spreader field—and now a still better New Idea! Greater strength, lighter draft—more real spreader for your money than ever before! Practically all metal parts are of steel. Sides and bottom are

of highest quality oak and yellow pine. Forgings are made of finest high-carbon steel.

Fine Shredding and Pulverizing—and Wide, Even Spreading



Note closely the "business end" of this better spreader. The shape of the blades—and their relative position to each other—are the secret of the unequalled efficiency of the New Idea in laying a thin, uniform blanket of perfectly shredded and pulverized manure over every square inch of soil surface.

Here is the original wide-spreading spreader—improved, refined and perfected to operate easily and smoothly under all conditions to give long years of profitable service.

See this new and better New Idea at your dealers—or write direct to "spreader headquarters" for complete information. And bear in mind only in the genuine New Idea Spreader can you get genuine *New Idea value!* Refuse imitations.

The New Idea TRANSPLANTER

Another New Idea Leader. Unusually sturdy, exceptionally light draft, faultless in mechanical regulation—and not built backward. The driver sits behind the plant-setters—and engineers the job. Write for interesting folder.



THE NEW IDEA SPREADER CO. COLDWATER, OHIO

THE NEW IDEA SPREADER CO., Coldwater, Ohio.

Please send folders describing
 — New Idea Spreaders
 — New Idea Transplanters

Name _____

Address _____

EXTRAORDINARY HOLSTEIN SALE

Seventy head of registered Holsteins—among them the highest record yearly cow ever offered at public sale.

At Wooster, Ohio, March 27, 1924, in the new Sale Pavillion.

Four yearly record cows, including King Wood Bergsma Segis 4th, No. 365905, 365 day butter 1,148.85, milk 24,540;
 Copia Flora Hengerveld No. 448739, 365 day butter, 1,001.72, milk, 23,622.30;
 Daisy L. Pontiac Verna No. 347309, seven days, 30.88, year record, 927 pounds;
 Hester Pieterje Champion Ormsby, yearly record at three years, 684 pounds, milk 17,843;
 Yearling daughter of Hester Pieterje Champion Ormsby, whose every dam has a year record;
 Two-thousand-pound yearly bulls born July, 1923, dam's record 1,001 pounds, sired by Friend Piebe No. 329948, whose dam has a record of 1,281. This youngster's five nearest dams all have over 1,000 pound yearly records.

ALSO MAY ECHO SYLVIA BLOOD

One of the three highest seven-day record bulls in service in the United States; Carnation Echo Tietje No. 274950, he sired by Champion Echo Sylvia Pontiac, who is a son of May Echo Sylvia; Carnation Echo Tietje has for his dam Glen Alex Tietje DeKol No. 382578. He will have five daughters in the sale.

There will be fifteen cows in calf to Carnation Echo Tietje, also five of his sons. The sire of Carnation Echo Tietje is the brother of Carnation King Sylvia who sold for \$106,000.00. An opportunity to buy blood close to May Echo Sylvia.

Thirty fresh and near fresh cows, 10 A. B. O. cows, 10 yearling heifers, 5 high quality young bulls and a number of well-bred calves. Col. S. T. Wood—in the Box. Commences at 11 o'clock A. M. Reached by Lincoln Highway, Pennsylvania Railroad and the Cleveland & Southwestern Traction. Terms of sale, cash or six months' note without interest, or bankable notes acceptable to consignor. Cattle from herds under Federal and State inspection and 60-90-day retest.

P. S.—Clip this ad and attend this sale of high quality cattle. This ad will not appear again. Catalogs ready.

C. S. Reece and E. S. Wertz

USE The Faultless Foot Power Milker. Send for cut and descriptive circular. W. L. MATTHEWS, Horton, Mich.

HOGS

L. T. P. C. Bred gilts. Fall pigs, either sex. Brown Swiss Bull, Calved 4-29-23. A. A. Feldkamp, Manchester, Mich.

Fall Pigs either sex, by the great Boar, The Wolverine, Priced reasonable, Best of dams. W. E. Livingston, Parma, Mich.

Hampshire Bred gilts, spring and fall boars, at bargain prices. 12th year. Write your wants, John W. Snyder, R. 4, St. Johns, Mich.

Hampshire Best of breeding. Choice gilts bred to farrow March and April. Herman Barchet, R. 3, Watervliet, Mich.

HORSES

Registered Belgian Stallions For sale or trade. Chas. Baumgarner, Waterville, O.

For Sale

Clyde Stallion and 3 Mares

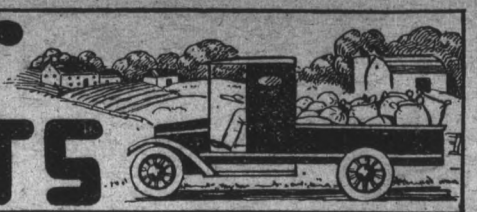
6-3 to 5 yr. old work horses Black and Greys Wts. 1400 to 1700. Prices \$125.00 to \$250.00.

R. S. Hudson, Farm Supt.

Michigan Agricultural College
 Please Mention The Michigan Farmer
 When Writing to Advertisers



THE LATEST MARKET REPORTS



GRAIN QUOTATIONS

Wednesday, March 19.

Wheat.

Detroit.—No. 1 red \$1.09, No 2 red \$1.08; No. 3 red \$1.05; No. 2 white \$1.09; No. 2 mixed \$1.08.

Chicago.—May \$1.04½@1.047½; July \$1.057½; September \$1.067½.

Toledo.—Cash \$1.07½@1.08.

Corn.

Detroit.—Cash No. 2 yellow at 81c; No. 4 yellow 77c; No. 5, 71@73c; No. 6, 68@70c.

Chicago.—77½; July at 79¼; September 79½.

Oats.

Detroit.—Cash No. 2 white at 49½c; No. 2 47½.

Chicago.—May at 46½c; July 44½c; September 41½.

Rye.

Detroit.—Cash No. 2, 67½.

Chicago.—May 66½@66¾c; July 68.

Toledo.—66½.

Barley.

Barley, malting 74c; feeding 70c.

Buckwheat.

Buckwheat.—New milling at \$2.00 per cwt.

Beans.

Detroit.—Immediate and prompt shipment \$4.60@4.65 per cwt.

Chicago.—Navy \$5.25; red kidneys \$7.50.

New York.—Choice pea at \$5.75@6; red kidneys \$7.60@7.75.

Seeds.

Detroit.—Prime red clover cash at \$11.75; alsike \$9.10; timothy \$3.70.

Hay

Strong.—No. 1 timothy \$23.50@24; standard and light mixed \$22.50@23; No. 2 timothy \$21@22; No. 1 clover at \$20.50@21; No. 1 clover mixed \$20.50@21; wheat and oat straw \$11.50@12; rye straw \$12.50@13.

Feeds.

Bran \$32; standard middlings \$32; fine do \$33; cracked corn \$35, coarse cornmeal \$34; chop \$30 per ton in 100-lb. sacks.

Apples.

Chicago.—Barrels, "A" grade Wine saps \$5; Greenings \$5.00@5.25; Jonathans \$5.50@6; Spies at \$4.50@6; Kings \$4@4.50; Baldwins \$4@4.50;.

WHEAT

The recent estimates by the U. S. Department of Agriculture which indicated larger farm stocks of grain than were generally expected by the trade were a depressing factor in the grain market and prices of all grains suffered material declines.

The stocks on wheat on farms, however, were about 21½ million bushels less than on March 1, 1923, and stocks in mills were also about 2,000,000 less than last year. The visible supply continues around 16,000,000 bushels larger than last year and exports have only been about ⅓ of the amount exported for the corresponding period in 1923.

While the movement of wheat into commercial channels has been materially less than last year it should be noted that the consumption on farms and by interior mills has been larger than usual and that if the present rate of consumption should continue during the remainder of the crop year the carryover will not be burdensome.

While mills in the hard winter wheat territory reported a rather dull flour demand there was a feeling that the supply of choice milling grades would be exhausted before the new crop becomes available. The red winter wheat markets were relatively weaker than for the other kinds, as the demand from Southern mills was rather limited because of the small flour and feed trade in that territory.

CORN

Corn prices were also lower and the market somewhat depressed by the larger stocks on farms. As in wheat, however, the reports indicate larger farm consumption during the winter, but with the present tendency of farmers to reduce their hog stocks it seems probable that the feeding demand will be materially decreased, which may result in a larger carryover at the beginning of the new crop. The demand at practically all markets was less urgent, but reports, however, indicate that farmers are not selling freely at the lower prices.

OATS

While the stocks of oats on farms

were also larger than last year they constituted a smaller percentage of the crop than last year, which together with the smaller receipts at the markets indicates a rather large consumption to date. Prices were slightly lower, with other grains, future prices and cash prices both declining 1c to 2c per bushel. The outlook, however, indicates a continued good demand for oats, especially in the South and Southeastern States where a large percentage of the winter oats have been winter killed. While some of these oats will be reseeded in spring oats it is stated that they will furnish but little grain and will be used principally for forage.

SEEDS

Clover seed prices advanced again last week and red clover is about 75 cents a bushel above the recent low point. Demand is improving and stocks are not heavy enough to cause great pressure to unload. The season is late so that demand may continue longer into the spring than usual. A survey by the United States Department of Agriculture indicates that seed dealers expect demand for red clover seed and seed corn to be much greater than a year ago. More alsike, sweet clover, alfalfa, timothy, sorghum, cow pea and soy beans will be needed than last year while prospective demand for millet and Sudan grass is less than a year ago.

FEEDS

The feed market has a weak undertone and prices of wheat feeds are lower. Production of wheat and corn feeds and linseed oil meal is relatively heavy, while demand is dull especially from dairymen in some of the fluid milk districts where large amounts of feed usually are bought but where present milk market conditions are discouraging. Spring is close at hand and there is but little forward buying by either dealers or consumers. In most cases lower prices are expected next month and holders are trying to unload.

HAY

The breakup of roads has restricted country loadings of hay. Receipt at central western markets were light last week and the excess of low grades at eastern markets is being cleaned up so that prices are firm. Some wavering in the demand for choice alfalfa from dairymen is noticeable as spring approaches.

POULTRY AND EGGS

The egg market seems to have found a solid basis as prices are on a storing level with a small movement into storage already started. Receipts at the leading markets were lighter last week but with prospects of ample supplies to come forward, prices made no response.

Poultry prices show but little change. Extremely heavy receipts are offset by lighter storage reserves than a year ago and excellent consumptive demand.

Chicago—Eggs: extras, 27@28c; miscellaneous, 21@21½c; dirties, 20½c; checks, 20c; fresh firsts, 21½@22c; ordinary firsts 20@20½c. Live poultry: Hens, 24½c; springers, 29c; roosters, 17c; ducks, 28c; geese 18c; turkeys, 22c.

Detroit—Eggs: Fresh candled and graded, 23@23½c; storage, 27c. Live poultry: Heavy springers, 28c; light springers, 25@26c; heavy hens, 27@28c; light hens, 26@27c; roosters, 17c; geese, 20@21c; ducks, 32c; turkeys, 30@32c.

BUTTER

Price changes in the butter market were rather irregular last week. Receipts at the leading markets showed no increase and reports on the make showed a slight falling off. Prices at some markets closed higher while elsewhere weakness was apparent. Arrivals of foreign butter included 1,089 boxes from Argentina and 560 casks from Sweden. Buyers are disposed to operate with small stocks in view of the prospective spring increase in production so that any rise in prices is likely to prove temporary. Production in sections making fine butter seems to be gaining more regularly from week to week than elsewhere. Consumption demand remains broad.

Prices of fresh butter were: 92 score—Chicago, 47c; New York, 48½. In Detroit fresh creamery in tubs sells for 46½@47½ per lb.

POTATOES

While the carlot movement of potatoes has diminished slightly, it remains heavier than normal for this time of year and prices in eastern markets have weakened. U. S. No. 1 northern round whites are quoted at \$1.20 to \$1.35 per 100 pounds in Chicago, while New York round whites dropped to \$1.50 to \$1.85 in the east. Further reports on the area planted or to be planted to potatoes in the early states point to a substantial increase over last year but weather in the south con-

tinues unfavorable for planting or for growth so that the movement will be late.

APPLES

Apple markets are reported dull but the rate of movement out of producing sections at fairly steady prices points to broad distributing demand. Boxed sections have shipped 58,966 cars for the season up to March 8 compared with 43,449 cars a year ago. Barreled apple states have shipped 61,261 cars against 60,843 a year ago. Total shipments thus far practically equal the movement for the entire season last year.

BEANS

After being deadlocked for several days as a result of light receipts and limited demand the bean market weakened when deliveries increased and demand failed to improve. Country roads have been in bad shape but are improving in the bean producing sections. Remaining stocks of beans are believed to be ample for the demand during the remainder of the year but are not considered burdensome.

Choice hand picked whites were quoted at \$4.80 per 100 pounds f.o.b. Michigan shipping points. Light red kidneys are \$7 and dark reds are hard to obtain at \$8.25.

WOOL

Demand for wool became a little more irregular toward the close of last week but prices have been relatively firm. Manufacturers are shopping about but the orders for goods since the heavyweight opening have not been heavy enough to stimulate steady accumulation of raw material especially with the pressure from the new clip about to set in. The strength of foreign markets and the strong world position of wool statistically are main supports. Our prices are below the world level when the tariff is considered.

GRAND RAPIDS

Light poultry receipts over a period of several weeks have strengthened this market and produce houses were urging farmers to dispose of their Leghorn fowls at this time. These birds were in demand at 15@18c a pound. Heavy fat hens were firm at 22@24c a pound. Eggs were in good demand at 22@23c per dozen with supplies barely sufficient to supply the trade. Leaf lettuce touched the lowest level in years this week, selling in a range of 5@6c a pound. The supply is in excess of the demand but growers believe the bottom of the market has been reached. An upturn with the approach of Easter usually takes place. Potatoes were easier at 45@55c a bu. and apples were plentiful at 75@82c a bu.

DETROIT CITY MARKET

Market was well supplied with produce, and buying generally was active. Carrot and cabbage sold easily, with prices remaining firm. Parsnips were in liberal supply and most sales were at \$1.15 to \$1.25 a bushel. The demand for beets, turnips, root celery and vegetable oysters was light. Potatoes were slow to sell, and apples had a moderate movement, with prices firm. Poultry was in demand, but eggs moved slowly. The supply of veal was moderate.

Prices were: Apples, fancy, \$2@2.25 bu; No. 1, \$1.25@1.75 bu; beets, round \$1.25@1.50 bu; long, 2@2.25 bu; cabbage, \$1.75@2 bu; red, \$2.50 bu; carrots, \$1.50@1.75 bu; celery, \$1 doz; onions, dry, \$1.50 bu; parsley, \$5 bu; parsnips, \$1.15@1.50 bu; potatoes, 75@85c bu; turnips, \$1.50@2 bu; vegetable oysters, 60@75c doz. behs; eggs wholesale, 30c doz; retail, 30@35c doz; hens, wholesale, 27@28c lb; retail, 30@33c lb; springers, retail, 28@30c lb; veal, 15@17c lb; hogs, 12c lb.

COMING LIVE STOCK SALES.

Holsteins.

March 27—Wooster, Ohio. C. S. Reece and E. S. Wertz.

Jersey Cattle

March 27—Fred L. Bodimer, Reese, Mich.

March 27—J. C. Madigan, Rockford, Mich.

Chester Whites.

March 27—Fred L. Bodimer, Reese, Mich.

Live Stock Market Service

Wednesday, March 19.

CHICAGO

Hogs.

Receipts 26,000. Market slow; mostly 5@10c higher than yesterday's average. Light weight 15@25c higher. Big packers inactive. Bulk good and choice 160 to 325-lb average \$7.25@7.50. Tops \$7.55. Bulk good 135 to 150-lb. average \$7.00@7.35. Bulk packing sows \$6.50@6.80. Killing pigs 25@50c higher. Bulk good and choice 110 to 130-lb. average \$6.25@6.75.

Cattle.

Receipts 7,000. Market active. Mixed steers and yearlings mostly 10@25c higher. Best steers early \$11.50. Bulk \$5.00@10.75. Canners and cutters steady to strong. Bulls slow weak to unevenly lower. Vealers strong to higher. Bulk to packers \$9.50@10.50. Stockers and feeders steady.

Sheep and Lambs.

Receipts 11,000. Market fairly active. Fully steady. Choice woolled lambs early \$15.25@16.50. One deck \$16.75. Good to choice clipped lambs \$14.40@14.65. Good to choice fat ewes \$10.00@11.00. Shearing lambs \$16.00.

DETROIT

Cattle.

Market opened steady; closed around 25c lower on most kinds. Good to choice yearlings \$8.75@9.50. Best heavy steers 8.00@8.75. Handyweight butchers 7.25@7.75. Mixed steers and heifers 6.25@6.75. Handy light butchers 5.25@5.75. Light butchers 4.25@5.00.

Best cows 5.25@5.75. Butcher cows 4.00@5.00. Cutters 3.00@3.50. Canners 2.50@3.00. Choice bulls 5.00@5.50. Bologna bulls 4.50@5.50. Stock bulls 4.00@4.50. Feeders 5.50@6.50. Stockers 5.00@6.00. Milkers \$45@80.

Veal Calves.

Market 75c@1.00 lower. Best \$13.00@14.00. Others 6.00@12.00.

Sheep and Lambs.

Market 15@25c lower. Best lambs \$16.50@16.60. Light to common 10.00@12.50. Fair 13.50@14.50. Fair to good 9.00@9.75. Culls and Common 3.00@5.50.

Hogs.

Market 5@10c higher. Mixed and heavies 7.70. Pigs 6.50. Roughs 6.10. Yorkers 7.40@7.70.

BUFFALO

Cattle—Receipts, eight cars; steady. Calves, \$14. Hogs: Receipts, 30 cars; higher; heavy and yorkers, \$8@8.10; pigs, \$7. Sheep: Receipts, seven cars; strong; top lambs, \$17@17.35; yearlings, \$14@15.50; wethers, \$12@13; ewes, \$10@11.50.

-IF-

You are discouraged with bean growing. If the market does not suit you.

The Judson Jr. Bean Sorter will make you an enthusiastic bean grower, because you get the profits.

Mail us samples of your beans, we will tell you the possible gain awaiting you.

Many Michigan farmers have made from \$300 to \$1000 in the last three months picking their own beans.

Ask address of your nearest Judson Jr. dealer.

Demonstration Branch and Sales Warehouse, Durand, Mich.

JUDSON MICHIGAN CO.

Factory and Main Office, 407-9 Fort St. E., Detroit, Mich.



A complete line of beekeepers' supplies ready for prompt shipment. Winter problem solved by the Inner Over Coat Hive. Send for 32-page illustrated catalogue, free.

A. G. WOODMAN CO.,

Dept. M. F.

GRAND RAPIDS, MICH.

Ship Your

DRESSED CALVES

Dressed Hogs and Live Poultry to

DETROIT BEEF CO.

Oldest and most reliable commission house in Detroit. Write for instructions how to dress calves. Tags and market letter on application.

Detroit Beef Co.

1903 Adelaide St. Detroit, Mich.

Ship Your Cattle, Hogs and Sheep to

Warns, Hies and Dankert

Union Stock Yards, Toledo, Ohio. For Top Prices - Big Fills - Quick Returns. Correspondence solicited.

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.

Rates 8 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order.

Real estate and live stock advertising have separate departments and are not accepted as classified. Minimum charge, 10 words.

Rates in Effect October 7, 1922

Words	One time	Four times	Words	One time	Four times
10	\$0.80	\$2.40	26	\$2.08	\$6.24
11	.88	2.64	27	2.16	6.48
12	.96	2.88	28	2.24	6.72
13	1.04	3.12	29	2.32	6.96
14	1.12	3.36	30	2.40	7.20
15	1.20	3.60	31	2.48	7.44
16	1.28	3.84	32	2.56	7.68
17	1.36	4.08	33	2.64	7.92
18	1.44	4.32	34	2.72	8.16
19	1.52	4.56	35	2.80	8.40
20	1.60	4.80	36	2.88	8.64
21	1.68	5.04	37	2.96	8.88
22	1.76	5.28	38	3.04	9.12
23	1.84	5.52	39	3.12	9.36
24	1.92	5.76	40	3.20	9.60
25	2.00	6.00	41	3.28	9.84

Special Notice

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

MISCELLANEOUS

FOR SALE—Improved 320-acre farm, located 1½ miles east of village of Akron, Tuscola County, Michigan, on Trunk Line M 31, with concrete road to village affording good market for all farm produce. Has large apple orchard, wood lot, with all necessary farm buildings, including two-story house. For further information apply to F. A. Bach, Administrator, Sebawaing, Mich.

ALFALFA farm for rent. 600 fertile acres, rich clay loam, all level and in cultivation. Will divide. Best farm in county. 245 acres now in fine alfalfa. Four sets of good buildings, located in good Michigan county. Raises wheat, oats, barley, hogs and most any crop. Tenant to furnish stock and implements and he gets one-half. Write P. O. 1060, Chicago.

FOR SALE—Good 80 A. 52 A cleared, 22 A seeded, fair buildings, 5½ miles town. R. A. McMillan, R. 2, Remus, Mich.

FARMS—40-60-100 acres, rent or sell. House, 2 acres, village, Dryden, Mich. Small thresher, Polled Shorthorn Bulls. Frank Bartlett, Dryden, Mich.

GOOD LAKE FARM, center of Oakland County, for sale. Wanted, good farm hand, or renter. Box 96, Michigan Farmer.

WANTED—To hear from owner of farm for sale. O. K. Hawley, Baldwin, Wisconsin.

CABBAGE PLANTS. Fullwood's Frost Proof plants will produce headed cabbage three weeks before your home grown plants and will stand a temperature of 20 degrees above zero without injury. I have twenty million now ready. Varieties: Jersey Wakefield, Charleston Wakefield, Copenhagen Market, Succession and Flat Dutch. Prices by express any quantity at \$2.00 per 1000. By parcel post, 200 for \$1.50 for \$1.75, 1,000 for \$3.00. First class plants and safe arrival guaranteed. P. D. Fullwood, Tifton, Ga.

SEED CORN THAT GROWS

EXTRA SELECTED GERMINATION GUARANTEED

Improved Leaning	\$3.50 per bu.
Pride of the North	\$4.00 per bu.
Early Yellow Dent	\$4.00 per bu.
Johnson County White	\$4.00 per bu.
Early Butler	\$4.00 per bu.
Virginia Ensilage Corn	\$3.50 per bu.
Canadian—No. 47 Swedish Oats	\$1.00 per bu.
Fancy—No. 49 Swedish Oats	\$.90 per bu.
Swedish—No. 35 Oats	\$.80 per bu.

Will furnish samples upon request. Any seeds that are not satisfactory, may be returned to us, and your money will be cheerfully refunded.

J. P. EASTON, SEEDGROWER, Monroeville, Ohio.

STRAWBERRY PLANTS

\$3 per 100. Black Raspberry \$12; Red \$13. 20 Iris \$1. 8 apple trees \$1; 15 grapes \$1; 1,000 grapes \$25. We grow the best plants in Michigan. Free Catalogue. THE ALLEGAN NURSERY, Allegan, Mich.

TRY a Michigan Farmer Classified Liner. They bring results.

FROST PROOF CABBAGE PLANTS, Early Jersey, Charleston Wakefield, Flat Dutch, Copenhagen Market and Succession. Prompt Shipment of fine plants. Tomato Plants, Earliana, Redfield Beauty, Livingston Globe and Greater Baltimore. Postpaid, 250 for \$1.00. 500 for \$1.00, 1,000 for \$3.00. Express Collect, \$1.50 per 1,000. Tifton Potato Co., Inc., Tifton, Ga.

PATENT-SENSE—As one of the oldest patent firms in America we give inventors at lowest consistent charge, a service noted for results, evidenced by many well-known patents of extraordinary value. Book Patent-Sense, free. Lacey & Lacey, 795 F Street, Washington, D. C. Estab. 1869.

IMPROVED ROBUST BEANS—Heaviest yielding existing variety and latest improved Agricultural College Strain. Ninety-four per cent germination. Not polished or hand-picked. Ninety-pound bag, six dollars. Owosso. Will pick about three pounds to bag. A. B. Cook, Owosso, Mich.

STRAWBERRY PLANTS—Plants Right, Prices Right. Perry Wright, Fennville, Mich.

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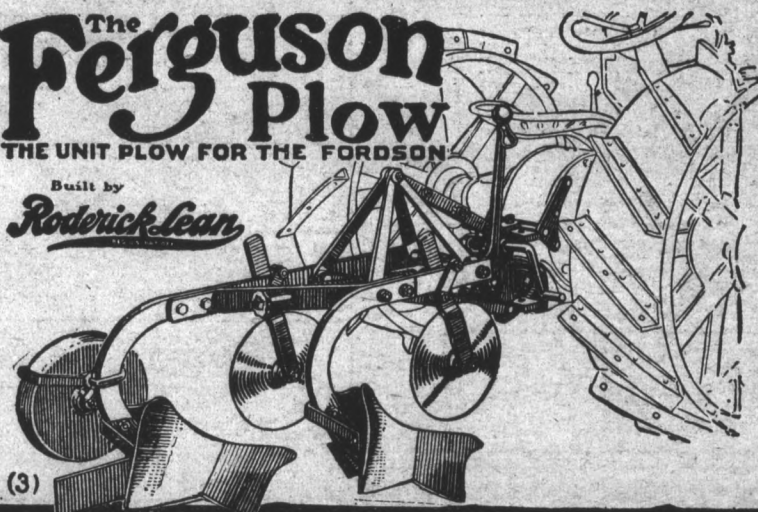
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