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## Some of the Hay Maker's Troubles

*In Trying to Make Good Hay in Bad Weather.*

By Burt Wermuth

WHEN I think of haying I almost invariably call to mind Sam Cruthers. One day, while driving, I saw a man in a field grabbing handfuls of hay and momentarily holding each against his cheek. I later learned that this man was Sam Cruthers. I could not understand just what the performance meant, so I stopped, climbed the fence and made myself acquainted.

"Just seeing whether the hay was dry enough to go in the barn," was Sam's reply to my greeting.

"An old Englishman once told me," continued Sam, "to hold a bunch of hay against my cheek. If it felt warm the hay was in condition to be put in the barn; but if cool, then it was not sufficiently cured."

My method of determining the condition of the hay, as I told Sam, was to shake it gently and if it rattled I felt pretty certain that it was sufficiently cured. I usually supplemented this test by taking a small handful and giving it a firm twist. If the stems broke then I concluded that no chances would be taken by putting the hay into the mow immediately.

With modern machinery, ample barn room and good drying weather, haying on the average farm is not a bad job. But when the weather is "catchy," then even with the best equipment the farmer is more or less on nettles until the last load is brought under cover. There is, however, a general lack of appreciation of the amount of loss sustained through the exposure of the hay to rain and dew.

What do we consider a prime hay? The qualities sought by the best hay makers are an agreeable fragrance, that is agreeable to all excepting the hay fever patient, freedom from dust, a bright green color and, if a legume, the retention of the leaves upon the stems.

Tests have been made at different experiment stations to determine how much the farmer loses when rain or dew falls upon a partly cured hay crop. These tests show that the loss is large, particularly in the case of alfalfa and other legume hay. About one-half of the original weight of an alfalfa crop is to be found in the leaves, they weighing from forty to sixty per cent of the portion removed in cutting. Chemists have found that one-half of the fat and nitrogen-free extract, and four-fifths of the crude protein contained in alfalfa hay is to be found in the leaves. From these facts, it at once becomes apparent that to lose any considerable portion of the leaves means a large loss in the feeding value of the resulting hay. The plant food is concentrated in the leaves, while the stems have a higher percentage of indigestible woody fiber. Consequently when the leaves are broken off and fall to the ground, the percentage of

woody fiber increases, while that of the digestible parts decrease.

In the absence of rains, with a southwest or westerly wind blowing, and with clouds to prevent the scorching rays of a hot summer sun from bleaching the crop, but little care is necessary to secure a prime grade of hay. The green color of the original plant can be largely retained. The rich aroma will be there and the food elements will not have been wasted. Under such conditions the ordinary farmer will be able to serve his stock with the finest forage salad during the winter months.

But the case is different when the days are muggy and wet. It is then that all the trials and tribulations of the hay maker are visited upon him. If he has been observing, he knows too well that hay which has been weathered will not be relished by the ani-

mal. There is comparatively little that he can do to save himself from much of the loss that is bound to come through bad weather. It is a fact, however, that the good farmer will in the long run make better hay under adverse conditions than will the careless man. The few things which can be done to maintain the desirable qualities of the hay crop are highly important and when properly done bring large returns for the energy required.

The first suggestion that we have to make is in regard to the time of day that the hay should be cut. When the farmer finds that the weather is going bad the common practice has been to wait until the rain has subsided and the sun has had a chance to dry off the surface of things before the mower is started.

A Yankee farmer of my acquaintance follows rather successfully a dif-

ferent method. The great damage done by rains is after the hay has been partly or wholly cured. It is then that the moisture leaches out the nutrients as referred to above.

This same idea we have found helpful when trying to avoid the evil effect of dews. Instead of waiting until the dew is off the grass in the morning we found it possible to start the mower early in the morning or late the preceding afternoon. This frequently gave an advantage of an hour or two in the drying period of the day, which often meant the difference between getting the hay in the barn that day, or leaving it in the field over another night.

Then, too, thunder storms often appear at the most unexpected and inconvenient times. These storms not infrequently find the farmer with hay partly cured. Just what the farmer will do will depend, of course, upon the amount of hay he has down and the available help at his disposal. The best thing that can be done, under such circumstances, is to rake and bunch. These bunches should be of a size that will eventually dry out and still be large enough so that only a comparatively small per cent of the hay will be exposed to the rain. The bunches should be built with care, caution being taken to pack the hay thoroughly and build firmly so that they will not readily blow over.

Merely raking hay together into windrows with an old dump rake to protect the hay against rain is of doubtful value. A brisk rain will drive through such a windrow and reach practically every part of the loose hay. It, therefore, offers little protection and makes much extra work when spreading out to dry. If left in the swath the tedder can be used to advantage, but not so on the heavy windrows.

Generally speaking, it is best not to handle the hay when the surface is moist. Stirring the crop at such a time shakes the water down into the dryer hay below, which readily absorbs a portion of this moisture, thus increasing the time required to cure and dry the product.

To avoid undue loss of leaves from legume hay, the most approved plan of harvesting consists in allowing the crop to wilt a short time and then raking and bunching. These bunches are then permitted to stand in the field until they are thoroughly cured.

It occasionally happens that one finds it desirable to put in the mow hay that is not thoroughly cured. In such a case a little salt or lime sprinkled over the hay as it is mowed away in layers will be found beneficial. These materials retard the fermenting processes and prevent the growth of moulds. The palatability of the product is also improved, particularly by the salt.



Power Outfit Assembled by Michigan Farm Boy for Belt and Traction Duty.

mals, nor will it keep them slick of coat and high in flesh.

The moisture dissolves and takes out of partly cured plants the most easily digestible elements. It furnishes conditions favorable for the development of moulds, the spores from which make the hay dusty. Then, too, protracted rains often make it necessary to leave the windrows or bunches in the field so long that the aftermath beneath the piles of hay is killed. The legumes particularly are hard to handle under these unfavorable circumstances, since the larger stems do not dry so readily as do the stems of timothy, and besides, the leaves of legume hay are easily detached by much handling.

But the farmer is largely at the mercy of the weather man at haying

ferent method. This farmer usually had a much larger acreage of hay than his neighbors, yet in spite of this he was almost certain to get his crop in the barn before the others, especially when the weather was unfavorable. His policy was this: When it started raining, he would don his raincoat, hook the team to the mower and proceed to cut hay. When the sun came out his hay would immediately start drying off. His neighbors would wait until the grass was fairly well dried out before they began cutting. Consequently our Yankee friend would be well started with his haying before the neighbors had made a start.

This man, who was a keen observer, had learned that rains do comparatively little, if any, damage to a freshly cut plant so far as the feeding value





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VOLUME CLVIII NUMBER TWENTY-THREE

DETROIT, JUNE 10, 1922

## CURRENT COMMENT

## THE MICHIGAN FARMER SAYS:

The man with a padlock on his heart is to be pitied.

Let us pray for ideas and ideals that recognize no class distinctions.

Every age has its problems and the more complex the civilization the more complex the problem.

Happy is the man who plants seeds of hope and self-respect in the breast of a discouraged and perplexed neighbor.

Cooperation depends for its success upon the fundamental business principles of patience, thrift and loyalty.

By intensively fixing his eye upon a single purpose the would-be reformer is, as a rule, likely to develop a narrow vision.

The only justification for continuing support to a social or economic institution is in its ability to serve mankind efficiently.

We cannot expect to establish permanently the cooperative idea unless the new order provides conditions which tend to produce men who are at least equally as capable as are the men under the present order.

### The Seed Potato Business

The business of growing certified seed potatoes is gaining in popularity and magnitude. Not only is a rapidly increasing number of growers in our own state using certified seed, but the farmers in the states immediately to the south of us, and also in the gulf states are rapidly becoming enthusiastic in their demand for this northern-grown seed.

This increasing demand is based on sound economics. Wherever tests have been made with seed grown in Michigan and other states of the same latitude, the yields have more than warranted the extra expense required to secure the certified stock. These yields show a general average of around forty bushels per acre more than was secured from seed raised in the territory where the tests were made. This margin makes this practice an exceedingly good business proposition.

To keep this certified potato seed business healthy will require the constant cooperation of our best potato growers with the extension workers.

The recent action of the Michigan Potato Growers' Association in placing additional safeguards around the business should hold out to the careful, painstaking farmer additional reasons for undertaking to grow certified seed potatoes. The new rules and regulations will make it more difficult for the unscrupulous man to compete and, therefore, more profitable to those who merit the profits. With proper farmer cooperation and strict supervision there is no reason why Michigan should not hold the position of the leading certified seed producing state in the Union.

### A Grange Leader Passes On

HON. GEORGE B. HORTON, widely known throughout Michigan and the United States as a prominent Grange worker and farmer statesman, died suddenly of heart disease last Friday morning at his beautiful farm home at Fruit Ridge, in Lenawée county. He was seventy-seven years old.

Mr. Horton was a practical farmer. He started in a small way with a few acres of land left him by his father, and succeeded, through the application of sound agricultural policies, to the ownership of two thousand acres of some of the finest farm land in the state. He believed thoroughly in the dairy business and promoted this line of live stock by furnishing a market for milk in a successfully operated cheese factory. The factory, still located on the Horton farm, is the oldest cheese factory in Michigan.

It was his policy to pass on to other farmers the good things he learned through study and his own practical experiences. Thus minded it was natural that he saw great possibilities in the Grange, in which organization he has been an outstanding leader in local, state and national activities. He was master of the Fruit Ridge Grange for thirty-eight years, master of the State Grange for sixteen years, and also served as master of the National Grange.

To thousands of farmers and business men throughout the state Mr. Horton was appropriately known as "The Sage of Fruit Ridge" and "The Farmer Statesman." He has been closely associated with sound progressive movements in Michigan agriculture. His advice and counsel have been almost constantly sought by hundreds of young farmers in the solution of their perplexing problems.

Through his death Michigan agriculture has lost a sincere and capable leader. He will be mourned by a great host of intimate friends and personal admirers. To his bereaved family we express the sympathy of the thousands of readers of this journal.

### Looking After Our Visitors

AMERICANS have been a real busy people, at least during the past half century. It has required so much energy to build homes upon soil which was but recently occupied by primeval forests or vast prairies, that comparatively little attention has been given to the subject of taking care of folks who are out for a holiday.

The Europeans have done much to make folks feel at home amongst them. In fact, in many sections of the

old country, this has come to be the most important business in which the people are engaged. We are not unhospitable, but we have apparently had too little time to fix up for visitors. It seems, however, that we should begin to give a little time and attention in this direction.

This is particularly true here in Michigan. Our state, with its thousands of lakes, fringed with forest-covered hills, is a natural resort place. Already we have a reputation in this direction. As our population increases the demands for watering places will grow. The farmer is concerned in this movement, because farm products are needed to feed these visitors. Properly looked after, there is no better place to sell certain classes of high-grade vegetables and fruit than in the market of a good resort district.

### The Rural School

JUDGING from our own observations and from the correspondence we get in the office, there is no subject which is much more freely discussed than that of the rural school.

The discussions on this subject revolve mostly around the question as to whether the consolidated school is better than the little red school, which really isn't red any more. Of course, this is an important question, one which must be solved by each community to the best of its judgment and ability.

But while we are fully alive to the pros and cons of this phase of the subject, are we not likely to forget the meaning of education and its relation to private and public welfare? Are we not lax in our consideration of the kind of education we should give the twenty-seven million boys and girls so that they may make America a better place to live in, a greater democracy?

The success of any form of government is largely dependent on the education of its people. The most autocratic government succeeds because of the lack of proper education of its people, but the most democratic government is at its best only when its people are fully and properly educated, for the people themselves are the government. So it seems that the methods of education are essential for all of us to consider, for it is what the children learn that is vital to their welfare and to that of their country.

In this respect the full cooperation of the home with the school will help greatly to make our school system more democratic and more effective, for cooperation in itself is one of the great essentials of a greater democracy.

### To Our Farmers' Advantage

THERE is a phase of agriculture in Michigan that is encouraging and should not be lost sight of by the prospective farmer. The young man is guaranteed against the necessity of going on a minimum market with his products. The farmers of this state have a transportation tariff against farm products from the surplus states. The recent reduction of ten per cent in freight rates reminds us that while this tariff may be reduced, it cannot be eliminated.

The fact is that Michigan is no longer a self-sustaining state agriculturally. Her population is 3,668,412. On the basis of the per capita consumption for the country, the farms of Michigan produce enough corn to feed about two and a half million of her people, enough wheat and barley to satisfy two and a quarter million, and sufficient oats and rye to care for two million of her people. About the only staple crops which are produced in ex-

cess of our needs are beans and potatoes.

The farmers producing these crops can market them at a price equal to that required to purchase in the surplus states and deliver here. That this statement is true is shown by the reports of the bureau of markets on the farm prices of products in surplus sections as compared with the prices in importing districts.

The industrial development of Michigan is apparently only started. It seems destined to go on until our agriculture will be capable of producing only a comparatively small portion of the farm products required by its population. This change guarantees a higher and higher transportation tariff wall as it becomes necessary to go farther and farther to secure the supplies to make up our deficit.

### Sir Cuss

OUR Oughto is still what you call indisposed so we had to take old Bud to go to see the Sir cuss. I am glad I did, 'cause I put Bud in a ten-cent hitch while, if I had the Oughto it would cost twenty-five cents to do what you call parking.

Well, I found to make a Sir cuss you gotta have some sawdust, a lotta canvas and some hard boards, a lotta gold and red paint and some wagons to put it on, some girls and clowns to put into some tight underwear and to put some powder and span-gles on.

Then, besides, you need an elephant, which is an animal whose clothes never fit him good, and some monkeys and horses. To work all this you need some men with voices what kin say such words like stoop-end-us, pond-her-us, co-loss-all and gigantic, which words sounds educated like and is all right when used in their proper places, but these men get kinda careless about that.

Well, all these things are needed to make a Sir cuss but it aint successful unless he pays for the privilege of doing so. For inst., first you pay, then you see the wild animals which ain't as wild as the ones what is looking at them. Then you go in the Main Show and can't find no place to sit, so you gotta pay to set on one of them hen roosts. Then you get afraid of blisters so you gotta rent a cushion. Then you get awful dry and need a drink and you gotta pay for a glass of water with a paper pipe in it so you kin suck the water into yourself.

In the mean time some of those pink tights with ladies in them, hangs in the air for a while and rides horses and those white faced men do black faced stunts. Then when you are just gettin' used to roostin' they come around and sell you tickets for the Big After Show. But not me.

Old Bud got home soon 'cause he knew it was near supper time. Well, the kids liked it, and I spint some money, so I guess it's all right.

Anyhow, you pay a lot for Anticipashun and don't get much in Realizashun. But it looks like we all like to do that sometimes. Besides, it gets what you call money into circulation, which some folks says is good for the country. So maybe the Sir cuss is a patriotic institution after all.

HY SYCKLE.

Says Sam: By and large, I'd rather have hayseed in my hair than soot. It's interesting to reflect that certain leaders of this "back to the land" agitation will actually go back to the land themselves, when they die.

An old French proverb calls spinach "the broom of the stomach."





# Did You Plow Potato Ground Early?

*What Late Plowing Did to One Farmer's Crop Last Year.*

I WAS very much interested in Mr. Wermuth's article in the May 13 issue of the Michigan Farmer, on growing a crop of beans, and the difference which a thorough preparation of the seed-bed made in the yield. That other things besides beans are so influenced we had a good illustration last year in two fields of potatoes.

The first field of ten acres of sod was plowed early in April. No manure was put on it, and no fertilizer was used. The ground was fitted, and the potatoes planted just before the middle of June. The latter part of May, and all of June proved very dry, but the April-plowed field had caught and retained all the rain that fell.

The second field, five acres of sod, had been given a heavy coating of barnyard manure, and was plowed between the tenth and fifteenth of June, by which time the ground was "as dry as an ash-heap," as the plowman put it. The field was rolled, harrowed, and the potatoes planted the nineteenth. The drouth continued until the beginning of the second week in July, one hot day succeeding another till the soil was fairly baked.

The ten acres April-plowed did not

have a perfect stand, but good, considering the lack of moisture and intense heat. The field that was June-plowed showed only scattering plants here,

and there, until after the rains came. Much of the seed dried up in the hot soil. After the rains came more plants appeared, but they were still "few and

far between." A few rows were planted with uncut seed, medium small potatoes which had gone through the grader. These whole potatoes gave a much better stand than the cut seed. The two fields received about the same care through the season, and at harvest time in October the April-plowed field gave a yield of a little less than 150 bushels per acre, while the five acres plowed in June gave less than thirty, (140 crates, the crates holding a little over a bushel).

Except for the harvesting, the cost for growing twenty-eight bushels to the acre was about the same as for growing 150 bushels. The five acres were really in better condition than the other field, and with the manure it received it should have given better returns per acre than the other. The time the fields were plowed made all the difference. On lands that will not wash, fall plowing is to be preferred, but for other lands the earlier they can be plowed, after the soil is in condition, the better. Land that is well plowed in early April and harrowed once a week for from four to eight weeks is not liable to have weed trouble to any great extent.—A. LONG.



Late Plowing Makes Difficult the Firming of the Seed-bed Necessary to Maintaining a Regular Supply of Moisture for the Growing of Good Crops.

## Cheapest Way to Turn Corn Into Beef

*Results of Feeding Tests at M. A. C. Make Interesting Reading*

THAT normal corn silage is superior to stover silage for steer feeding purposes, making more rapid gains and a better "finish" on the animals in the feed lot, is the outstanding conclusion drawn from experimental feeding tests carried on at the Michigan Agricultural College during the past few months.

Three lots of steers were on feed in the steer tests, seven animals being included in each lot. Careful checks were kept of all costs, while profits were determined on a basis of actual sales made on the Detroit market.

Prof. G. A. Brown, of the M. A. C. Animal Husbandry Department, and Prof. W. E. J. Edwards, of the same department, were in charge of the tests and also computed the results at the end of the experiments. This was the second year on the same set of tests, a third being contemplated before the specialists will be willing to reach final conclusions regarding the results.

A feature brought out at the feeders' meeting was the fact that it pays to run hogs in steer-feeding lots in order to salvage the grain wasted by the steers. This item figured prominently in the results of the test program.

**Professor Brown Summarizes Results.** The following summary of the steer feeding experiments carried on at the college is given by Prof. G. A. Brown, head of the M. A. C. Animal Husbandry Department:

The second year's experimental work with stover silage as a feed for fattening steers, which was started on December 14, 1921, was brought to a close with the marketing of the steers at Detroit in the middle of May. The results this year are very similar to those of 1921, and indicate that it is not desirable to feed fattening steers on stover silage.

The steers used during the past winter were yearling Herefords, purchased in Chicago at a cost of \$5.75 per hundred weight the last week in November. All of the steers were fed alike until the fourteenth of December, when they were placed on the experiment. The cost per hundred

weight at this time, including freight charges, shrinkage, and feed consumed was \$6.40 per hundred weight, the steers having been held for two weeks before the tests started in order to recover shrinkage in shipment from Chicago and become accustomed to new conditions.

The feed was charged up to the three lots in the test as follows: Normal silage, \$4 per ton; stover silage, \$1.65 per ton; shelled corn, fifty-six cents per bushel; linseed meal, \$50 per ton, and clover hay, \$12 per ton.

The rations fed for the first two months were as follows: Lot No. 1, normal silage, linseed meal, and clover hay. Lot No. 2, stover silage, linseed

meal, and clover hay. Lot No. 3 was fed the same as Lot No. 2, with the addition of an amount of shelled corn equal to that which was removed from the stover when it was ensiled, making their ration practically the same as that of Lot No. 1. The gains during this period were decidedly in favor of Lot No. 1, with Lot No. 3 making the next best gain, and Lot No. 2 decidedly the lowest. On February 11 shelled corn was added to the ration of all lots, and gradually increased until Lots No. 1 and 2 were receiving twelve pounds of shelled corn, and Lot No. 3, sixteen pounds of shelled corn, thus giving Lot No. 3 practically the same amount of corn as that received by Lot No. 1, when we consider the corn which the normal silage contained. The gains during this period were again the same relatively in the different lots as in the period when no corn was fed.



The total cost of feed for the period Lot No. 3 showed a light shrink, which was also true of the corresponding lot a year ago. Lot No. 1 sold for \$8.35 per hundred weight, with one steer out at \$7.50, which made the average price for at lot \$8.23. Lot No. 2 sold for \$8.25, with one steer out at eight cents, making the average for the lot \$8.21 per hundred weight. Lot No. 3 sold for \$8.25 per hundred weight straight. The returns from Lot No. 1 were \$628.84; from Lot No. 2, \$576.55, and from Lot No. 3, \$609.51. Deducting from these figures the total cost we have a profit in Lot No. 1 of \$13.27; Lot No. 2, \$17.12, and Lot No. 3 of \$15.44. To these figures should be added, however, the value of the pork produced which, with pork at ten cents per pound gave a return of \$30.53 for Lot No. 1, or a total profit for this lot of \$43.80. Lot No. 2 produced \$17.12 worth of pork, making a total profit of \$34.96. Lot No. 3 produced \$15.44

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worth of pork, or \$42.93 profit for the lot. The profit per steer was \$6.25 in Lot No. 1; \$4.99 in Lot No. 2, and \$6.15 in Lot No. 3. The actual price received for the steers, based on the weights at the feed lot, was \$7.60 in Lot No. 1; \$7.53 in Lot No. 2, and \$7.76 in Lot No. 3, the higher price received for Lot No. 3 at the feed lot being due to their light shrinkage. This lot, however, showed a loss in weight the last ten days they were on feed, which makes their necessary selling price somewhat higher than was indicated on the report given out May 6. The dressing percentage of Lot No. 1 was 57.43; of Lot No. 2, 55.92, and of Lot No. 3, 56.88. If we assume that Lot No. 1 was worth \$8.35 per hundred weight, then the actual value of the other two lots, based upon comparative dressing percentages, would give Lot No. 2 a value of \$8.01 per hundred weight at the Detroit yards, and Lot No. 3 a value of \$8.15 per hundred weight. The results of experiments this year were much closer than those of a year ago. This was brought about by the fact that the stover silage used this year was run first through the combination husker and silage filler and then through the regular silo filling box. This was done because the silage used a year ago was extremely coarse and was not eaten as well as could have been wished. Even under these conditions, however, the steers receiving stover silage did not have as good an appetite nor consume as much silage as those in Lot No. 1, which received normal silage. From the results of the two years' work it would appear that gains are slower where stover silage is used. Secondly, it is impossible to gain as good a finish with stover silage as with normal silage. Third, the stover silage is not eaten with as much relish as the normal silage. Fourth, while the cost of feed is less in stover silage, the cost of gain is much greater—this in spite of the fact that the stover silage was charged at only forty per cent of the price of normal silage.





## For Summer Time and All the Time



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# Late Agricultural News

## TWO AGRICULTURAL BLOCS.

THE impression seems to have gained credence that the senate agricultural bloc and the agricultural tariff bloc are the same. This is not true. The agricultural bloc is composed of senators from the south as well as the north and west, representing both parties. The tariff bloc is confined to majority party members in the west and north.

The senate leaders assert that the tariff will be passed before congress adjourns, but at the present rate this is doubtful. Through the efforts of the tariff bloc, cyanide was restored to the free list. There is yet strong opposition in the senate to the American valuations plan, which promises to be the biggest obstacle to getting the bill before the President very soon. The house leaders are persistent in their assertions that they will stand for the American plan to the bitter end.

## TRAVERSE COUNTY LEADS THE CHERRY MARKET.

THE cherry deal in the Traverse region is being watched this year with an eagle eye by all other cherry growers in the country, with the possible exception of those in Dorset county, Wisconsin, according to reports received at Traverse City from outside sources.

This is said to be due to the large blocks of cherries under contract to be sold cooperatively through the Grand Traverse Packing Company. This concern will have the largest volume of cherries of perhaps any company in the country, and whatever kind of deal it is able to swing the result will have a tremendous effect upon prices elsewhere.

Almost the entire pack of this company will be handled frozen in barrels. The company is erecting pitting plants in Leelanau and Benzie counties, two other large producing counties of

choice cherries. The pitted fruit will be placed in barrels and shipped to Traverse City for freezing, in which state the fruit can be kept fresh until sold to consumer or to pie makers or other trade.

The Grand Traverse Packing Company is erecting a cold storage and freezing plant at Traverse City at a cost of nearly \$100,000. It will have storage capacity of 5,000 barrels of cherries and 10,000 barrels of apples. Three sharp freezing rooms will be located on the first floor of the building, each with a freezing capacity of 250 barrels daily. This is expected to prove one of the greatest economic measures for conservation of the vast fruit production of this part of the state.—M.

## FINAL OFFER ON MUSCLE SHOALS.

THE counter proposals framed by the house military affairs committee on the Muscle Shoals power-nitrate project, which was practically Henry Ford's offer with the Gorgas steam plant eliminated, and the letter received from Mr. Ford in reply giving his final word that he must have the Gorgas plant or turn down the entire proposition, has created much interest and caused much discussion in and out of congressional circles.

It is definitely stated that the committee had agreed to accept Mr. Ford's proposition. Later it "crawfished" and voted to eleven to ten in favor of the Ford offer with the exception of the Gorgas plant.

Mr. Ford's prompt reply left as an alternative for the committee to reverse again or flatly turn down his offer to develop the Muscle Shoals project, keep the nitrate plant in readiness for military purposes and manufacture fertilizers.

In his letter Mr. Ford warns congress that if it rejects his bid for the Muscle Shoals nitrate, fertilizer and

power project, "it will be but the beginning of a more determined effort on my part to save Muscle Shoals for the benefit of the public."

This is not a political threat, as is hinted in the newspapers. Those who are in a position to know Mr. Ford's state of mind, say that it is a warning that if his offer is turned down by congress he will use his influence to see that the financial interests that have fought his proposal for their own selfish ends do not get hold of it, and that he will go to the extent of joining with those who are promoting government ownership and operation of the power, nitrate and fertilizer plants rather than to have the farmers and consumers of food lose the possibilities in the plant for the production of cheaper fertilizers.

## ANTI-GAMBLING BILL.

AFTER consultation with the legal experts of the department of agriculture, Senator Arthur Capper has prepared a bill to take the place of the anti-grain gambling law, the effective clause of which was recently declared unconstitutional by the supreme court. The new bill defines interstate commerce as a means of meeting the objections of the supreme court. It provides that grain exchanges failing to meet conditions required in the bill shall be barred from the use of the mails. This provision has been substituted for the taxing clause of the futures trading law, which was declared to be unconstitutional by the court. The farm bloc will make an effort to secure action on this bill before adjournment.

## THE INTERNATIONAL CANAL PROJECT.

THE Great Lakes-St. Lawrence Canal project is meeting opposition which threatens indefinite delay of the proposition. Secretary of State Hughes recently sent a communication to the Canadian government announcing that the United States would be glad to take up the negotiation of a treaty looking to the deepening of the waterways which would enable ocean-going ships to reach the Great Lakes. In reply to this communication, the United States government has been informed by the prime minister of Canada, that the Dominion government did not consider the present an opportune time for negotiation of a treaty with the United States on the St. Lawrence waterway plan.

## ANOTHER STATE PARK.

OFFICIALS of the State Conservation Department and newspaper men will visit Isle Royale of Lake Superior during July for the purpose of investigating the project to make this large, but now quite useless island, a state park. At one time the island was valued for its copper deposits, but these were ascertained not to be of any great importance, and at present, save for an occasional fisherman and game warden, the island is quite tenantless. Undoubtedly it will be found to possess much interest for the tourist and seeker after recreation and repose.

## HIGHWAY LEGISLATION.

FEDERAL aid to highways legislation has again struck a snag, this time in the senate. The senate bill attached as a rider to the post office appropriation bill, provided for an appropriation of \$50,000,000 for the coming fiscal year, and an authorization of \$65,000,000 for the next year and \$75,000,000 for the following year.

This will probably be passed before June 30, with the senate's limitation clause of \$20,000 per mile.

# News of the Week

Wednesday, May 31.

THE Standard Oil Company will sell its stock to its employees at 84; the market price at present is 118.—Ten thousand veterans of all American wars were in the Memorial Day parade at Detroit.—The United States Supreme Court has held that the combine of the Central and Southern Pacific Railroads is illegal.

Thursday, June 1.

STRONG Irish Republican forces are repelling the Ulsterites at the border between north and south Ireland.—Stanislaw Szulkalski, noted New York sculptor, is going to abandon art to raise pigs, because the latter is more profitable.—William Rosenbeers, six years old, who has been mute since birth, gained his speech when he went up in an airplane.

Friday, June 2.

THE union of railway shop workers has been ordered to take a strike ballot because of the labor commission's wage cut order.—The Polar Bears organization of soldiers who had seen service in Russia was organized at Detroit at its recent gathering there.—The United States takes the lead in world disarmament. It now stands fourteenth in size among the armies of the world.

Saturday, June 3.

A REVOLT against President Obregon, of Mexico, is rapidly growing.—The Michigan State Radio Association is going to make a state-wide campaign for members.—Secretary of

Commerce Hoover fixes the price of coal to prevent profiteering.—Disarmament among South American nations is expected to result from Pan-American congress which will soon be held.

Sunday, June 4.

THREE independent steel companies form a merger to be called The North American Steel Corporation.—Tax receipts of the government dropped \$83,000,000 in April as compared with April of a year ago.—The race war near Fort Worth, Texas, has caused one thousand whites to arm.—The United States Senate has set the size of the army at 145,530.

Monday, June 5.

THE United States Treasury announces that the United States public debt has been cut \$51,000,000.—The United States Senate and House agree to appropriate \$50,000,000 for federal and state road development.—The railroads of the country have accepted the ten per cent reduction in freight rates, to be effective July 1, as ordered by the Interstate Commerce Commission.

Tuesday, June 6.

BRITISH troops have been sent to Belfast to subdue the warfare between the Republic and Ulster forces.—Capt. Roald Amundsen leaves Seattle for a five-year trip in the Arctic.—Henry Ford purchases waterpower rights at Pontiac, Clarkston and Waterford.—The British defeat Sein Feiners in their first battle with them on the Ulster border.



# Riding to a Fall

Grain Gamblers Soon to Face a Stonger Law

By Arthur Capper

THE Chicago Board of Trade law is "riding to a fall," says the Northwestern Miller, highest milling authority in the United States, in a vigorous, plain-spoken editorial in its issue of May 10, discussing and scoring the board's annual "May squeeze" in wheat. I reprint below much of the hide-removing comment made by this country's leading milling journal on the vicious practices of the Chicago grain exchanges.

For more than a month this squeeze, resulting in an erratic wheat market, has seriously and injuriously affected legitimate business in every grain center in the United States. It was going on at the very moment that the United States Supreme Court handed down its decision declaring Section 4 of the Capper-Tincher law for federal control of grain exchanges invalid because as the court held, "sales for future delivery in grain exchanges are not of themselves interstate commerce."

With the brazen effrontery of the "dead game sport" the Chicago grain gamblers seized upon this very decision, which gives the world's greatest gambling game another lease of life, to further manipulate the market to the injury of those who make use of the grain exchanges to carry on the actual grain business of the country.

In this reckless proceeding the grain gamblers have but assisted recent market history to repeat itself. Last summer when the Capper-Tincher law was passed and the 1921 crop was moving to market, the grain gamblers, seizing upon the passage of the law as a pretext, worked the same game they worked last week, except at that time they reversed the process and deliberately brought about a slump in the price of wheat for the purpose of prejudicing the farmers of the country against the very legislation adopted by congress to protect the farmers from these wolves. Then they were "soaking" the producer. This time they are throwing the grain-and-milling trade machinery out of gear on the eve of another crop season.

There was absolutely no legitimate reason why this decision of the court should have affected the price of wheat one way or the other. It simply demonstrated what a grip the gamblers have on the markets as they are being conducted today.

The general effect of these frequent and unwarranted demonstrations of power to manipulate the market, is to rob the beholder of any confidence in it, of any faith that a dependable or probable stability may be forthcoming at any time of year, based on actual conditions. This makes of the entire marketing process by which wheat is transformed into bread, little more than what it actually is—a colossal game of chance whereby the big and the little gamblers win or lose their bets.

However, let the greatest milling journal, the recognized authority of the milling trade in forty-eight states say it:

## Riding For a Fall.

"It will require more even than the practiced glibness of the grain trade's publicity department to convince the country that recent developments on the Chicago Board of Trade and elsewhere have not been the direct result

of speculative manipulation. The sudden pressure on May wheat, the hurried purchases by shorts who were in the process of being squeezed, the advance in prices on the thinnest excuses, or with no excuse at all, every phase of the performance bears the characteristic marks of that form of speculation which the public regards as gambling.

"When wheat option prices jump six or eight cents in the course of one day's trading, and when the current news provides absolutely no information indicating either an increased demand for actual wheat or a prospective shortage of supplies, there is only one possible conclusion to be drawn. When the same thing happens year after year at almost exactly the same time, becoming so familiar that the 'May squeeze' is marked on Chicago's calendar as methodically as Easter or Decoration Day, the natural assumption is that the speculative leaders feel so sure of their ground that they dare to defy public opinion.

"In 1920 and 1921, when the shadow of government control still rested darkly over the grain trade, there were profuse promises of reform. Speculation of the kind represented by the 'May squeeze' was to be eliminated, and transactions in grain futures were to be maintained only to permit of legitimate hedging. There was to be no more opportunity for price manipulation by gamblers who never held a bushel of actual wheat, but who bought or sold paper promises in such a way as to force wheat prices up or down as they saw fit.

"The devil was sick, the devil a monk would be; the devil was well, the devil a monk was he." The grain exchanges, or those who use them for purely speculative purposes, have of late given a vivid interpretation of the old adage. The official leaders plead helplessness; if members of the exchanges in good standing choose suddenly to buy or sell a particular option, the managers are obviously powerless to prevent it. The men who really direct operations say nothing, and pocket their immense profits.

"This method of doing business, if persevered in much longer, will lead to one of two things; either the principal buyers of actual wheat will ally themselves closely with the farmers' selling agency, or else the government will once more interfere, and this time will not be put off by specious promises of reform.

"The United States Grain Growers, Incorporated, has seen troublesome times, but it is by no means defunct. Its leaders made the mistake of promising too much and too rapid results, but they must have known all along that it would take years for them to build up such an organization as they had planned. Just now the grain exchanges are playing straight into their hands; they are giving them a powerful argument, not alone with the farmers or the public, but with the men whose business is to buy grain.

"The millers are utterly out of patience with the vagaries of grain prices as manipulated on the exchanges. They know that the greatest obstacles to steady and consistent flour buying is the fluctuations of wheat prices for causes utterly unrelated to supply and

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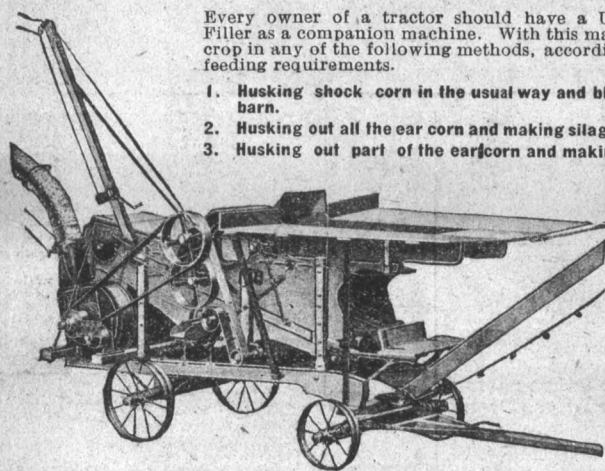
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demand. At the Chicago meeting last June it was apparent that the millers, far from being in close sympathy with the grain exchanges during their period of tribulation, were acutely conscious of themselves being the chief sufferers from unrestrained gambling in grain.

"The immense complex machinery for financing, distributing and storing the nations grain crops has an incalculable value, and the millers, as the principal buyers of wheat and other milling grain, have every reason to desire that it should be kept intact and able to operate efficiently. Their positions make them almost inevitably close allies of the grain trade, and its welfare means almost as much to them as that of their own industry. They cannot, however, have any sympathy with the use of machinery, in open contempt of the public good, for purposes of gambling for the sole benefit of a few powerful interests. The grain exchanges will either have to find some way of putting a stop to such speculative activities as are exemplified in the present 'May squeeze' or somebody else will do so for them.

"The time for protestations of innocence and good intentions has long since passed. The millers have no desire to see a revival of government control of the grain trade, but they do not propose indefinitely to be made the victims of a small group of grain gamblers. The grain exchanges have successfully withstood the attacks of their enemies, but it will be an evil day for them if their failure to carry

out their promises of reform finally aligns even their very closest friends against them.

"It is not too late, even now, for the necessary housecleaning to be undertaken and carried out, but the whole country is out of patience with promises that mean nothing in the face of manifest proofs of speculative manipulation."

I am convinced no lasting reform may be expected from the grain exchanges themselves, as the last forty years of their history amply proves. Gamblers do not reform themselves although they may affect at times to "get religion" for appearance sake. I consider federal control of the grain exchanges even more necessary than federal supervision of the packers and the meat industry.

The decision of the supreme court invalidating the Capper-Tincher Act probably means another big fight to get the necessary remedial legislation enacted. We are working on a new bill that will do the business where, in the opinion of the supreme court, the old bill did not, despite the fact that some of the court's former rulings seemed substantially to support that bill.

The new bill will be promptly introduced.

We shall not let up until we have a law that will give the producer, consumer, miller and all a square deal in the big markets and that will put the grain gambler and the manipulator out of business for all time.

## Our Service Department

*Always Give Name and Address When Sending Inquiries*

### POSSESSION OF LAND.

What must I do to recover a piece of land I sold to two parties who have failed to make their payment, which was due last February? I have written them; had a letter from one party saying the other party was unable to pay; and unless he could get someone else to take over interest of said party he would also not pay, thereby allowing the contract to cancel itself. I would like to go on and plow for beans. Can I do this under the terms of letter?—W. J. B.

W. J. B. has possession and to recover that, buyers would in any event have to pay back payments and reimburse W. J. B. to the extent of benefit to buyers by work.—J. R. R.

### CONTRACTS EXPIRED.

A sells timber to B, a log scaler, for a company, C. B draws up contract that A was to sell ten elm trees to C for \$10 per thousand, log scale, timber to be cut by C on or before March 15, and paid by check on ground before removed, and signed by A and B. The trees were not marked, nor any money paid on them. The time is past and A has not heard from B or company. Was the contract any good? What can A do? The timber is in one county and the company in another.—P. M.

If the contract was good it has expired. A is no longer bound.—J. R. R.

### PROMISSORY NOTES.

I am owing the bank \$773.02 in four notes of various sizes, on which I have been paying twelve per cent for some time. About a year ago they asked me for a statement of my property. I had about \$200 worth of personal property at the time, but they did not ask any mortgage or other security than my father's name as endorser. The property is not worth that now. The bank has come down to seven per cent for some folks around here, and I asked the same, but they refuse to do it. The last time I had the notes renewed I asked for a receipt and they said they had made a note on the margin of the notes, but if I wanted a receipt they would give it. I am sending one of

the old notes. Is this as good as a receipt, or should I require a receipt?—U. H. L.

There is no legal form for a receipt. It is merely presumptive evidence open to dispute, and the facts may be proved by oral testimony without any receipt. The note being surrendered the advantage of having a receipt is not apparent.—J. R. R.

### FALL SOWING OF RYE AND VETCH.

If rye and vetch are sown in August for green manure and plowed under in spring, is the vetch hard to get rid of, and will it spread?—W. N. P.

When rye and vetch are sown in August and plowed under the following spring soon after growth is started, no difficulty will be experienced in getting rid of the vetch and neither will it bother by spreading. If considerable growth is made, however, and the vetch is not well turned under, it will continue to grow and may cause some trouble.

Rye and vetch is one of the most economical crops that can be used for plowing under, due to the fact that it makes its growth during that part of the season that the ground is not occupied with major crops.—C. R. M.

### MUCK GROUND FOR ROOT CROPS.

I have a piece of muck land which I broke up last year and raised a crop of cabbage on. It is fairly well drained but not tilled. Would like to know if this would raise mangels?—F. J. G.

Muck lands will produce fair crops of mangels and rutabagas. Stock carrots will give you better yields, especially if the muck is slightly acid. Good drainage is essential for best results and if your land is fairly well drained you should be able to grow any of the above root crops.—C. E. C.

A heavy June crop of fruit is predicted by apple growers of the Ohio valley districts.





#### PURCHASING POWER OF FARM PRODUCTS MAINTAINED.

THE prices of crops and live stock on the farm showed a slight improvement during the month from March 15 to April 15. However, the purchasing power of these crops remained unchanged, due to a slight increase in the wholesale price of all commodities, excluding farm products and food. These opinions were arrived at after a study of the index numbers on farm products as determined by the department of agriculture.

The index number representing the farm price of crops March 15 to April 15 was 115, as compared with 112 for the preceding month and with a low point of ninety-seven in December. The farm price of live stock was 115, as compared with 117 for the preceding month, and with a low of ninety-one in December. The index number for crops and live stock combined was 115 as compared with 114 the preceding month, and with a low point of ninety-four in December. The purchasing power of these products as related to the wholesale price of all commodities, excluding food and farm products, was sixty-seven on April 15, as compared with sixty-seven on March 15. This is the highest ratio since the beginning of the year 1921.

#### THE MELON APHIS.

VERY often severe losses occur through the depredations of the melon aphis or "melon louse." The damage due to this pest can be greatly reduced and in many cases prevented by the use of proper control measures if applied when the insect first appears. The main trouble is that there may be quite a few present without attracting any notice. In a short time these few will have increased at such a rapid rate that before we are aware of it, the leaves and vines will be literally alive with them. They sap the strength of the plant by piercing them and extracting their vital juices.

This pest is not bad every year, but when present it may be found from spring until fall. In seasons that favor its increase, notably summers following cold and rainy springs, it appears in large numbers and does very serious damage. They collect in masses on the under side of the leaves causing them to curl up and lose color, which greatly interferes with the ultimate development of the fruit.

In order to prevent its attack in serious numbers the plants should be examined occasionally to see if the pest is present. Particular attention should be paid to the under side of the leaves. When found to be present is the time to get busy with extermination methods. A good spray will be the best thing to control these pests and it must be put on at the proper strength and thoroughly applied. The solution that has been found to kill the largest per cent of them is nicotine sulphate at the regular strength, one-half pint to fifty gallons of water, with a little soap added. This, to be effective, must be applied so that it hits the aphis on the under side of the leaves.

—Don B. Whelan.



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should know their rights under the New Laws. Full information regarding all pension matters sent free. Address Bernard G. Fitzgerald, Authorized Pension Claim Agency, Indianapolis, Indiana.

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# ELECTRICITY from THE WIND



LIGHT AND POWER FROM THE WIND

## No Cost For Fuel

Think of having all the light and power you need without spending a penny for fuel. Without noise; without vibration; without fussing with a stubborn engine. Just press the button and get instantly—brilliant, steady electric light in house, barn or yard; wherever you want it. Power for pumping water by electric motor; current for electric iron, washer, sweeper and other appliances. All costs nothing except first cost of outfit because the AEROELECTRIC utilizes the power of the wind which is FREE and stores it in big over-size batteries to be used whenever you wish.

## Developed By Pioneer Wind Mill Builders and Westinghouse

The AEROELECTRIC is the creation of PERKINS, pioneer wind mill builders working with WESTINGHOUSE, the great Electrical Engineers. Together they have perfected a power plant which is destined to revolutionize farm lighting. AEROELECTRICS have now been in successful use more than two years. They are not an experiment. Plants in use in 14 states from North Carolina to California under every imaginable wind condition have never failed to supply more electricity than needed.

## A Complete Power Plant

Don't confuse the AEROELECTRIC with make shift wind mill attachments, using old fashioned wind mills and exposed belts or chains. The AEROELECTRIC is a complete power plant with fifty-foot super-strength tower and specially designed 14 foot wind wheel with Westinghouse generator built right into the main casting.

## Write Now For Special Offer

Find out how you can have all the convenience of city electricity right on your farm. Write for AEROELECTRIC catalog and full information. To the first buyer in each territory we have a special offer. Lose no time; write today.

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Corporation,  
322 Main St.,  
Mishawaka, Ind.



No scars—no blemishes  
GOMBAULT'S CAUSTIC BALSAM  
does the work better than firing. Hair  
positively grows back natural color

Reliable remedy for Curb, Splint,  
Sweeney, Capped Hock, Strained  
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Skin Diseases, Thrush, Spavin,  
Ringbone, Throat or Bronchial  
Troubles. Will not scar or blemish.  
Supercedes all firing and cautery.

As a human liniment it is unsurpassed.  
\$1.50 per bottle at druggists or by  
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**GOMBAULT'S  
Caustic  
BALSAM**

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Ensilage Cutters

The leader among cutters. 72 years' reputation built into them. Some after 50 years of service still in use. Thousands of owners testify that Ross cutters are 25 per cent cheaper to operate, make 25 per cent better ensilage, have larger capacity, more improvements. **BUY NOW—BIG DISCOUNT** Ross cutters at present low prices are biggest bargain of any cutter made. Our new terms—no cash, no deposit, no interest means it's cheaper to own a Ross than rent a cutter or pay to have silo filled. Write today for terms, etc. **THE E. W. ROSS CO.** Dept. 529 Springfield, Ohio

**FREE For 30 Days** as a special introductory offer to establish Ross cutters in every community, we make a special proposition of knife grinder pictured above or choice of five other articles free to first buyer in each community. Write today.

## Francisco Farm Notes

By P. P. Pope

I AM thinking back to the time of the good old-fashioned farmers' institutes, and how ideas gained there years ago are showing up actual results at the present day. It was at one of these meetings down at the old court house in the very first years of the present century that our old friend Colon C. Lillie, whose writings are so familiar to readers of these columns, advocated more attention to the business side of the farm. He said each eighty-acre farm should be so organized and managed that an extra man



would be required to operate it. There were many ways of doing this. Mr. Lillie set me thinking. I was a young lad, barely out of my teens, trying to take the place of a deceased father. We had a quantity of baled

hay to sell. The local buyer bid \$7.00 per ton. After a week of very disagreeable jockeying, working one buyer against another, we succeeded in getting the offer raised by stages of twenty-five to fifty cents until it reached \$8.50 per ton and we sold. We had a car of fat steers to sell. The local drover offered \$3.75 per cwt. By the same process as with the hay we finally got an offer of \$4.10 from one party, or \$4.00 and a chance to share the sale price at the terminal market from another. We took the latter, confident that the final returns would be satisfactory, but we never could find out what they sold for. We had beans to sell. We were interested in the picking process. We saw the elevator manager, who happened to be the owner, take perhaps twenty samples, all told, from the entire lot. We saw him make a composite sample from these numerous samples and noted that a good full measure came from some lots and only a pinch from others. They picked five pounds. Naturally, he had to have a lesson in bean picking right there, and after taking an equal amount from each sample to make up a composite sample that would be fairly representative of the lot, they would only pick three pounds.

Now, I don't mind the struggle with the elements and with nature. The generations of farmers behind me have developed and bred in the bone, the speculative instinct to a point where it is rather a pleasure, this constant effort to beguile nature into doing our bidding. Her varying moods are taken into consideration as a part of the regular program and we can say with Riley, "When God sorts out the weather and sends rain, then rain's my choice." But to be forced into continual strife with my fellowman for the things which are just, is very distasteful to say the least, and my nature rebelled.

We considered Mr. Lillie's advice and determined that we would so organize our business that the price of the things we produced to sell could be named in part, at least, by ourselves. Cooperative live stock shipping associations were then unheard of. There was no such thing as a cooperative elevator in these parts. It was an individual problem. We worked out a very satisfactory solution by planning to feed most of the crops raised on the farm to pure-bred live stock, and selling the bulk of the stock produced for breeding purposes. There has been a heap of satisfaction in the work.

Later came the State Crop Improvement Association and its corn shows, (Continued on page 697).

**\$44.80**

F.O.B. FACTORY



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Those who want a thoroughly dependable engine at a comparatively small investment will select the new "Z." It is built to the same high standards as other "Z" Engines, and fully guaranteed. It delivers more than rated horsepower; operates on gasoline alone; has simple high-tension battery ignition; hit-and-miss governor; new type, safety flywheels; quiet-running, spiral-cut gears. Wonderfully simple—no complicated parts. Control lever gives six speed changes. Starts easily; runs steadily, requires little attendance, carburetor requires no adjusting. The high quality and low price are due to scientific study and large production facilities. One of the greatest values in years. Over 300,000 "Z" Engines in use. See your dealer. Or write us.

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With high-tension magneto and throttling governor

1 1/2 H.P. .... \$ 67.00  
3 H.P. .... 100.00  
6 H.P. .... 160.00

All f.o.b. factory—add freight to your town.

**FAIRBANKS, MORSE & CO.**  
Manufacturers Chicago

(10)



**Economical  
or "cheap" feed  
—WHICH?**



No filler—no off-grade ingredients

"Larro never did, it does not now, and never will contain materials of low feeding value. Every bag of Larro contains the same high quality of ingredients—and is of the same high feeding value. Larro high quality is never changed, it is always the same—yesterday, today, tomorrow.

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Cows keenly relish the succulent, easily digested and highly nourishing Larro blend. It is economical: (1)—Because it increases milk yield. (2)—Or produces same milk with fewer cows and less feed. (3)—Keeps cows healthy. Neither "cheap" feeds nor ordinary home mixed kinds can be depended on to do this. Give Larro a trial and prove our claims. Write for details of the Larro guarantee.

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837 Larro Bldg. Detroit, Michigan

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Comb foundation, Smokers, etc. Complete outfits for beginners. Agents for the A. I. Root Company, in Michigan. Send for catalog. Beeswax wanted.

**Berry Baskets** and 16 quart crates. A grade wood quart baskets, and waxlined paper baskets. Special offer of 200 waxlined paper baskets post-paid for \$1.70, to towns within 150 miles of Lansing.



Send for Price List.

**M. H. HUNT & SON,**

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Stop your Tire Trouble  
Add mileage to your casings.  
Pull nails out, but keep air in by using.

The McWade TUBES

Self-Sealed

Relief from tire trouble built right in them.

No dope, no fabric. Just air and rubber.

Thoroughly tested and highly recommended. A trial will make you a regular user.

This ad. is good for \$1.00 on the purchase of any tube within 30 days from date.

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HAMMOCKS—New, Navy ..... \$1.55  
HIP BOOTS—New, Army ..... 2.75  
WOOL O. D. SHIRTS—New, U.S. Army Reg. 2.25  
KHAKI SHIRTS—New ..... .90  
KHAKI PANTS—Heavy, civilian style ..... 1.50  
KHAKI BREECHES—U. S. Army, Rec. .... .90  
SHELTER TENTS—U. S. Army, with poles ..... 1.50  
KHAKI COATS—U. S. Army, Rec. .... .45  
CANTENS—New, Aluminum; U. S. Army ..... .35  
MESS KITS ..... .20  
CUPS—New Aluminum; U. S. Army ..... .20  
UNDERWEAR—Summer, new; Army, Gar. .... .40  
NAVY UNDERWEAR; New style; Gar. .... .40  
RAINCOATS; Officers' style; New ..... 3.95  
TENTS—all sizes and prices and a complete line of Camping, Army and Navy Goods—Money-back Guarantee. Send for Complete List M10.

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235 Flatbush Ave. Brooklyn, N.Y.

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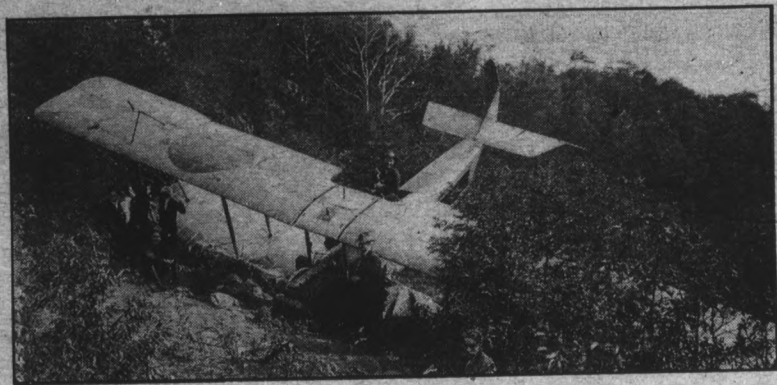
We desire to secure the permanent services of local representatives to act as county agents. Prefer men qualified to deal with farmers. We manufacture a high grade line of Paints, Enamels, Varnishes, Roof Coatings, Lubricants, etc. Our prices are reasonable. We pay liberal commissions weekly. With us you can build up a business of your own that will increase your earnings yearly. Write for particulars.

**THE CERTIFIED MATERIALS CO.**  
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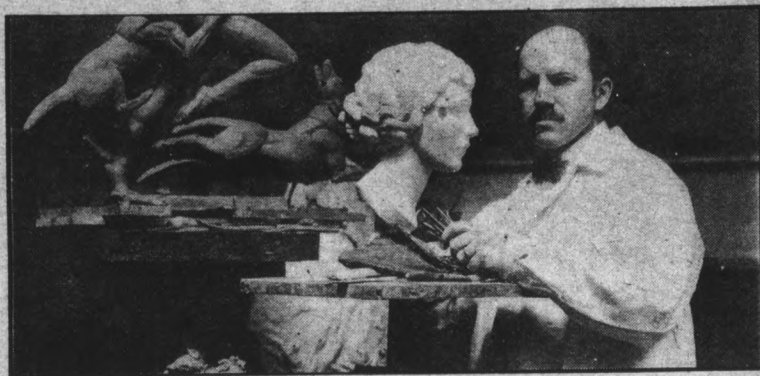
**PAINT—\$1.17 PER GALLON**  
Get factory prices on all paints. We guarantee quality. We pay the freight. Write today.  
Franklin Color Works, Dept. M. Franklin, Ind.



# WORLD EVENTS IN PICTURES



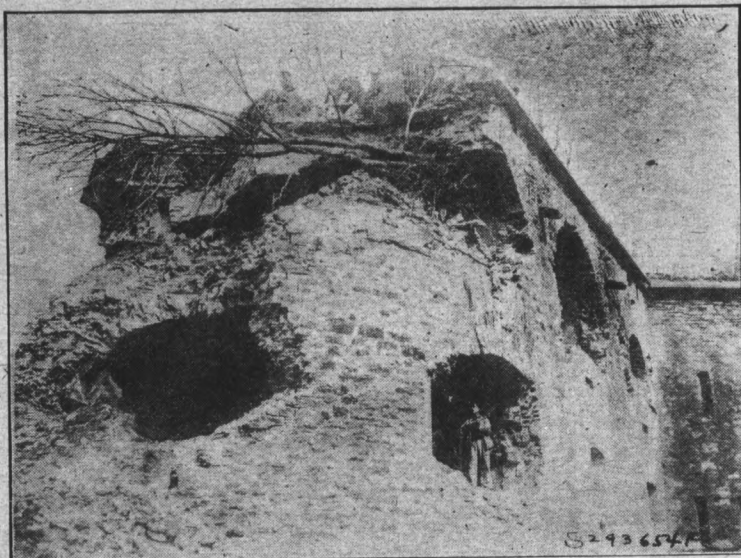
This big biplane was deserted by the aviator when it crashed to the ground near Croton, New York, because it contained 150 bottles of choice Scotch and rye whiskey.



Paul Manship, an American sculptor in Paris, is just putting the finishing touches to a bust of Mary Pickford, which he will entitle, "The Sweetheart of the World."



A colt born in Winnipeg, Canada, which is entirely normal except for the lack of front legs.



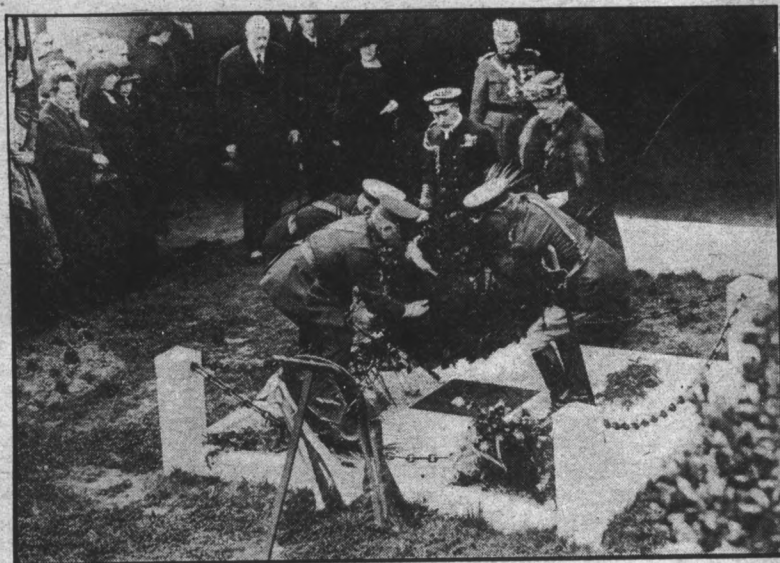
This is a German fortress at Coblenz on the Rhine, which is being destroyed in accordance with the terms of the treaty of Versailles. Coblenz was a great Rhine military center.



President of the California Flappers' Protective Association, organized to fight propaganda.



A view of Miami Beach, Florida, where the Barbadoes cable lands. This is the first direct cable connection we have had with South America. It will be valuable in developing South American trade.



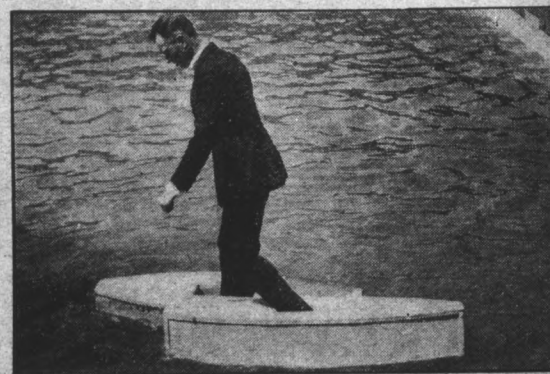
King George and Queen Mary, of England, place a wreath on the Belgium grave of Edith Cavell, the famous English nurse, who was shot by the Germans.



This bust of Ex-Kaiser William was sold to an inn keeper of New York for \$835. Later he refused an offer of \$10,000 for it.



Introducing Dr. Otto L. Weidfeldt, the new German ambassador to the United States.



Frank A. Cady, of Los Angeles, gets a lot of exercise and enjoyment by strolling on the water in his one-man ferry boats.



# THE CROSS-CUT —By Courtney Ryley Cooper

Copyright, 1921, By Little, Brown &amp; Company

"And he abandoned it?"

"He'd forgotten what he had written when I saw him again. I didn't question him. I didn't want to—his face told me enough to guess that I wouldn't learn. He went home then, after giving me enough money to pay the taxes on the mine for the next twenty years, simply as his attorney and without divulging his whereabouts. I did it. Eight years or so later, I saw him in Indianapolis. He gave me more money—enough for eleven or twelve years—"

"And that was ten years ago?" Robert Fairchild's eyes were reminiscent. "I remember—I was only a kid. He sold off everything he had, except the house."

Henry Beamish walked to his safe and fumbled there a moment, to return at last with a few slips of paper.

"Here's the answer," he said quietly, "the taxes are paid until 1922."

Robert Fairchild studied the receipts carefully—futilely. They told him nothing. The lawyer stood looking down upon him; at last he laid a hand on his shoulder.

"Boy," came quietly, "I know just about what you're thinking. I've spent a few hours at the same kind of a job myself, and I've called old Henry Beamish more kinds of a fool than you can think of for not coming right out flat-footed and making Thornton tell me the whole story. But some way, when I'd look into those eyes with the fire all dead and ashen within them, and see the lines of an old man in his young face, I—well, I guess I'm too soft-hearted to make folks suffer. I just couldn't do it!"

"So you can tell me nothing?"

"I'm afraid that's true—in one way. In another I'm a fund of information. Tonight you and I will go to Indianapolis and probate the will—it's simple enough; I've had it in my safe for ten years. After that, you become the owner of the Blue Poppy mine, to do with as you choose."

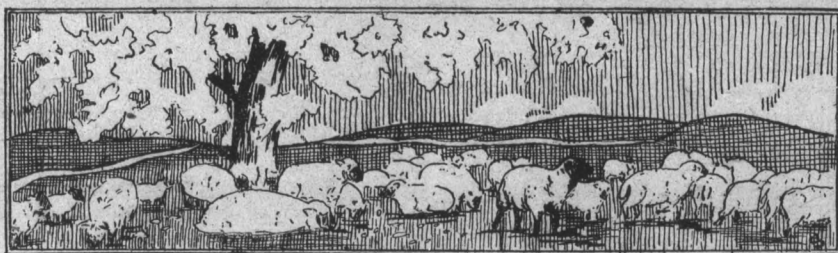
"But—"

The old lawyer chuckled.

"Don't ask my advice, boy. I haven't any. Your father told me what to do if you decided to try your luck—and silver's at \$1.29. It means a lot of money for anybody who can produce pay ore—unless what he said about the mine pinching out was true."

Again the thrill of a new thing went through Robert Fairchild's veins, something he had never felt until twelve hours before; again the urge for strange places, new scenes, the fire of the hunt after the hidden wealth of silver-seamed hills. Somewhere it lay awaiting him; nor did he even know

in what form. Robert Fairchild's life had been a plodding thing of books and accounts, of high desks which as yet had failed to stoop his shoulders, of stuffy offices which had been thwarted so far in their grip at his lung power; the long walk in the morning and the tired trudge homeward at night to save petty carfare for a silent man's pettier luxuries had looked after that. But the recoil had not exerted itself against an office-cramped brain, a dusty ledger-filled life that suddenly felt itself crying out for the free, open country, without hardly knowing what the term meant. Old



Beamish caught the light in the eyes, the quick contraction of the hands, and smiled.

"You don't need to tell me, son," he said slowly. "I can see the symptoms. You've got the fever—You're going to work that mine. Perhaps," and he shrugged his shoulders, "it's just as well. But there are certain things to remember."

"Name them."

"Ohadi is thirty-eight miles from Denver. That's your goal. Out there, they'll tell you how the mine caved in, and how Thornton Fairchild, who had worked it, together with his two men, Harry Harkins, a Cornishman, and 'Sissie' Larkins, a Swede, left town late one night for Cripple Creek—and that they never came back. That's the story they'll tell you. Agree with it. Tell them that Harkins, as far as you know, went back to Cornwall, and that you have heard vaguely that Larsen later followed the mining game farther out west."

"Is it the truth?"

"How do I know? It's good enough—people shouldn't ask questions. Tell nothing more than that—and be careful of your friends. There is one man to watch—if he is still alive. They call him 'Squint' Rodaine, and he may or may not still be there. I don't know—I'm only sure of the fact that your father hated him, fought him and feared him. The mine tunnel is two miles up Kentucky Gulch and one hundred yards to the right. A surveyor can lead you to the very spot. It's been abandoned now for thirty years.

What you'll find there is more than I can guess. But, boy," and his hand clenched tight on Robert Fairchild's shoulder, "whatever you do, whatever you run into, don't let that light die out of your eyes and don't pull in that chin! If you find a fight on your hands, whether it's man, beast or nature, sail into it! If you run into things that cut your very heart out to learn—beat 'em down and keep going! And win! There—that's all the advice I know. Meet me at the 11:10 train for Indianapolis. Good-bye."

"Good-bye—I'll be there." Fairchild grasped the pudgy hand and left the

office. For a moment afterward, old Henry Beamish stood thinking and looking out over the dingy roof adjacent. Then, somewhat absently, he pressed the ancient electric button for his more ancient stenographer.

"Call a messenger please," he ordered when she entered, "I want to send a cablegram."

## CHAPTER III.

TWO weeks later, Robert Fairchild sat in the smoking compartment of the Overland Limited, looking at the Rocky Mountains in the distance. In his pocket were a few hundred dollars; in the bank in Indianapolis a few thousand, representing the final proceeds of the sale of everything that had connected him with a rather dreary past. Out before him—

The train had left Limon Junction on its last, clattering, rushing leg of the journey across the plains, tearing on through a barren country of tumbleweed, of sagebrush, of prairie-dog villages and jagged arroyos toward the great, crumpled hills in the distance—hills which meant everything to Robert Fairchild. Two weeks had created a metamorphosis in what had been a plodding, matter-of-fact man with dreams which did not extend beyond his ledgers and his gloomy home—but now a man leaning his head against the window of a rushing train, staring ahead toward the Rockies and the rainbow they held for him. Back to the place where his father had gone with dreams aglow was the son traveling now—back into the ruffled mount-

ains where the blue haze hung low and protecting as though over mysteries and treasures which awaited one man and one alone. Robert Fairchild momentarily had forgotten the foreboding omens which, like murky shadows, had been cast in his path by a beaten, will-broken father. He only knew that he was young, that he was strong, that he was free from the drudgery which had sought to claim him forever; he felt only the surge of excitement that can come with new surroundings, new country, new life. Out there before him, as the train rattled over culverts spanning the dry arroyos, or puffed gingerly up the grades toward the higher levels of the plains, were the hills, gray and brown in the foreground, blue as the blue sea farther on, then fringing into the sun-pinked radiance of the snowy range, forming the last barrier against a turquoise sky. It thrilled Fairchild, it caused his heart to tug and pull—nor could he tell exactly why.

Still eighty miles away, the range was sharply outlined to Fairchild, from the ragged hump of Pikes Peak far to the south, on up to where the gradual lowering of the mighty upheaval slid away into Wyoming. Eighty miles, yet they were clear with the clearness that only altitudinous country can bring; alluring, fascinating, beckoning to him until his being rebelled against the comparative slowness of the train, and the minutes passed in a dragging, long-drawn-out sequence that was almost an agony to Robert Fairchild.

Hours! The hills came closer. Still closer; then, when it seemed that the train must plunge straight into them, they drew away again, as though through some optical illusion, and brooded in the background, as the long, transcontinental train began to bang over the frogs and switches as it made its entrance into Denver. Fairchild went through the long chute and to a ticket window of the Union Station.

"When can I get a train for Ohadi?"

The ticket seller smiled. "You can't get one."

"But the map shows that a railroad runs there—"

"Ran there, you mean," chaffed the clerk. "The best you can do is to get to Forks Creek and walk the rest of the way. That's a narrow-gauge line, and Clear Creek's been on a rampage. It took out about two hundred feet of trestle, and there won't be a train into Ohadi for a week."

The disappointment on Fairchild's face was more than apparent, almost

AL ACRES—Because of His Artistic Ability Slim Ought to be in Demand for Painting Barns.

—By Frank R. Leet.







## HALLMARK ATHLETIC UNDERWEAR

Insure yourself against scanty size and inferior details.

The HALLMARK standard of quality and the tailoring of Troy's Master Craftsmen insure both the wearability and the comfort of HALLMARK Athletic Underwear.

PRICED AT \$1.15 AND UP

HALL, HARTWELL & CO., Troy, N. Y.  
Makers of HALLMARK Shirts, MARK TWAIN and SLIDEWELL Collars.



A PURE petroleum product. Keeps the hair soft and smooth. The natural remedy for falling hair, dry scalp and dandruff.

\* Trial size sent for 10c, or free booklet, "Care of the Scalp and Hair", upon request.

CHESEBROUGH MFG. CO.  
(Consolidated)  
33 State Street New York

## Vaseline HAIR TONIC

## kills ants

Flies, roaches, fleas, mosquitoes, bed-bugs, potato bugs, cabbage worms and many others. 15c loaded metal guns; packages for refilling guns 30c, 60c, \$1.20. At grocers and druggists.

Hofstra Mfg. Co., Tulsa, Okla.

## HOFSTRA NON-POISONOUS INSECTICIDE

## Property Owners WANTED!

To introduce the best paint in the world. Made under our new scientific process. Free Paint for Your Own Home to one property owner in each locality we will give you for a little of your time and good will.

Be first to write quick for special introductory offer. We want an agent in every community to use and introduce these wonderful paints at our astonishingly low prices to all property owners.

Write for color card and booklet fully explaining our amazing introductory offer to property owner agents.

## The Martin Laboratories

Dept. B. General Office,  
402 Fulton Bldg.,  
PITTSBURGH, PA.

FOR SALE. Collie Puppies, guaranteed heelers. Males \$10, female \$7.50. WARD W. DUNSTON, Clarkston, Mich.

boyish in its depression. The ticket seller leaned closer to the wicket.

"Stranger out here?"

"Very much of one."

"In a hurry to get to Ohadi?"

"Yes."

(Continued next week).

## RURAL HEALTH

By Dr. C. H. Lerrigo

### DANDRUFF.

DANDRUFF is a very common complaint, which exists in several varieties, the medical name for the most common being seborrhea sicca. Sometimes it comes in little patches, at other times it is uniform over the entire scalp, or it may attack the margins of the hair, the eyebrows, the beard, or portions of the face, neck and ears that are not hairy.

Any systemic disturbance that lowers the vitality may lead to this condition. Constipation, indigestion, the excessive use of alcohol or tobacco promote it. Local causes are wearing of heavy, ill-ventilated hats and failure to give regular attention to the scalp. Man, not being blessed or bothered with hair to the extent that woman is, does not bestow anything like the attention upon it. His hair-dressing is satisfactory to him if it assures a fairly straight parting along the side or in the middle, and as he grows older nature frequently endows him with a permanent parting, so that he gives it less concern than ever. This is bad for the circulation of the scalp which requires regular stimulation by a good brush.

The treatment demands a general body-building course. Every bad habit must be set aside and all chronic ailments, such as constipation, indigestion, and low nutrition must be cured.

The first thing in local treatment is to remove the crusts. You will probably lose some hair in doing so, but it will be of such low vitality that it would not stick on much longer, anyway. Soak the patches with some oily fluid, such as olive oil or vaseline. Use enough to permeate the crusts, rub it in several times in twenty-four hours, and wear a flannel cap at night while the treatment is going on. When the soaking is complete wash the scales away with warm water and tincture of green soap, using a good lather. Dry the scalp thoroughly and anoint with a small amount of zinc oxide ointment, since your scalp becomes red and tender.

After your scalp is thoroughly clean keep the circulation active by daily brushing and by massage with the finger tips. Allow plenty of ventilation in all your head covering, and remember that the real cure depends upon removing all systemic disturbances and building up your body.

### SORE THROAT FROM RIDING.

We live seven miles from town. Everywhere we go, we drive an automobile. Riding in so much draught causes us to have sore throat a good deal. Is there any way of taking extra precautions? Of course, the usual symptoms are difficulty in swallowing, and inflamed condition of the throat. Would you kindly give us some advice as to the treatment of such? I believe your answer will interest others than myself as I have heard others complain the same way.—Mrs. W. E. B.

The precaution necessary is to form the habit of keeping the lips firmly closed and breathing only through the nose. After a long drive it is an excellent plan to wash the mouth and throat with a hot gargle of listerine or some other simple preparation. Do not get the habit of bundling up too much. Excepting in very severe weather it is not wise to cover the face and neck.

## Let the children share this mealtime beverage



NO NEED to warn the little folks away from the table beverage when Postum is served; every reason to invite every member of the family to join in the enjoyment of this wholesome, satisfying drink.

Postum is made from Nature's best grain—wheat, and contains nothing to harm nerves or digestion.

You'll greatly relish its full-bodied flavor and aroma.

Your grocer has Postum in two forms: Instant Postum (in tins) made instantly in the cup by the addition of boiling water. Postum Cereal (in packages of larger bulk, for those who prefer to make the drink while the meal is being prepared) made by boiling for fully 20 minutes.

## Postum for Health "There's a Reason"

Made by Postum Cereal Company, Inc.  
Battle Creek, Michigan



## Baby Chicks Pure Bred for 1922

LOOK AND LISTEN WHAT WE SAY AS TO PRICE FOR JUNE & JULY

Bred To Lay and they do it. Buy them, try them and be convinced. Quality means Success. To your door prepaid parcel post. Live delivery guaranteed. Order from this Ad. and save delay in your order. No order for less than 25 chicks.

S. C. White Leghorns, S. C. Brown Leg., S. C. Buff Leg.	10c Each
Barred Rocks, S. C. R. 1. Reds, Anconas	13c "
White Rocks, W. Wyandottes, B. Minorcas, R. C. R. I. Reds	15c "
White & Buff Orpingtons	16c "
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Catalogue Free for the Asking

Wolf Hatching & Breeding Co.,

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## Pullets Cockerels Pullets

Chicks—Eggs—Breeding Stock—From Proven Layers  
BARRED ROCKS ENGLISH WHITE LEGHORNS

ROCKS. Official Records 213 to 257 at M.A.C. In Dec. at Nat'l Laying Contest No. 4 Pullets averaged 24.5. I have won 5 specials so far at this contest, some records. WHITE LEGHORNS. Won cup best utility pen Zeeland [22 pens]. Mr. Foreman Judging. 1st and 2nd pens Holland Fair. 1st Hen West Mich. State Fair. Why take chances when you can buy stock of this kind at bargain prices. Special prices on May, June, July chicks. Write for catalogue.

G. CABALL, Box M, Hubsonville, Mich.

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WILL FIT ALL STANDARD MILK BOTTLES  
PARAFFINED AND PRINTED RED LIKE DESIGN.  
BOX CONTAINS 1750 LIP CAPS or 2000 WITHOUT LIP. PARCEL POST PREPAID—ORDER A BOX NOW!  
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10c BRINGS semi-monthly poultry paper, 3 months, summer trial. POULTRY GUIDE, Box D, Montpelier, Indiana

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ANCONAS "Superior Quality" Baby chicks and fertile eggs from M. A. C. selected 250 egg strain hens, mating list free. MANNINGS ANCONA FARM, Coldwater, Mich.

Barred Rocks S. C. Reds, W. Wyandottes, eggs, cockerels. Howard Grant, Marshall, Mich.

Day Old Chicks, S. C. White Leghorns. They are from the big, thrifty, persistent producing stuff for which Macalwhite Poultry Yards are becoming noted. We know we can give you satisfaction. Send for our circular. Macalwhite Poultry Yards, Caro, Mich.

GUARANTEED CHICKS AND PULLETS! Low prices for pure-bred stock. Single Comb English Whites, Brown Leghorns and Anconas and Barred Rocks. Catalog free. Free Delivery. Fairview Hatchery, Zeeland, Mich. R. 2, John Bos & Son.

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**Zeeland, Mich.**

"Pioneer Pullet Producers"

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The Old Reliable Breeds

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English and American Strains

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HERE we are, just a few hours from your door, with baby chix from the best breeds. Our growth from one small incubator to 22,000 egg capacity has been steady and denotes honest dealing. Get our prices on chicks from our healthy, free range, heavy laying stock. Send today for handsome catalog in colors.

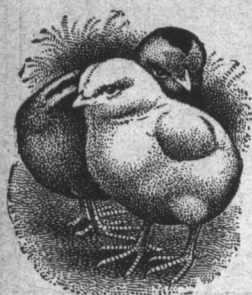
CITY LIMITS HATCHERY & POULTRY YARD,  
Route 5, Box 11 Holland Michigan

## BABY CHICKS

Price List. Prepaid to You. Purebred Stock.

	100	50	25
Wh. & Brown Leghorns	10.00	5.50	3.00
Buff Leghorns	12.00	6.50	3.50
Black Leghorns	13.00	7.00	3.75
Anconas & Minorcas	13.00	7.00	3.75
R. I. Reds	13.00	7.00	3.75
Barred Rocks	13.00	7.00	3.75
Buff & Wh. Rocks	14.00	7.50	4.00
Wh. & S. L. Wyandottes	15.00	8.00	4.25
Buff Orpingtons	15.00	8.00	4.25
Black Langshans	18.00	9.50	5.00
Brahmas	20.00	10.50	5.50

Start the season right with chicks that can be depended upon to produce profitable heavy egg-producing hens. Mail orders to J. KREJCI, 2165 East 86th St., Cleveland, O.



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Box 26, Holland, Mich.

## JUNE CHICKS

Hatched in Buckeye 7s, the machine with 3 BIG ELECTRIC FANS that blow fresh air through all the eggs for the whole 21 days. Result the nearest to a HEN HATCHED Chick a machine can produce. Lively, strong, fluffy chicks from standard bred, heavy laying hens. Twelve thousand chicks each week till July 1st. We specialize in BARRED PLYMOUTH ROCKS and R. I. REDS, at \$14.00 per 100. Also, in less numbers, WHITE WYANDOTTES, WHITE PLYMOUTH ROCKS, and BLACK MINORCAS at \$16.00. White and Brown Leghorns, \$12. Please name second choice if any. Add 50c for 1/2 and 3/4 hundreds. 100% live delivery guaranteed. Mailed, post paid.

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CHICKS, Have shipped thousands each season since 1904. Let us send our prepaid prices. Freeport Hatchery, Box 12, Freeport, Mich.

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R. I. Reds  
R. I. Reds  
Anconas  
W. Leghorns Ask for our free catalogue and price list for May and June delivery.  
Minorcas H. H. PIERCE, Jerome, Mich.

## BABY CHICKS

We have just the chicks you have been looking for, the large, strong, vigorous kind from free range flocks that have been culled for heavy egg production. Shipped prepaid parcel post. Safe arrival guaranteed. Ask about 8 wk. pullets. Catalog free. Gilt Edge Poultry Farm, Zeeland, Mich.



Many estates are spent in the getting, since women for tea forsook spinning and knitting; and men for punch, forsook hewing and splitting.—Poor Richard.

## Woman's Interests

## Floral Helps for June

By Nelle Portrey

IF April may be called the month of promise—of hope, surely June may be called the month of fulfillment. In June we breathe an atmosphere of flowers. But if it is a month of flowers, it is also a month of weeds, lusty weed seedlings, encroaching upon the rights of our tender cultivated plants, appropriating their food, and finally crowding them out of existence, unless the gardener comes to the rescue. The Golden Rule of the flower gardener, as well as of the farmer should be, "Drive the weeds; don't let the weeds drive you."

Many a novice cannot recognize the seedlings of even the common varieties of cultivated plants. If one's seeds are sown in rows, one may feel safe in pulling up all between rows. I always mix a few radish seeds with my flower seeds, as they are quick to come up and easy to recognize. In this way in only three or four days after planting, the rows are marked. But if the flower seed is sown broadcast, it is quite another matter. It will then be a good plan to visit a spot where no flowers are planted, and compare the young growth in the two plots.

Careful cultivation is an important factor in the successful growing of flowers, not only to keep down weeds, but to promote root growth. However, there are two "don't" which must be borne in mind. Don't cultivate deep, but only stir the surface soil. Don't cultivate after a heavy rain, while the soil is of a mortar-like consistency.

Perhaps your early bedding plants were scratched out by chickens, or killed by late frosts. That should not be an excuse to leave the bed bare. You will be well repaid for your extra trouble if you try some "emergency

plants" to take the place of destroyed plants. Nasturtiums, phlox, Drummond's, petunias, and portulacas make ideal eleventh-hour plants for bedding purposes.

When transplanting and making up your beds, try to spare a few seedlings for the children. Let them have their own flower bed and try to teach them to shoulder the responsibilities of taking care of something for themselves.

## My Garden

A garden

is a lovable thing, God wot!

Rose plot,

Fringed pool,

Fern'd grot—

The veriest school

Of peace: and yet the fool

Contents that God is not—

Not God!

in gardens! when the eve is cool?

Nay, but I have a sign;

'Tis very sure God walks in mine.

—Thomas Edward Browne.

Do not forget the potted plants that are plunged out in their pots in the border beds. If the weather is dry, they will need extra watering. Or if there is much rain, the soil in the pots may sour if not attended to. In this case the pots should be taken up and carefully laid on their sides and allowed to drain before putting in the beds again. One should always remember that potted plants have more of a handicap than those set in the open ground.

As soon as the tiny tendrils begin to appear on vines, it is time to begin training them. The effect is far more

graceful if the vines are trained and festooned while young, than if neglected till they are half-grown.

Small, substantial stakes should be driven early for the dahlias, cosmos and gladioli. The plants should be carefully tied to the stakes by means of soft cords and care must be taken not to bruise the tender stems and foliage.

If one loves ferns—and who does not—she will find June the best in which to transplant hardy, wild ferns to their own shady flower bed. A little of their native soil should be removed with the roots, so that they may feel at home in their new location.

Nearly all wild flowers will do well when transplanted away from their native haunts, if care is taken in making the change. One would be surprised at the difference in the size of the blossoms after the second year of cultivation.

## USING UP THE PASTRY SCROPS.

THE housekeeper who makes a pie every day or two, saves a great deal of time, by making enough short crust at one time to last a week. Kept in a cool place, where odors from other food will not taint it, it is better at the end of the week than when fresh made. And without the trouble of making the pastry every time, one can have a pie much oftener, baking it fresh on the day it is to be eaten, instead of baking several, the last of which is apt to be soggy and stale after standing a couple of days.

Short pastry does not require butter at all but only pure lard, and that in the proportion of not less than seven ounces to a pound of flour. Add to this a half-teaspoon of salt and just a dash of baking powder, or a pinch of cream of tartar. The lard is rubbed into the flour, and it is mixed with very cold water into a firm paste. Rolling is good for it, and makes it rather flaky.

When we have bits of pastry left over which are not big enough for a pie, we make them up into things for lunch baskets, which will carry with out mussing up the more solid part of the lunch. Eccles cakes are favorites. A bit of pastry is rolled out thin, a teaspoonful of seedless raisins, a small half-teaspoon of sugar, a dash of nutmeg or cinnamon, and a tiny bit of butter about the size of a pea placed in the middle. The edges are then gathered up, the cake turned over and rolled out about a quarter-inch thick. This is baked in a quick oven. A dumpling is made in the same way, substituting half an apple, a preserved peach or plum, or a teaspoonful of good jam. The dumpling is not rolled, but the edges are pinched tight. If a bit of fresh fruit is used sugar must be added.

Cheese straws are expensive to buy but can be made cheaply from pastry left-overs. Make the pieces into a lump and roll out very thin. Grate cheese (that which is too dry for the table may be used), all over the pastry; fold, roll, grate more cheese, and repeat. Then cut the pastry in thin strips and bake.

A pastry turnover with a filling of chopped meat or sausage, is an acceptable adjunct to a lunch basket.—Helen Combes.

## Lace for Undergarments

Explanations.—Ch means chain stitch (pull loop through the one on hook); sc, single crochet (with one loop on hook, pull loop through both the designated stitch of preceding row and the loop on hook); dc, double crochet (pull loop through stitch, then thread over hook and pull through both loops on hook); tr, treble crochet, (thread over hook, put the hook through stitch below and pull loop through the stitch, thread over hook and through two loops on the hook; thread over hook and through the remaining two loops); dtr, long or double treble crochet (thread twice over hook, put hook through designated stitch and pull loop through, which gives four loops on hook, thread over hook and through two loops, thread over hook and through remaining two loops).

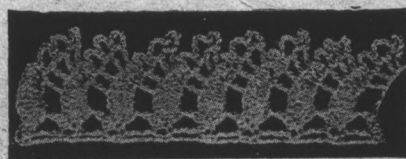
This design is crocheted crossways of the lace and is very easy to do. Use crochet cotton No. 40 and a fine steel hook. Make a foundation-chain of thirteen chain stitches.

First Row.—Dc 1 in fourth ch from hook, 2 dc in consecutive stitches; 5 ch, miss 3 st of foundation chain; 1 tr in next st, 2 ch; 1 tr in next st, 2 ch; 1 tr in next st, 2 ch; 1 tr in last st.

Second Row.—Turn with 5 ch, 1 dc in first space; 5 ch, 1 dc in next space; 5 ch, 1 dc in next space; 3 ch, 10 tr

in the big space; 1 long tr (dtr) in the loop of chain that turned the row.

Third Row.—Turn the work and dc 3 along the first three tr; 5 ch, miss 3 tr; 1 tr on next st, 2 ch; 1 tr on next st, 2 ch; 1 tr on next st, 2 ch; 1 tr on last st.



Fourth Row.—Same as second, then repeat last two rows.

For Heading.—Dc 2 in the top space, \* 3 ch, 2 dc in next space. Repeat from \* to the end.

This design is from our Needlecraft Book No. 10, which contains many other pretty patterns, and can be had by sending fifteen cents to the Michigan Farmer, Detroit, Michigan. This Book No. 10 also contains detailed very plainly illustrated directions for making all the different kinds of crochet stitches; for this it is very handy for the beginner in crocheting, and the more intricate stitches will interest the experienced crocheter.





# The Wages of Faithfulness

Our Weekly Sermon—By N. A. McCune

OUR thought today centers in one man, Jeremiah. It is unfortunate in some ways that Bible characters must be wrapped up in the customs, geography and nationality of their times. It is difficult to get at the real greatness of their lives, until we understand the times in which they lived. But on the other hand, the world knows a real man, though it does not always recognize him at first. Unrecognized greatness, unappreciated worth, is one of the tragedies that life holds for many. We build monuments to those we stoned yesterday. It is another instance of a great private citizen and a weakling monarch.



Isaiah stiffened King Hezekiah's courage, until he resisted the enemy to the teeth, but without Isaiah he would have cut a sorry figure. Jeremiah stands behind the scenes, breathing the truth into the soul of a wobbling monarch, although it avails but little. Look at the circumstances: The society of a once powerful nation is fast decaying from within. As usually happens, foreign powers take advantage of the situation to seize more territory and more wealth. The king of the threatened country is like the weather-vane on a barn, turning now this way and now that. He has no settled policy, he only wants to "get by." Anything to keep his head above water, which means, to keep in office.

He respects Jeremiah, for his steadfastness of purpose, for his great moral courage. He feels safer in having such a man around. He asks the prophet to pray for him, but will not heed his message. He wants the benefits of religious leadership, but he will not pay the price. But for some reason, it seems to be in the very constitution of things, there is a cost to all worthwhile objects. He that would attain success must toil for it, and he who achieves character does so only by the slow travail of his soul. "No effort no victory, no cross, no crown." Then one day the king send for the prophet secretly and asks, "Is there any word from the Lord?"

THERE is a reason for the fact that kings and presidents often gladly consult ministers, to learn their views. Henry Ward Beecher was often in the White House during Lincoln's administration. Bishop Newman was a confidant of President Grant. Lorenzo, the Magnificent, feared the word of Savonarola, and sent for the priest, when dying. But Savonarola refused to absolve him until he had made right certain great wrongs which he had committed. "Is there any word from the Lord?" "Yes, there is, your majesty: 'Thou shalt be delivered into the hand of the king of Babylon.'" If that is not stated in plain enough terms, perhaps we can think of some shorter words, so that its meaning can sink down into your majesty's imagination."

Yet with this fearful prospect before him, the king does not seem able to alter his methods of thinking or acting. Moral paralysis has slowly sapped his powers of resolution. In the words of a great English preacher, Zedekiah was a small man on a great stage, a weakling set to face circumstances that would have taxed the strongest man. It is curious how strong the weakest mortals can be, if they have moral courage. One of the

most famous writers of essays of recent years, a man who buoyed up the faith of thousands, was a sickly man, who could not count on one day ahead. The celebrated Doctor George Matheson of Edinburgh, was blind, yet he never entertained discouragement for a moment. Of him it was said, "The radiance of his nature mastered the darkness of time." What King Zedekiah wanted was moral courage. For all we know, he may have been a splendid hunter, and had several good lion stories to tell. He may have been a soldier who wore the armor with credit and was quick with the javelin. When he failed it was the failure of the spirit, not of muscle. And that is the most serious weakness one may have. Of a certain young man his friends said they never had a more agreeable companion. He was almost a model youth. He never was known to cheat or gamble. He was courteous and ambitious. But he simply could not say, "No." and it wrecked his life.

SHORTLY after this, certain princes of the court who presumably had a good deal of influence, came to the king and demanded that the prophet be put to death. And permission is promptly given to end the life of the man of whom the king had within a few days been secretly inquiring concerning the future of the nation. Jeremiah is put into a dungeon, probably an old cistern, and he sinks in the mire. But a servant in the royal household goes to the king and tells him of the prophet's plight, and the likelihood of his death. Promptly the command is given to take thirty men and draw him out of the dungeon. And from that time until the kingdom falls into the hands of the invader he suffers no more indignities.

Jeremiah is a mighty personality. There was probably no greater prophet in the long line of speakers for God, than he. He rises to great heights. He is a type of Christ. He suffers persecution as the Master did. Like Christ, he found the people ready for his message, and stirred by social and political upheavals. His severest rebukes were directed, as were those of Christ, toward the professional religionists, the politicians who oppressed the public. Jeremiah suffered at the hands of his own people who, at least on one occasion, sought his life. Christ, too, was often embarrassed by the want of cooperation among his friends and relatives. The fifty-third chapter of Isaiah may have been suggested by the tragic life of the great prophet. But on the other hand, Jeremiah was often discouraged, he gave way to temper, and sometimes he was seized with fear. None of these things ever moved the Galilean. He alone lived the sinless life. He was as far above Jeremiah as the elm is above the grass. Jeremiah could only point forward to a more perfect prophet who was to come. Christ could say, "All authority has been given unto me in heaven and in earth."

The fearlessness of Jeremiah undoubtedly appealed to our Lord. The most perfect antidote for fear is love for someone else, or for a cause. When the fire fighter is intent on rescuing a child in a burning building, he forgets fear.

SUNDAY SCHOOL LESSON FOR JUNE 11.

SUBJECT.—Jeremiah Cast into Prison.  
LESSON.—Jeremiah 37:1-38:13.  
GOLDEN TEXT.—Be not afraid because of them; for I am with thee to deliver thee, saith Jehovah.—Jer. 1:8.

## DOWN GO THE PRICES

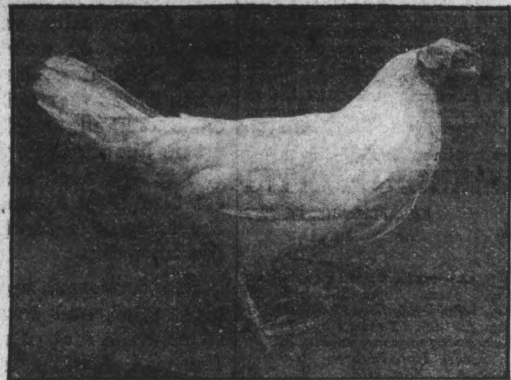
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Thousands of satisfied customers are making money with Superior Baby Chicks and Stock.



Read This One.  
Mr. R. L. Holmes of Easton, Missouri says:—The 300 Tom Barron chicks arrived here on March 29 in fine condition. There were 12 extras and all were alive. I would like 500 or 800 more.

Read This.  
Earl Denton of Manton, Mich., says:—Received my order of chicks all O. K. and they surely are a fine bunch. There were 1020 and they are starting fine. I want to congratulate you on the stock you put out. Will want 2500 next year.

This Hen Imported Direct From Tom Barron By Us.  
Trapnested and Pedigreed 272 Eggs One Year.

Baby Chick Prices for June, July and August delivery.

### ORDER DIRECT FROM THIS AD. AT THESE BARGAIN PRICES

	per 50	per 100	per 500	per 1000
Amer. White Leghorns.....	\$5.00	\$10.00	\$50.00	\$100.00
Brown Leghorns.....	5.00	10.00	50.00	100.00
Anconas.....	6.00	12.00	57.50	110.00
Tom Barron Ex. Sel. Eng. White Leghorns.....	6.00	12.00	57.50	110.00
Tom Barron Spec. Pen Star Mating Chicks.....	8.00	16.00	75.00	
Broiler or mixed chicks, Odds & Ends.....	4.50	8.50	40.00	80.00

Remember these are not just ordinary stock but purebred. The best that money can buy. 8 weeks old pullets at bargain prices. Send for free Bargain list. We guarantee you complete satisfaction and live arrival.

Superior Poultry Farms & Hatchery, Box 2053, Zeeland, Mich.



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Ten Weeks Old Pullets

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25,000 large strong super-hatched chicks every week from Hogan tested flocks culled out annually by our Poultry Experts.

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S. C. White Leghorns				
English W. Leghorns	\$5.25	\$10.00	\$47.50	\$95.00
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S. C. Mottled Anconas				
Broilers (Odds & Ends)	\$4.00	\$7.50	\$35.00	

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Mrs. Wattenbach, Amherst, Ohio, writes: "I sold \$37.30 of eggs in two months from 200 pullets of your stock."

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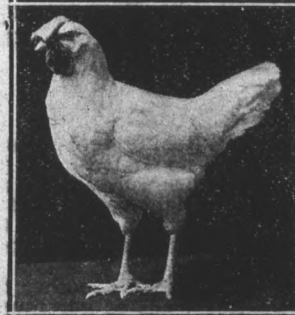
Intelligent chick buyers of today do not take chances with ordinary stock. Our enormous output enables us to sell these money makers at a price that positively cannot be equaled.

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Wingarden Hatchery, Box M, Zeeland, Mich.



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From our S. C. English type White Leghorns. This hen is a full sister to our two hens that made records of 218 and 207 each at Mich. Agr. College. Notice the close feathering, fine shape and vigorousness of these birds. This is an unretouched picture. Our chicks will produce birds of this kind, and you will be sure of getting big strong chicks; 9¢ each by prepaid parcels post, 100 per cent alive guaranteed. Special prices on pullets.

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100,000 Chicks 10¢ & Up. Of pure bred finest egg producing flocks. Built directly from laying and exhibition contest winners hatching eggs. Duckings. Catalog 20 varieties. Early bookings avoids disappointment. Beckman Hatchery, 26 E. Lyon, Grand Rapids, Mich.

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Selected Chicks Tremendously low prices. Free June 26th. Write now before entire outfit is sold. Litchfield Hatchery, Litchfield, Mich., J. H. Adams, Owner.



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# Baby Chicks

### That Are PURE BRED

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Simon Harkema and Sons,  
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Dear Sirs:  
The 7th of June last year we bought 600 chicks from you and had splendid success with them. Raised 550, have 100 that have not been culled, began laying Nov. 15 and are now laying from 60 to 70 eggs per day. 1 cockerel and 2 pullets took 1st and 3rd prizes at our poultry show here at Niles, etc.

Mrs. Mark Feighner,  
Niles Mich.

**SIMON HARKEMA & SONS,**  
Holland, Mich.



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Postage Paid. Live arrival guaranteed. Write TODAY for valuable FREE Booklet, "How to Raise 90% of Your Chicks" also interesting Catalogue, describing convincing-ly. WHY you should purchase our "Better Hatched" Chicks. Co-Operative Breeding and Hatching Co., Box H, TIRO, OHIO.

## DAY OLD CHICKS

White Leghorns \$12 per 100; \$6.50 for 50; and \$3.75 for 25. Barred and White Rocks, White Wyandottes and Rhode Island Reds \$17 for 100; \$9.00 for 50; and \$4.75 for 25. Order from this ad, terms cash with order. Custom hatching 5c per egg, hatchery capacity 9600. Hatchery 4 miles east of Mt. Morris on Mt. Morris road one mile north and one east. Valley Phone No. 14-5. ROSS WADE, Prop. Meadow Brook Hatchery, Mt. Morris, Mich.

### Free ROYCROFT Book B-A-B-Y C-H-I-X

WHITE LEGHORNS AND MOTTLED ANCONAS Also Black Leghorns, Brown Leghorns, Buff Leghorns, Black Minorcas, R. O. Rhode Island Reds, Barred Plymouth Rocks, White Plymouth Rocks, Silver Wyandottes, White Wyandottes. WE HATCH eggs from Hoganized flocks on free range on separate farms. Send for Price List.

Valuable Booklet with first order for twenty-five or more  
**CRESCENT EGG COMPANY**  
Allegan, Michigan

**Baby Chicks \$12.00 per 100 and up**  
Hatching eggs \$1.50 per setting to \$15.00 per 100. We are listing 17 varieties of pure bred fowls, Chickens, Geese, Ducks & Guinea, also breeding stock. Send for prices and circular. Booking now for early delivery. **CLINTON HATCHERY & POULTRY FARMS**, Wilmington, Ohio.

### BABY CHIX

May & June delivery prices. Barred Plymouth Rocks, White Rocks, R. I. Reds, Black Minorcas, White Leghorns or Anconas, 25 for \$5.50; 50 for \$10.00 or 100 for \$16.00 prepaid. 100% live delivery guaranteed. Our 12th year producing chix that please. July price 2c less per chick. Green Lawn Poultry Farm, R-3, Fenton, Mich.

### 5 to 6 Lb. White Leghorns

Larger hens, better winter layers. Free catalog describes them, tells a new way to cull hens, feeding methods, how to make a mash hopper that won't waste feed or clog, and other information.  
A. WAUCHER, Gobleville, Mich.

## BABY CHICKS

Barron White Leghorns 100, \$10.00; 500, \$47.50; 1000, \$95.00.  
Park's Strain Barred Rocks 100, \$12.00; 500, \$57.50; 1000, \$110.00.  
100% live delivery guaranteed. Parcel post paid.  
**FINE BAY POBTRY FARM**, Holland, Mich.

Barred Rock. Hatching eggs from Parks 200-egg strain from stock direct from Parks best pedigreed pens. \$2 per 15, \$5 per 50, \$12 per 100. Prepaid by parcel post in non-breakable containers. No chicks for sale. R. G. KIRBY, Route 1, East Lansing, Mich.

Barred Roc's egg contest winners, eggs from strain with records to 290 a year. \$2.00 per setting prepaid by P. P. Circular free.  
**FRED ASTLING**, Constantine, Mich.

### SINGLE COMB BUFF LEGHORN

baby chicks. Willard Webster, R. 2, Bath, Mich.

### WHITTAKER'S RED CHICKS

and Eggs for Hatching. Both Combs. Blood tested for white diarrhoea. Michigan's Greatest Color and Egg Strain. Write for Free Catalog.  
**INTERLAKES FARM**, Box 39, Lawrence, Mich.

## Our Boys' and Girls' Page

### My Tame Crow

By John O. Roberts

AFTER school one day about the last of May, 1921, I went into the woods in search of crows' nests and incidentally, young crows. After two hours of unfruitful searching, I was returning home empty-handed when I was startled by a strange noise close at hand, and found it to be young crows about ready to fly. There were five in the nest, and choosing the finest bird from among them I beheaded the remainder for the bounty paid by the township.

Bread, worms, sparrows (young and old), mice, and scraps from the table formed the diet of my gluttonous bird. He was always hungry and would squall loudly for something to eat. He would sit before the cat when he was small and beg long and loud.

This remarkable youngster grew very rapidly and became known as "Blacky." With a little help from myself and by brother, "Blacky" learned to fly in two or three weeks.

From the very first a young kitten was Blacky's companion and playfellow, and as the weeks passed they became great friends and would play, much as two kittens would; rolling and tumbling about on the grass until long after sunset. Then I would have to put him on his roost, which was sometimes a rung of a ladder in the barn, or a high limb in a maple tree hard by the house.

Blacky seemed very wise, would come at a call and perch lightly on the

shoulder of any member of the family and making a funny noise way down in his throat, he would rub his glossy head along the hollow of one's neck.

Among the things Blacky took especial interest in was the interior of the house and he never missed a chance to pick up the silver and loose things, all the while chuckling happily to himself. He also loved a great deal of noise and was always on hand to ride around when any of us were using any machinery in the fields. This love for noise and machinery led to a sad accident about the middle of August. Blacky lit with one foot in the cogs of the pumpjack one afternoon. He lost two toes and suffered a broken leg, but after a time he regained his former good spirits and was not much the worse for the incident, except a slight stiffness in that leg.

Another great attraction was the automobile. He would fly to meet it, sit on it or in it whenever possible and when the hood was up he would peer over the edge and watch operations interestedly.

Late last fall, after long, lonesome days without his two young masters, who were attending high school at Breckenridge, our lovable pet was found dead behind a horse in the barn one morning. He had been roosting behind the horses and becoming frightened at night, had fluttered under the feet of a horse.

So ended the short but eventful life of Blacky.

## Our Letter Box

THIS letter box will be where the boys and girls can express their views, tell of themselves and things about the farm, or ask advice. The most interesting letters each week will appear here. Address your letters to me.—Uncle Frank.

Dear Uncle Frank:

This morning I saw an oriole. I had a toy duck hanging on a string near the house. The oriole came and took the string and duck, both. It flew into a nearby tree where the string got caught. It could not get the string loose. The duck is still hanging there. I then put out some string which the bird came and got. I also saw a wren, catbird, and two robins' nests. Last night I was standing within a few feet of a barn swallow. I have found four ground sparrows' nests.

When school closes we will have more time for answering these questions.—Genevieve Zeeb, Ann Arbor, Mich.

It looks as if this time the duck won out. The oriole could not get the string away from the duck even if it was only a toy duck. Write again, Genevieve.

Dear Uncle Frank:

I have been watching the contests and noticed that no Laingsburg girl ever got any prizes, so I decided to see if we weren't as bright as the rest of them, and found the answers to the last contest and am sending them in.

Do you like flowers? My mother has her windows clear full of geraniums, begonias and a whole lot of other things and they are all blossoming now. She has a flowering maple that blossomed all the year, if you keep the ground right. I have a calla lily and it blossomed this year for the first time. Quite a lot of people are having trouble making them blossom so I was overjoyed when I saw the bud. My flower garden is coming up and my pansies are blossoming. I am afraid I have lost my yellow pansies but hope there are some coming up.

Will write again when I have time. —From one of many readers, Dorothy Smith, Laingsburg, Mich.

Your letter shows that Laingsburg girls are as smart as others. And I don't see why a Laingsburg girl can't win a prize if she keeps trying.

Dear Uncle Frank:

I've been reading "Our Letter Box." We have seven cows and one large hog and one little pig. But the most cunning one of all is the six little rabbits in the pen, one is all white and one is black and the rest are grayish. The mother of them is coal black.

Out in the barn there are two little kittens, fat as butter. In the horse barn we have six horses, one is black, one is bay and four are iron greys. We haven't many little chickens, but we have three old ducks, one is setting on duck eggs. One hen has four chickens and three ducks. Some other hens are setting to hatch some more.

I will close, hoping this finds you well.—Yours, Bina Bell, Howell, Mich.

I bet you have lots of fun with your rabbits and kittens.

Dear Uncle Frank:

I am a boy twelve years old and I will be in the seventh grade next year. I have one sister older than I. We have a pony and a cart and a stoneboat which we hitch her to, to do light things. I have been watching the Boys' and Girls' Department for a long time and have been interested in it, and have also been watching the contests with interest.

My sister and I have planted some popcorn this year and I hope to have enough money from it to pay our tuition through school next year, and to buy our clothing, too.—Yours truly, Elwood Foote, Holly, Mich.

I suppose you will use your pony when you go to town to sell your garden stuff.

**DAY OLD CHICKS**  
HOMESTEAD FARMS  
Michigan people: Here is something in your own state to interest you. Let us send you a description of our  
**Pure Bred Practical Poultry**  
Here is an egg producing poultry stock such as the farmer poultry-woman wants. It is proving out in actual eggs in the hands of the farmer poultry people who buy it.

White, Brown and Buff Leghorns; Anconas; Black Minorca; Barred, Buff and White Rocks; Rhode Island Reds; Wyandottes; Orpingtons.

This stock is culled and bred on the plan of the state Agricultural College, and all the Hens in the Breeding Colonies are practical egg-producing Hens.

If you will send for a description and egg record of this Pure Bred Practical Poultry, you will find stock that it will pay you to buy. Buy Day Old Chicks this year and see the results you will get.

### EIGHT WEEKS OLD PULLETS

We shall have 5000 Eight-weeks and Three-months Pullets to sell in May, June and July in all our breeds. Orders can be placed now for these Pullets. We will send you description and Price List.

**STATE FARMS ASSOCIATION**  
Box A47, Kalamazoo, Mich.

## CHICKS



From Michigan's Old Reliable Hatchery. American and English White Leghorns, Anconas, Barred Plymouth Rocks and R. I. Reds. Strong sturdy chicks from Grand bred to lay. Hoganized, free range breeders. Sent by Insured Parcel Post, prepaid. 100% live delivery at your door. Guarantee satisfaction, or your money back. 15,000 each week, 14th season. Get my low price and valuable illustrated 1922 free catalog and place your May and June orders where you get best quality at lowest prices.

**W. Van Appledorn, R. 7, Holland, Mich.**

### 100,000 Reliable Chicks for 1922

Of quality, real value for your money. Anconas, Brown Leghorns, American and English White Leghorn strains, with the long deep-bodied loop combed kind that lay the large white eggs, from Hoganized selected flocks. Post paid to your door at reduced prices. Get our information and price list free before you buy elsewhere.

**PAUL DE GROOT, Prop.**  
Reliable Poultry Farm & Hatchery,  
Zeeland, Mich., R. R. No. 1

**OVIE'S BABY CHICKS**  
Makes Producers!  
For years we have been building up utility heavy laying strains of exhibition quality so our customers will be assured of success. 12 leading breeds, 10c each and up. Safe arrival guaranteed by P. P. Prepaid. Catalogue free, Ovies Poultry Farm & Hatchery, 32 State St., Marion, Indiana

## CHICKS

Twelve most popular varieties. Hatched from flocks which have been bred for quality and culled for heavy egg production. 100 percent live delivery guaranteed by parcel post prepaid.

**Mankel Ideal Hatchery,**  
Box B, Upper Sandusky, Ohio

### 200,000 Baby Chicks

FOR 1922

Shepard's Anconas, English Type White Leghorns and Brown Leghorns and Barred Rocks. Why pay two prices when you can buy direct? Our chicks are from strong vigorous flocks of fine quality and excellent layers. Chicks are shipped prepaid with 100% live arrival guaranteed. Order now, catalogue free.

**KNOLL HATCHERY,**  
R. 12, Holland, Mich.

### Bred-to-Lay White Wyandottes

59 hens laid 1170 eggs in Jan. Eggs \$2.00 per 15; \$10 per 100. **BYERGREEN POULTRY FARM**, Blanding & Sons, Greenville, Mich.

**EGG BRED CHICKS**, from high production stock. 19 years experience in hatching and breeding White Leghorns, Barred Rocks and Anconas. Circular. Frank Heinz, Box 6, Comstock Park, Mich.

### CHICKS—BRED-TO-LAY

S. C. W. Leghorns, S. C. Anconas and Barred Rocks. Quality chicks that please, guaranteed full count, 100% live on arrival, parcels post paid. Circular. **SUNNYBROOK POULTRY FARM**, Hillsdale, Mich.

### HA! HA! 75,000 CHICKS

Buy Hi-grade Profit Paying Bred-to-Lay Chicks. From tested egg strain. Best foundation stock ever produced. Hatching eggs, duckings, 10 varieties. Circulars, Laurence Poultry Farm, R. 7, Grand Rapids, Mich.

**S. C. Black Minorca Eggs** No. 1 pen \$3.00 per setting. From No. 2 pen \$2.00 per setting. **R. W. MILLS**, Saline, Mich.

**W. Chinese** goose eggs 40c each. Pekin duck \$1.50 for 8. R. C. Br. Leghorn \$1.50 for 15 \$8.00 per 100. **Mrs. Claudia Betts**, Hillsdale, Mich.

### SINGLE COMB WHITE LEGHORNS

baby chicks and hatching eggs from our flock of high producing hens raised on free range. Write for circular. **RALPH S. TOTTEN**, Pittsford, Mich.

**Hatching Eggs** \$5 per 100, \$3 per 45, \$1.25 per 15 prepaid. R. I. Reds, White Wyandottes, W. Rocks, Barred Rocks, W. Leghorns. Healthy heavy layers, farm raised. Please order from ad. Satisfaction. **GORET BROS.**, Corunna, Mich.

**S. C. Brown Leghorns**. Eggs, Lt. 15-\$1; 30-\$1.60; 50-\$2.50; 100-\$4.75. Dark 15-\$1.75; 30-\$3; 50-\$4. P. P. guaranteed. (288 ped. males) 15-\$1.75; 30-\$3; 50-\$4. P. P. guaranteed. Hens and pullets, egg bred. Cat. free. Vera Fulton, Box 136-M, Gallipolis, O.

**Rose Comb** Rhode Island Reds. Hatching eggs reduced to \$1 per setting. **Mrs. Albert Harwood**, R. 4, Charlevoix, Mich.



## POULTRY

**Look Guaranteed Baby Chicks**

White Leghorns and Anconas exclusively from the largest chick producing center in the world. Remember this is not just ordinary stock. Our females are all selected birds and are bred for egg production. Our flocks are culled by M. A. C. experts, and are headed by vigorous pedigreed males. We are getting testimonies every day from our customers such as this, "The best lot I ever got from any hatchery." One order will convince you. Write for catalog at once.



Barron English White Leghorns, extra selected \$12.00 per 100. English White Leghorns, Standard stock \$11.00 per 100. Anconas, extra selected \$12.00 per 100. Anconas Standard Stock \$11.00 per 100.

**SILVER WARD HATCHERY**  
Box 252, Zeeland, Mich.

**BABY CHICKS**

From Select, Heavy Laying Hens in S. C. White and Brown Leghorns. Black Minorcas, Anconas, Barred Rocks and Rhode Island Reds.

**JUNE PRICES**

S. C. White and Brown Leghorns and Anconas, 50 chicks \$5; 100, \$10.00; 500, \$47.50; Rocks, Reds and Minorcas, 50, \$6.50; 100, \$13.00; 500, \$62.50. Postpaid to your door and full live count GUARANTEED. Order from this ad. and save time. REFERENCE, ZEE- LAND STATE BANK, Instructive Circular Free. Colonial Poultry Farms, Zeeland, Mich.

**JUST-RITE Baby Chicks LOOK!**

Get our low June prices, June chicks for December layers.

grades. Catalog free, stamps appreciated. NABOB HATCHERY, Dept. 15, Gambier, O.

**Big Value Baby Chicks**  
Eleven popular, money-making breeds. Easy to buy—priced low. Easy to raise—husky, healthy, vigorous. And guaranteed! Write today for FREE catalog showing many breeds in full colors.  
**OHLS POULTRY YARDS and HATCHERY**  
Box 27, Marion, Ohio

**CHICKS WITH PEP**

**A Big June and July Price Reduction**  
Try some of our fullblooded DON'T STOP LAYING KIND of chicks for June and July. They will pay you big. Rocks, Reds, Anconas, Minorcas, W. Wyandottes 13c, Leghorns 10c, Orpingtons 15c. Broilers 10c, 5% off on 500 and 10% on 1000 lots. Free Catalog. Prepaid. Safe Delivery.

**HOLGATE CHICK HATCHERY,**  
Route 5, Holgate, Ohio

**Baby Chick Prices Slaughtered**

English and American Leghorns now \$10.00 per 100 delivered. Anconas \$12.00. Rocks \$15.00. Our flocks cannot be beat for egg production. Our Anconas are Champions. Only one grade—the best. Special prices for larger orders. Catalogue free. Progressive Poultry Farms, Box Q, Holland, Mich.

**CHICKS 10c**

Barron's S. C. W. Leghorn and Sheppard's Ancona chicks for June delivery. Stock from trap-nested stock with egg records from 200 up to 270. We pay all shipments and guarantee safe delivery. Order now as our supply is limited. Write for catalogue. Byron Center Poultry Farm, Byron Center, Mich.

**Buy Chicks Where Quality Counts.**

All my flocks culled. You get chicks from nothing but best layers. Safe arrival guaranteed by prepaid parcel post. Ask about 8-week pullets. HERMAN J. OOK, 133 W. Main St., Zeeland, Mich.

**BABY CHICKS** 1922 delivery now ready. White Leghorns, White Rocks, Buff Orpington, Buff Rocks, Barred Rocks, R. I. Reds, Black Minorcas, S. C. Anconas. Guaranteed pure bred and live arrival. Postage paid. **DURAND HATCHERY,** Fenton, Mich.

**NOW IS YOUR CHANCE**

Put in your order for June chicks at 9 1/2 cents. And April hatched pullets. Bred from Heavy English Strain from our own free range poultry farm. 100% live delivery guaranteed. Village View Poultry Farm, R. 3, Zeeland, Mich.

**RHODE ISLAND WHITES**

win over all breeds at the egg laying contest. 30 eggs \$5; 50 \$8; 100 \$15 order from this ad. Some chicks. H. H. JUMP, R. 5, Jackson, Mich.

**S. C. Brown Leghorns**, excellent layers. Vigorous farm range. Selected eggs postpaid 15, \$1.25; 30, \$2.45; 50, \$3.65; 100, \$7.00. Floyd Robertson, R. 1, Lexington, Ind.

**S. C. Black Minorca** Hatching Eggs. Our choice strain settings \$1.50; for 50 \$3.00; 100, \$5.00. C. J. DEEDRICK, Vassar, Mich.

**STRICTS POULTRY FARM**

Hudsonville, Mich., R. R. 4, Box M. S. C. English White Leghorns. Official records from 9 hens of 208 to 244. Chicks and Eggs. Write for catalogue.

**Top Quality Chicks** Spanish, Minorcas, Rocks, Reds, Wyandottes, Orpingtons. **TYRONE POULTRY FARM,** Fenton, Mich.

**WHITE WYANDOTTES**

207 egg average. Eggs all matings, \$2.00 per 15, \$10.00 per 100. Cockerels, hens and pullets \$5.00 each. FRANK DELONG, R. 3, Three Rivers, Mich.

**EGGS AND DRAKES** Price List Free. Box T. Pardee's, Islip, L. I. N. Y.

**Bourbon Red Turkeys** We have them. Order your birds and eggs now. SMITH BROS., R. 3, Augusta, Mich.

**Some Fun!**

By Uncle Frank

THE joke contest was a dandy; it brought a nice lot of letters which showed that my pals had a good sense of humor. I picked those for prizes which had the most general appeal, but some of the others were so good that I will use them in some other issue in which we will have more space available. Several real good jokes came in late and therefore were disqualified.

Here are the names of the winners and the jokes they sent in:

By John Jenema, Falmouth, Mich.

Peggy, with her feet sprawled out in the aisle, was sitting at her desk, industriously chewing gum.

Teacher (severely)—"Peggy! Take that gum out of your mouth and put your feet in."

By Elnora Wilson, Harbor Beach, Mich.

Mother was hastily getting Johnny and Mary ready for the long drive to church early Sunday morning. Johnny

**Our Drawing Contest**

THIS week we are going to give the artists a chance. You can select any subject and any method of drawing you wish. The five best drawings will bring their makers one dollar each. The contest closes on June 15. Please address all letters and drawings to Uncle Frank, Michigan Farmer, Detroit, Michigan.

began to fuss over the restrictions of his Sunday clothes. "Please hold still and be good," exclaimed the hurried mother, "or I'll spank you right on the start."

Mary studied Johnny through fully for several minutes, then braving her mother's haste asked, "Where is Johnny's start, Mother?"

By Jeannette Brandt, Litchfield, Mich.

Jack—"My brother takes up French, Spanish, Italian, Hebrew, German and Scotch."

Jill—"My goodness, when does he study?"

Jack—"Study! He doesn't study. He runs an elevator."

By Herbert A. Westveer, Grand Rapids, Mich.

Mike—"Say, Ike, that mattress you sold me was full of bed-bugs."

Ike—"Well, what can you expect for two dollars? Did you want it full of canary birds?"

By Mabel M. Zimmerman, Reed City, Mich.

"Mother," said Mickey, "the doctor was at our school today, tryin' to find out if there was anything the matter with any of us, an' he says I got ad'noids."

"Ad'noids? What's them?" Mrs. Flanigan demanded.

"They're things in your head, mother, what has to be took out," said Mickey in a doleful tone.

"He's a liar," Mrs. Flanigan cried hotly, "an' it's me that isn't afraid to tell 'im so. I finecomb your head iv'ry Sattaday night, an' it's niver an ad'noid kin I find."

Besides getting all the funny things, I got an unusual number of very nice letters. For these I wish to thank the girls and boys and I promise to do my best to use them in the Letter Box or to give them a personal reply. The letters that are the most interesting to other boys and girls are the ones which stand the best chance to get in the Letter Box.



Blood Will Tell

antee safe arrival and satisfaction, or your money back.  
**17,000 Chicks Every Week Till August 15th.**

Prices for June and July 1922.

S. C. English type White Leghorns, are good and profitable layers, and our extra selected are of the very best layers.

It has never been our aim to put out cheap chicks, but to give our customers chicks that will be good layers and bring our customers a good profit.

We have been in the poultry business eleven years and are offering you chicks of the best layers at a very reasonable price.

	Per 25	Per 50	Per 100	Per 500	Per 1000
S. C. Eng. Type W. Leghorns, extra selected	\$3.00	\$6.00	\$12.00	\$57.50	\$115.00
S. C. English Type White Leghorns	2.50	5.00	10.00	50.00	100.00
S. C. Brown Leghorns, extra selected	3.00	6.00	12.00	57.50	115.00
S. C. Brown Leghorns, standard	2.50	5.00	10.00	50.00	100.00

We ship chicks by parcels post and pay the postage up to your door, and guarantee safe arrival. Our terms are cash with order, but we will book your order if you send one-fourth of the amount with the order, and the balance just before chicks are to be shipped.

**Prompt Shipment**

Order from this adv. to save time and we will write you at once when to look for the chicks and also will mail you our instructive catalogue, or write for catalogue before ordering.

**The Wolverine Hatchery,**

H. P. Wiersma, Proprietor,

Zeeland, Mich.

**Ancona Baby Chicks**

The **S. C. Anconas** have proved to be the most valuable fowl for the farmer today. We have the Bred-To-Lay Sheppard Strain, and are offering these chicks at extremely low prices, let us have your order and prove to you the wonderful laying ability of our birds.



For those who prefer **S. C. White Leghorns** we have some of the very best stock obtainable. Get some of our chicks and you will be on the road to success. We pay all Parcel Post charges and guarantee chicks to reach you in first-class condition.

Prices of Selected Chicks from June 20 to August 1.

	per 50	per 100	per 500	per 1000
S. C. Anconas	\$5.75	\$11.00	\$52.50	\$100.00
S. C. White Leg.	\$5.25	\$10.00	\$47.50	\$95.00

Order direct from adv. Prompt shipment. Satisfaction guaranteed.

M. D. Wyngarden, R. 4, Zeeland, Michigan

**Royal Chix****Guaranteed to Satisfy****10c EACH POSTPAID**

June 27th to July 30th

English Type White Leghorns Brown Leghorns

Get your order in at once. A hatch each Monday and Tuesday between above dates. Our chicks are from heavy laying selected breeders, with large combs and deep bodies. Our chicks are hatched right and will live. Safe arrival guaranteed. Order direct or send for our illustrated catalog.

ROYAL HATCHERY, R 2, ZEELAND, MICHIGAN

**BUY HUBER'S****RELIABLE CHICKS****Special Summer Prices****By Parcel Post Prepaid. Guarantee Live Delivery.**

Don't fail to take advantage of these prices for they will include our Number One Grade Chicks. Our stock is bred for Quality and Heavy Egg Production. Will ship any number of chicks from 25 on up. Our 13th Year.

S. C. White and Brown Leghorns and Odds and Ends at 10 cts. S. C. Anconas at 12 cts. R. C. and S. C. Reds and Barred Rocks at 13 cts. S. C. Buff Orpingtons, S. C. Black Minorcas and White Wyandottes at 15 cts. S. C. Buff Minorcas at 20 cts.

30,000 chicks every week. Order direct from this advertisement.

Attractive Catalogue Free.

Huber's Reliable Hatchery, East High St., Fostoria, Ohio.



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Aberdeen  
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## ACHIEVEMENT

The reward of pure breeding; the accomplishment of quality. Success has again contributed more laurels to the already remarkable record of

## Imp. Edgar of Dalmeny

The Sire Supreme

At the International Live Stock Exposition, where gathers each year the elite of North American Cattle to compete for the coveted awards, five more honors have been bestowed upon the "get" of Edgar of Dalmeny. You too may share these honors. A bull by this world famous sire will prove a most valuable asset to your herd. Write us today.

## WILDWOOD FARMS

ORION, MICHIGAN  
W. E. SCRIPPS, Prop. Sidney Smith, Supt.

REGISTERED Aberdeen-Angus. Ten heifers, six bulls from eight to fourteen months. Best of breeding, the growthy kind that make good. Reasonable. Inquire F. J. WILBER, Ohio, Mich.

## Brookwood Guernseys

Birmingham, Mich.

During the past year, we have completed Advanced Registry with 7 Guernsey Cows—two of which were heifers with their first calves.

The average butter-fat production of these cows was 650 pounds, and three of them were leaders of their respective classes for the State of Mich.

We have for sale a number of good bull calves from these cows and their daughters, sired by Rosetta's Marshall of Waddington, No. 54420, Grand Champion Bull at the Michigan State Fair last year.

Our herd is not large, but it is select. Visitors are always welcome at the farm. Prices are reasonable, considering the quality of the stock.

JOHN ENDICOTT, Proprietor

## Registered Guernseys

A fine bull ready for heavy service \$125.00  
J. M. WILLIAMS, North Adams, Mich.

**GUERNSEYS**—REGISTERED BULL CALVES. Containing blood of world champions. A. R. cows. Federal inspected. HICKS' GUERNSEY FARM, Saginaw, W.S. Mich.

Registered Guernsey Bull 14 mo. old \$50. Bull calf \$25. May Rose breeding, also heifers. E. A. BLACK, Howard City, Mich.

**FOR SALE** Three reg. Guernsey Cows All due to freshen. PERCY ANDERSON, Fremont, Mich.

WINNWOOD HERD  
Registered Holsteins

It was through the daughters of  
Flint Maplecrest Boy that  
Sir Ormsby Skylark Burke

Our Junior Herd Sir

produced the Junior Champion and Reserve Grand Champion Heifer, at the Michigan State Fair this year, in a class of 38.

His get won first in Calf Herd, also first in get of sire, in a class of 13.

A son of either of these great bulls will help the individuality and production of your herd.

We have bulls at dairymen's prices, and we also have bulls at the breeder's price, from dams with records up to 38 lbs. of butter in seven days, and 1168 lbs. of butter in one year.

Ask us about a real bull, a Maplecrest or an Ormsby. JOHN H. WINN, Inc., Rochester, Mich.

**Holstein-Friesian** pure-bred bull calves, tuberculin tested herd. Prices are right. Larro Research Farm, Box A, North End, Detroit, Mich.

Wiscogin Farm offers Holstein-Friesian bulls ready for light service. From sire whose 6 nearest dams average 33.34 lbs. butter for 7 days. A. R. O. Dams from 18.33 to 21.51 lbs. Herd under state and Federal Supervision. Oscar Wallin, Unionville, Mich.

A Good Note accepted in payment of finely bred reg. of the best, and at prices within reach of all. Write GEO. D. CLARKE, Vassar, Mich.

## The Traverse Herd

We have what you want in BULL CALVES, the large, fine growthy type, guaranteed right in every way. They are from high producing A. R. O. ancestors. Dam's records up to 30 lbs. Write for pedigrees and quotations, stating about age desired.

TRAVERSE CITY STATE HOSPITAL  
Traverse City, Mich.

**Holstein** Friesian heifer and bull calves, purebred registered and high-grade. Price \$20 up. Splendid individuals and breeding. Write us your requirements. Browncroft Farms, McGraw, N. Y.

Registered yearling Holstein-Friesian bulls priced to sell, 42 lb. breeding, guaranteed O. K. shipped on approval. E. B. Reavey, Akron, Mich.

## \$100 EACH

Bull calves ready for service. Grandsons of King of the Pontiacs. From dams with A. R. O. Records of 27 to 29 lbs. for seven days—Federal Tested.

J. B. JONES FARMS  
Romeo, Mich.

## Registered Holstein Bull

born Nov. 2, 1919. Dam at 8 yr. 22, 920 milk, 895 lb. butter; at 7 yr. 305 days, 16,281 milk, 454 lbs. butter. She has three A. R. O. daughters, one above 25 lbs. in 7 da. 55 in 30 days. He is sired by a 24 lb. grandson of Colantha Johanna Lad. Also three heifers 2 yr. old, one fresh heifer calf by side. Other two due in May. Bred to sire above. State and Federal full accredited herd. Priced for quick sale. Pedigrees and photo on request. VERNON E. CLOUGH, R2, Parma, Mich.

**Holstein Bull Calves** from the famous Pontiac Herd for sale at a bargain on our ranch north of Clare, Michigan. For particulars W. O. CORNWELL, Saginaw, Mich.

## For Sale King Segis Breeding

Bulls of show type that are out of A. R. O. Dams.

## Grand River Stock Farms

Cory J. Spencer, 111 E. Main St.  
JACKSON, MICHIGAN

## HERE IS A GOOD ONE

Born June 23 1920 by Maplecrest DeKol Hengerveld whose three sisters have each produced over 1200 lbs. of butter in a year. Two of them former World's Champions. Bulls dam has just been tested and made nearly 27 lbs. We believe she will make 30 lbs. at her next freshening. Write for pedigree. F. B. LAY, Kalamazoo, Mich.

## Whitney Farms Holsteins

A grandson of Duchess Skylark Ormsby ready for service. Nicely marked bull calves from three weeks to six months of age. These calves have the type and are priced to sell. Herd under Federal supervision. Pedigrees and prices from WHITNEY FARMS, Whitney, Mich.

## 32 Lb. Bull, \$150

Pure bred, registered, federally tested. Dam, a daughter of King Segis Pontiac, 37 lbs. Good individual, mostly white. 1 yrs. old. Guaranteed healthy and breeder. Priced to sell quickly. Pedigree on request. ALBERT G. WADE, White Pigeon, Mich.

## BARGAIN PRICES

for three young pure bred Holstein bulls, whose dams all have high milk and butter records. Send for pedigrees and prices. JOSEPH H. BREWER, Grand Rapids, Mich.

**\$250 Buys** three high grade Holstein heifers, two yrs. old, all milking and one registered Holstein bull, old enough for service. Herd under federal and state supervision. HENRY S. ROHLFS, R. 1, Akron, Mich.

**\$50 A Year** gets a granddaughter of Maple Crest Korn Heng, from best herd in Wayne Co. Cow Testing Ass'n. Federal tested, no reactors. M. L. McLAULIN, Redford, Mich.

## Herefords

Repeaters, Beau Donalds, Fairfaxes, and Farmers represented in our herd. Repeater 173rd, a son of old Repeater, at head of herd. Both sexes and all ages for sale.

## ALLEN BROS.,

(Farm at Paw Paw, Mich.)

Office 616 So. West St., Kalamazoo, Mich.

**Registered Herefords** for sale. Cows and 2 herd bulls. RALPH CALHOON, Bronson, Mich.

**Reg. Herefords** for sale. Two good bulls 8 and 20 mos. old, also young cows. Prices reasonable. REED SCHULTZ, R. 3, Homer, Mich.

## Jersey Thoroughbreds

Few cows and bull calves. Best breeding line. Guaranteed. Tuberculin tested twice a year. If you have no money will take bankable note. E. W. Vasey, 509 Free Press Building, Detroit, Mich., Main 1267.

**One registered** Jersey Cow three years old, one heifer one and one-half years old, and one heifer one year old. Jersey heifers eligible for registration. Price \$200. Highly bred. G. F. PARIS, Milford, Mich.

**Lillie Farmstead Jerseys** Bull calves from R. of M. cows. COLON C. LILLIE, Coopersville, Mich.

**BUTTER BRED JERSEY BULLS** FOR SALE. CRYSTAL SPRING STOCK FARM, Silver Creek, Allegan County, Michigan.

**For Sale Jersey Bulls** ready for service; Raleigh, Oxford, Lad, Majesty breeding. WATERMAN & WATERMAN, Packard Rd., Ann Arbor, Mich.

**Jersey Bull For Sale** Springfield Owl breeding. Herd tuberculin tested. Satisfaction guaranteed. Age six months. Fred L. Bodimer, Reese, Mich.

**Milking Shorthorns** Bull calves for sale. Also 2 cows. ROSEMARY FARMS, Williamston, Mich.

## FRANCISCO FARM SHORTHORNS

**FEDERAL ACCREDITED HERD** One red Scotch bull ready for service. Two bull calves ten months old. Poland-China weanling pigs ready to ship. P. P. POPE, Mt. Pleasant, Mich.

**Clayton Unit** Shorthorn Breeders' Assn. Scotch, Scotch Top and Milking Shorthorns for sale all ages. W. J. Hinkley, Sec'y, Flushing, Mich.

## The Maple's Shorthorns

Kirk Levington Lad, by imported Hartford Welfare, in service. Bulls and heifers for sale.

J. V. Wise, Gobleville, Mich.

**Central Mich. Shorthorn Breeders' Assn.** offer for sale both milk and beef breeding, all ages. Write M. E. MILLER, Sec'y, Greenville, Mich.

**Shorthorns** for sale. White and Roan bulls by imported sires or from imported dam. J. A. BARNUM, Union City, Mich.

## Live Stock and Dairying

## A NEW SERVICE FOR LIVE STOCK MEN.

PLANS for a live stock reporting service are being completed by the department of agriculture. This service will be nation-wide and will indicate monthly changes in the live stock situation. There will also be forecasts and reports of all important live stock movements. This service which was decided upon at a recent conference of crop statisticians is certain to be of much benefit to live stock men, particularly feeders.

## TO RENOVATE PASTURE LANDS.

OUR Ohio neighbors are undertaking the task of learning whether or not it is feasible to build up old "hide-bound" hill pastures. Nearly three hundred farmers have agreed to make tests. In all cases the pastures will be fertilized with lime, phosphate and manure. Where the sod is very thin, they will also disc and reseed. There are many places in Michigan where work of this character could be done to advantage.

## BRINGING UP THE DAIRY CALF.

THE easiest way to raise a calf is by feeding it whole milk. This probably will produce the best calf, but not necessarily the best dairy cow. Feeding skim-milk to the calf after it has secured a proper start may give as good a cow as the feeding of whole milk, but the process requires greater care.

For the first few days, the calf should run with its mother, after which it should be removed and fed warm fresh whole milk by hand. This should be continued for ten days or two weeks, at least. The length of time it should be continued depends upon the vigor of the young animal. From ten to twelve pounds of this milk should be fed per day, in three feeds at first, but this number may later be reduced to two.

The skim-milk is then introduced gradually and a period of about two weeks should be required before the calf is placed entirely upon its new feed. The skim-milk should be sweet and warm when fed. Cold sour milk is the greatest cause of scours. Continue the skim-milk for at least five months and it may be fed for six or seven months, depending upon the supply. As soon as the calf is old enough to eat substitute feeds they should be given.

## STOMACH WORMS IN SHEEP.

WHILE sheep are susceptible to disease, perhaps none have caused greater loss to flock owners than the stomach worm. Allowing the flock to pasture continuously on the same pasture is the cause of this trouble. When a pasture once becomes infected with the stomach worm it is difficult to eradicate, therefore, preventive measures are most effectual. Frequent change of pasture is necessary to keep the flock in a heavy, vigorous condition. Over-stocking pasture should be avoided. Low land pasture, especially where foul and stagnant water stands, are more likely to be infected with stomach worms. Sheep show the first symptoms of stomach worm infection by their loss of flesh and run-down condition. A disposition to eat coarse undigestible food, a depraved appetite are common symptoms of the disease. There are a number of effectual treatments for this disease, but far better

to avoid the trouble than to attempt to cure it. Keep both ewes and lambs in good flesh by supplementing the pasture with a light grain ration. Alternate the flock from one pasture to another frequently, even though the feed is of about the same quality.—R.

## SUMMER HOG PRICES LOWEST IN JUNE.

OF all the summer months, hog prices usually reach their lowest level in the month of June. A ten-year average of quotations on the Chicago market show the following average prices for each month of the year: June, \$11.32; July, \$11.64; August, \$11.47; September, \$11.87; October, \$11.12; November, \$10.42; December, \$10.01; January, \$10.22; February, \$10.52; March, \$11.31; April, \$11.56; May, \$11.45.

## MAY MILK PRICES.

THE average price paid over the entire country for milk delivered at local shipping points or country plants during the month of May was \$2.08 per hundred for milk testing 3.5 per cent butter-fat. The highest average price was paid in the New England states, while the lowest is reported from the east south-central states. The average for the east north-central states, which includes Michigan, was \$1.73 per cwt. The prices reported in this state at different points are as follows: Ann Arbor, \$2@2.25; Detroit, \$2.17; Flint, \$1.70; Grand Rapids, \$2.12; Kalamazoo, \$2.56@2.60; Lansing, \$1.85.

## STERILIZING NECESSARY.

A CAREFUL study of the milking machine under varying conditions shows it to be necessary to sterilize the milker tubes and teat-cups, either by means of non-poisonous chemicals or by heat. Mechanical scrubbing devices which, according to experts, will clean the parts exposed to milk and other dairy utensils more effectively than can be done by hand fail, however, to kill bacteria. Such has been the conclusion reached at the Geneva Experiment Station at New York. The great difficulty seems to be in making the average person understand the difference between a clean and a sterile milking machine. The approach of hot weather makes it extremely important to those who are using the milking machine that they give the closest attention to keeping down bacteria through careful sterilization.

## ADDITIONAL PRIZES FOR HOLSTEINS.

THE Holstein-Friesian Association of America, through its committee on prizes, announces that thirty per cent cash will be paid on the general classification at the Michigan State Fair at Detroit, and twenty per cent cash will be paid on general classification at the West Michigan State Fair at Grand Rapids.

ACCORDING to figures on the winter wheat crop for Europe, there is an acreage of 31,397,000 reported, which is 1,399,000 acres less than were reported last year. On the other hand rye has been sown in larger quantities. The amount reported is 18,808,000 acres. As compared with 15,067,000 acres a year ago. The increase in the latter crop occurs mainly in Poland where the area sown is large.



## HANDLING CREAM ON THE FARM.

THE low price of milk the past year has caused a great many farmers to separate their milk on the farm, feeding the skim-milk to hogs, calves and poultry and selling the cream. I have been following this practice of handling my milk the past year and believe it is more profitable than to sell the milk. We have all the milk we can use for feeding purposes and feel sure it is worth a considerable more than the labor involved and cost of machinery for separating.

The problem of keeping cream in good condition during the hot weather months is not a difficult one to solve on the farm. Cream should be delivered at least twice a week during the summer season. In excessive hot weather three times a week is more advisable.

As soon as cream is separated it should be placed in cool water and kept at low temperature. A cooling tank conveniently located near the well between the pump and large stock tank in order that water may be pumped through the cooling tank. The cooling tank should be protected from the sun.

Never mix warm and cool cream. Cool the freshly separated cream to about the same temperature as the cream you wish to mix it with. Do not put freshly separated cream into an ice box or refrigerator until first cooled in water to get rid of the animal heat. Frequent stirring of cream while cooling will aid in removing the animal heat. It also is good practice to stir the cream at least three times daily to prevent lumps forming and also to give the cream a uniform body.

Cream should contain from thirty-two to forty-five per cent butter-fat. Thin cream deteriorates more rapidly than thick cream. However, if the cream is too thick there is considerable waste from transferring from one can to another at the creamery.

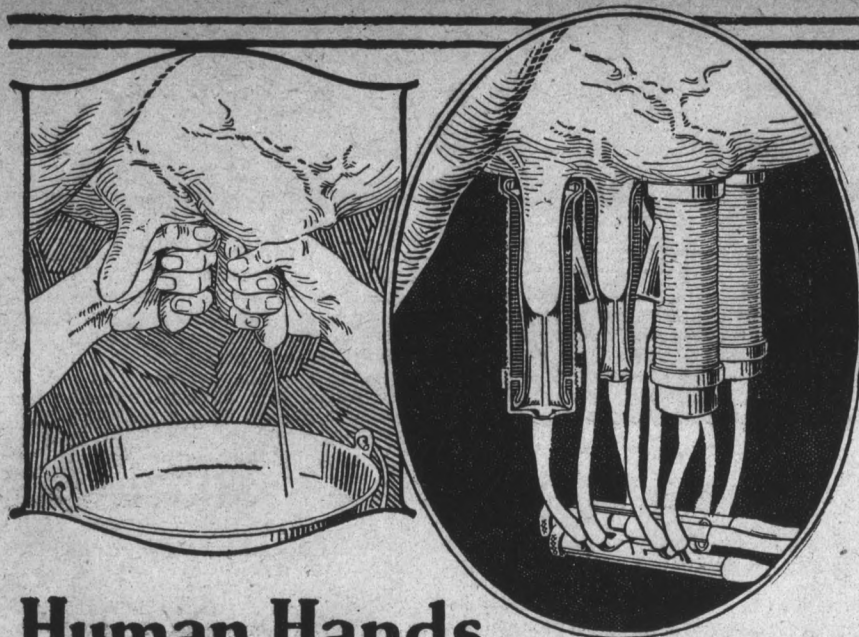
All cans and utensils used in handling cream should be thoroughly washed and scalded. Do not keep the cream tightly covered at any time. While storing cream keep it in a clean, well-ventilated place.—L. C. Reynolds.

## FRANCISCO FARM NOTES.

(Continued from page 688). offering opportunity for the development of high-class seeds. The growth and success of this organization has been phenomenal. The present efficient secretary, Mr. H. C. Rather, tells in a very interesting manner, of the present status of the organization, in a recent issue of this paper. It seems to me that with the very excellent system of cooperation now working, whereby the Michigan Agricultural College selects and propagates seeds of high-producing ability, the members of the Michigan Crop Improvement Association growing them in quantities, and the Michigan State Farm Bureau Seed Department selling them, the farmers of Michigan who care to avail themselves of the opportunities offered in growing pedigreed seeds hold an enviable position indeed, among the whole body of farmers.

Of course, not all farmers are qualified or have the inclination to become breeders of pure-bred seeds or live stock, but for him who cares to shoulder the added responsibilities, who will conscientiously attend to the endless amount of detail work, who will give the blood a chance, the blood will tell. He will make of his farm a business institution, and he need no longer take the other man's dictum on the price of his products.

Lime-sulphur glue is easier to make and to apply than self-boiled lime-sulphur, and it is said to get brown rot and scab and to color the fruit just as well. Ask the county agent about it.



## Human Hands Can't Compete with This

A user of a De Laval Milker recently said: "I would no more attempt to milk cows without a De Laval than I would try to raise wheat without a binder."

You know that hand labor can't compete with machinery—and yet there is no machine a dairyman can own that will save so much time as a De Laval Milker. Figure up what cutting your milking time in two, twice a day every day in the year, amounts to; and then compare this with the time any other machine you own will save.

But this is just one reason for using a De Laval Milker. It milks cows in the way they like best—vigorously, yet with a gentle, soothing and uniform action which

stimulates the milk-forming organs to greatest production. That's why De Laval users are practically unanimous in their statements that they get more milk with it than by hand milking.

But that isn't all; with the De Laval cleaner milk can also be produced—and cleaner milk is worth more money.

There are thousands of De Laval Milkers in use which are giving perfect satisfaction. Many users state they would sell their cows and go out of the business if they couldn't have a De Laval.

If you are milking ten or more cows by hand you are losing enough to pay for a De Laval. Send for complete information.

## The De Laval Separator Co.

NEW YORK CHICAGO SAN FRANCISCO  
165 Broadway 29 E. Madison St. 61 Beale St.



Sooner or later you will use a  
**De Laval**  
Milker and Cream Separator



50 Head

Inaugural Hereford AUCTION  
St. Clair, Michigan  
Wednesday, June 14th

40 YOUNG BULLS (Most to them Ready for Service)  
10 OPEN & BRED HEIFERS (Some Have Calves at Side)

T.B. Test and Registration Papers with each Animal. Consigned by up-to-date MICHIGAN BREEDERS that under direction of T. F. B. Sotham & Sons, produce peerless Hereford Baby Beef, to melt in the mouths of delighted consumers patronizing butchers who buy it of DETROIT PACKING CO. Every progressive farmer who understands will attend Hike & Sale to wise-up on this movement.

HEREFORD HIKE JUNE 13th.  
HELP BUILD THIS SOLID FOUNDATION.  
GIVE THE NEW PLAN FAIR TRIAL.  
NO FOOL FADS OR FAKES.  
NO AVERAGE TO BEAT.

Just prime cattle, true Herefords, of the best bloods of Earth's best beef breed; Fairfaxes, Disturbers, Line-bred Anxieties, etc. topped from herds of honest breeders to sell honestly to honest buyers, and benefit all concerned.

The sale managers will be glad to send you catalog and full particulars. Write right now. Address  
**T. F. B. SOTHAM & SON,** St. Clair, Michigan

## CATTLE

BIDWELL SHORTHORNS  
BUY A BULL

that will put weight on your dairy calves—the difference will soon pay for the bull. Now selling good Scotch and Scotch-topped yearlings, reasonably priced. We guarantee every animal to be a breeder. Federal Test. One hour from Toledo, Ohio, N. Y. C. R. R.

**BIDWELL STOCK FARM,**  
Box D, Tecumseh, Michigan

## Richland Shorthorns

Annual Sale June 21st at the farm. Thirty Heifers—Fifteen Bulls. Best lot we have ever offered. Write for Catalog. Plan to attend. Special prices on Bulls in order to make room for this Sale. Office at

**C. H. Prescott & Sons,**  
Herd at Prescott, Mich. Tawas City, Mich.

**FOR SALE.** One shorthorn heifer and calf. Price \$200.  
**WARD W. DUNSTON,** Clarkston, Mich.

## FOR SALE

## Polled Shorthorn Cows &amp; Heifers

in calf and calf by side. Also a few young bulls. Herd headed by Victor Sultan and Royal Nonparell

We can please you in richly bred cattle with quality at farmers' prices.

**GEO. E. BURDICK, Mgr.**  
Branch County Farm, Coldwater, Mich.

## Claradale Milking Shorthorns

We invite the discriminating breeder and farmer, who is in need of a real bull, that will transmit the combine qualities, beef, milk, high in butter fat, type, character, beauty. We do state official milk testing. Come and see us or write for circulars and reasonable prices. F. W. Johnson, Custer, Mich., Mason Co. Box 26

**Milking** Shorthorns of best Bates breeding, bulls, cows and heifers for sale.  
**E. H. KURTZ,** Mason, Mich.

**Don't you want** a good Shorthorn, priced in keeping with the times?  
**ROBERT MARTIN,** R. 3, Woodland, Mich.

## HOGS

## BERKSHIRES

C. C. COREY,  
2428-30 First National Bank Building,  
Detroit, Michigan

## WHITNEY FARMS DUROCS

Well grown fall gilts, either bred or open. A most excellent line of spring pigs at farmers' prices. Several extra fine boars. Stock is insured. Pedigrees and prices from Whitney Farms, Whitney, Mich.

## Brookwater Duroc Jerseys

Gilts bred for summer farrow. Only a few left. Fall gilts—open. Very good. Fall boars. Large enough for light service. Prices reasonable. Mail orders a specialty.

**BROOKWATER FARM,**  
H. W. Mumford, Owner J. B. Andrews, Manager.  
ANN ARBOR, MICHIGAN



Spring pigs by Walt's  
Orion, First Sr. Yearling  
Detroit, Jackson, Gd. Rapids and Saginaw 1919  
**Phillips Bros, Riga, Mich.**

## Sows &amp; Gilts

bred for July, Aug. and Sept. farrow for sale at reasonable prices. Also a few high class spring and fall boars ready for service and one 2 yrs. old boar, a grandson of Panama Special, at a bargain if you can use him. We guarantee satisfaction. Write for prices and description or better come and see them. Visitors always welcome. Sows bred for spring farrow all sold.  
**Thos. Underhill & Son,** Salem, Mich.

Collinsdale Duroc Farm, Lyons, Mich., R. 1.  
Greatest Blood Lines in Duroc Hogs

Herd Boars by Great Orion Sensation, Pathfinder, Duration and Great Wonder I Am. Now have for sale three yearling boars by Wolverine Sensation. For sale at all times, sows, gilts or boars registered. Sold under a positive guarantee and worth the money. Write for prices.  
**L. A. BURHANS, OWNER**

## AM SELLING

a great offering of bred Duroc sows and gilts March 4th. They are mostly bred to Orion Giant Col., son of Ohio Grand Champion. Get on mailing list for catalog.  
**W. C. TAYLOR,** Milan, Mich.

## Woodlawn Farm Duroc Hogs

A well kept herd, best of blood lines, with size and breeding qualities, stock of all ages for sale at reasonable prices.  
**W. E. BARTLEY,** Alma, Mich.

## Michigana Farm Durocs

Boars, open and bred sows and spring pigs. Satisfaction guaranteed.  
**MICHIGANA FARM,** Pavilion, Mich.

**Pure-Bred** Duroc Jersey Hogs: we usually have good boars and sows of all ages for sale. Reasonable prices. Large Research Farm, Box A, North End, Detroit, Mich.

**DUROC JERSEYS:** A few choice bred gilts for sale.  
**CAREY U. EDMONDS,** Hastings, Mich.

## Westview Duroc Bred Sows

all sold. Have two spring boars left at a reasonable price. Will book orders for April & May Pigs.  
**ALBERT EBERSOLE,** Plymouth, Mich.

**Duroc Jersey** Bred sows and gilts bred for Aug. and Sept. farrow. A few choice ready for service boars. Shipped on approval. Satisfaction guaranteed.  
**F. J. Drott, R. 1, Monroe, Mich.**

**Duroc Jerseys** heavy boned, low down type breeding stock for sale.  
**CHAS. BRAY,** Okemos, Mich.

**Duroc Jerseys** Bred Gilts all sold. Now offering some choice fall boar pigs large enough for spring service.  
**RUSH BROS.,** Romeo, Mich.

**Duroc-Jersey** Mar. and Apr. pigs, big bone, big litters \$10 and \$15 registered, satisfaction or money back. Special prices to Boy's Pig Clubs.  
**B. E. KIES,** Hillsdale, Mich.

**DUROC-JERSEYS** Do you want a good Pathfinder boar pig?  
**E. D. HEYDENBERG,** Wayland, Mich.

## BIG TYPE CHESTER WHITES

The prize winner kind from the best prize winner bloodlines. Early developers, ready for market at six months old. I have started more breeders on the road to success than any man living. I want to place one hog in each community to advertise my herd. Write for agency and my plan.  
**G. S. BENJAMIN,** R. F. D. 10, Portland, Mich.

**CHESTERS** We are all sold out of Boar, Bred Sows and Gilts. For spring pigs write **WEBER BROS.,** Royal Oak, Mich., 10 Mile and Ridge Rd., Phone 408.

**Big Type** Chester White March boars. Sired by Model's Giant and Hill's Big Buster. Out of granddaughters of Alfalfa Wonder.  
**LUCIAN HILL,** Alkton, Mich.

**Chester Whites** Spring pigs by Monster, Raleigh B. Choice Prince and others. Money back guarantee. Fred L. Bodimer, Reese, Mich.

**Chester Whites** bred gilts and fall pigs of excellent quality and breeding. Satisfaction guaranteed.  
**F. W. Alexander, Vassar, Mich.**

**O. I. C. & Chester White** Swine. Strictly Big Type with QUALITY. We are sold out of everything but a few choice fall gilts. Will book orders for Spring pigs. Of the best Prize winning blood lines. Will ship C. O. D. And record them free in purchaser's name.  
**NEWMAN'S STOCK FARM,** R. 4, Martlette, Mich.

**O. I. C.** fall gilts ready to breed. Orders booked for spring pigs. Write or call and see our herd. We ship C. O. D. and Register free.  
**GEO. M. WELTON & SON,** Middleville, Mich.

**O. I. C.** Gilts to farrow in Aug. and Sept. and March boar pigs.  
**CLOVERLEAF STOCK FARM,** Monroe, Mich.

Additional Stock Ads. on Page 699



# LATEST MARKET REPORTS

## GRAIN QUOTATIONS

Monday, June 5.

### Wheat.

Detroit.—Cash No. 2 red \$1.22; No. 2 mixed and No. 2 white \$1.20; July \$1.21.

Chicago.—No. 2 red \$1.17½; No. 2 hard \$1.14½@1.15½; September at \$1.13½.

Toledo.—Cash \$1.24; July \$1.16.

### Corn.

Detroit.—Cash No. 2 65c; No. 3 yellow 53½c.

Chicago.—No. 2 mixed 58½@59c; No. 2 yellow 58½@59½c.

### Oats.

Detroit.—Cash No. 2 white 42½c; No. 3, 40½c.

Chicago.—No. 2 white 37@41c; No. 3 white, 35¼@39c.

### Beans.

Detroit.—Immediate and prompt shipment \$9.25.

New York.—Choice pea beans \$9.50; red kidneys \$9@9.25.

Chicago.—Michigan choice, hand-picked \$8.50@8.65; red kidney according to quality \$8.50.

### Rye.

Detroit.—Cash No. 3, \$1.

Chicago.—94c.

### Seeds.

Detroit.—Prime red clover, cash at \$13.75; alsike \$11.50; timothy \$3.25.

Toledo.—Prime red clover \$13; alsike \$11.50; timothy \$2.70.

### Feeds.

Detroit.—Bran at \$28; standard middlings \$28; fine middlings \$31; cracked corn \$29.50; coarse corn meal \$28; chop \$25 per ton in 100-pound sacks.

### Hay.

Detroit.—No. 1 light timothy \$22.50@23; standard and light mixed \$21.50@22; No. 2 timothy \$20.50@21; No. 1 clover mixed \$17.50@18; No. 1 clover \$17@17.50; rye straw at \$14@14.50; wheat and oat straw \$13.50@14 per ton in carlots.

## WHEAT

With prices the lowest in five months and the disturbing influence of May contracts removed, the demand for wheat shows some improvement. Receipts which have been extremely heavy are beginning to fall off. The run during June is certain to be far less than that of May and if the demand is at all active, the market should practically hold its present level during the month. Unofficial crop reports indicate a yield of a total of 855,000,000 bushels compared with 795,000,000 bushels harvested last year. European crop reports are both good and bad. The French wheat crop condition on May 1 was estimated at 58 per cent, the lowest in years; Italy has had drouth; the United Kingdom needs dry, warm weather and the German wheat and rye crops are below normal condition. The European acreage also shows a decrease and the crop is not expected to be as large as last year.

## CORN

The corn acreage will be slightly less than last year according to comprehensive private reports. Owing to wet weather some planting is still to be done and the outcome is still in doubt. The after-planting run of corn is on without an equivalent broadening in the demand. Prices are slightly lower but the loss has been small. Exports are increasing again although the movement to Europe from Argentina also is heavy.

## OATS

The oats acreage shows a decrease of about seven per cent according to unofficial returns. The condition of the crop is lowest at this season in a number of years with the period of greatest deterioration still to be met. The crop is estimated at about 1,250,000,000 bushels compared with 1,060,000,000 bushels harvested last year.

## RYE

The rye crop is estimated unofficially at 83,000,000 bushels. This is much more than domestic requirements for flour and means a large surplus either for export or for feed. The supply of old crop rye is still fairly large but exports are running heavy and stocks are being depleted.

## FEEDS

Bran and middlings have declined sharply in the last ten days due to an indifferent demand. Production is not above normal for this time of the year. Cottonseed and linseed meals are lower also, although stocks are light. Only corn feeds show firmness.

## HAY

A large part of the receipts of hay are of poor quality and are not wanted. Prices on the best grades are slightly easy but the demand is practically equal to the supply.

## POULTRY AND EGGS

Receipts of eggs are declining although they are relatively above the average for this time of the year and the surplus for storage is large. Storage operators are anxious to buy all of the northern eggs arriving but are neglecting southern stock. Prices, although slightly lower, have changed but little for a number of weeks. The June 1 storage report is expected to make a new record for that date.

Chicago.—Eggs, fresh firsts at 23@23½c; ordinary firsts 21½@22. Live poultry, hens 24½c; broilers 35@40c; roosters 14c; ducks 22@30c; geese 14@25c; turkeys 25c.

Detroit.—Eggs, fresh candled and graded 24@25c. Live poultry, broilers 45@50c; heavy hens 26@27c; roosters 15c; geese 13c; ducks 20@22c; turkeys 30c.

## BUTTER

Although storage of butter in a small way has been going on for two weeks previously, large scale operations did not begin until the first of June and storage holdings are considerably less than at this time a year ago. Since a June stamp on stored butter is preferred and the butter now arriving has been showing full grass flavor suitable for longtime storage buying for this purpose is expected to be brisk for the next few weeks. With

a good demand for immediate consumption, demand for storage and a small amount of butter purchased by speculators for a short turn, the market strengthened at the close of last week after a moderate decline in the first half of the period.

Prices for 92-score fresh butter were: Chicago 35c; New York 36c. In Detroit fresh creamery in tubs sells for 33½@34½c per pound.

## POTATOES

Weekly shipments of new potatoes now exceed the movement of old stock although the latter is abundant for this season of the year. The market is rather weak with the demand only fair. Northern sacked round whites are quoted at \$1.25@1.30 f. o. b. shipping points.

## ONIONS

High prices for onions last year have stimulated production. The commercial late onion acreage estimate shows an increase of 15 per cent over last year.

## BEANS

The market is firm on all sorts of white beans, especially pea and medium. The New York market is not brisk but it is getting orders from the outside which makes the feeling good. Red kidneys are steady while limas are strong.

## WOOL

Boston reports that the wool market has slowed down in the last few days although prices have been maintained. Producers and country dealers are extremely optimistic but manufacturers are endeavoring to make out that the advance is being pushed too far. No one denies, however, that the supply is small and the demand is at least up to normal. The American Woolen Company, the leading factor, repriced its goods, especially worsteds, in line with the higher cost of raw material. Latest reports from Australia and the

Argentine tell of further advances in those markets. Prices abroad are too high to permits imports of any consequence. The Boston market is quoted as follows:

Ohio and Pennsylvania fleeces, delaine unwashed 52@54c; fine unwashed 40@42c; half-blood combing 48@50c; three-eighth blood combing 44@46. Michigan and New York fleeces, delaine unwashed 40@50c; fine unwashed 38@40c; half-blood unwashed 46@48c; three-eighth blood unwashed 43@45c; quarter-blood unwashed at 42@43c.

## DETROIT CITY MARKET

The market was good for green onions and strawberries but there was a light demand for horseradish, potatoes, poultry, eggs and rhubarb. The prices are: Asparagus \$1@2 per dozen bunches; eggs 28@38c; green onions 40@60c per dozen bunches; potatoes \$1.10@1.35 per bushel; poultry 26@35c per pound; radishes 50c@1.75 per bu; rhubarb 25@40c per dozen bunches; strawberries \$4@8 per 24-qt. case.

## GRAND RAPIDS

Liberal supplies of strawberries were offered on the Grand Rapids markets early this week and prices sagged sharply to \$1.75@2 per case of 16 quarts. Canning operations in the fruit belt commenced Monday and the growers were hopeful sales to the factories would have a tendency to stabilize the market. The canners are paying from \$1@1.25 a case, crates and boxes returned. Supplies of old potatoes were moderate and selling around 75c a bushel. Vegetables were easier, the supply of radishes exceeding the demand. Outdoor lettuce is steady at 6@8c per pound. First green peas brought \$7 a bushel but eased gradually as the supply increased. Early sweet cherries started moving late last week at \$4 a case of 16 quarts, but as the offerings increased this week the prices began tapering. Spring lambs were easier at 12@13c per pound, but other live stock was steady to strong, hogs in good demand at 13@14c dressed. Grass cattle are expected soon and butchers say a slump in quotations may follow. An effort is being made to organize an abattoir company here and stock is now being subscribed in a \$100,000 project.

## GOOD MARKET FOR GOOD CATTLE.

Distinct widening of the spread in prices between common and choice cattle featured the last week. Bulls, canners and cutters, and common and medium butcher cows and heifers trended lower. The supply of common steers remains abnormally small and prices were practically unchanged but revision downward in that sphere can be expected within a month.

Runs from day to day carry a liberal sprinkling of heavy steers but discrimination against them is slight. They will be practically cleaned up in a few weeks so that no fear exists of a repetition of last year's history when the liquidation of long-fed steers held back for the market to recover was continued until Christmas. A generous supply of yearlings is reported on the horizon but if not sold till ripe they will find a warm welcome. Otherwise they will come into competition with grassers a little later on.

Veal calf prices moved higher again last week with the supply light and the dressed veal market sharply higher in the east. Northern markets for calves should show improvement fairly steadily, but southern points can look forward to a heavy supply most of the summer.

## COMING SALES.

Herefords.—June 14, T. F. B. Sotham & Son, St. Clair, Mich.

Shorthorns.—June 21, H. C. Prescott & Sons, Tawas City, Mich.

On big lawns, a spray of iron sulphate will wipe out dandelions. On smaller tracts, dig them out, cutting deep, and put a few drops of gasoline on the spot to kill the roots.

## Live Stock Market Service

Monday, June 5.

### DETROIT

#### Cattle.

Receipts 820. Culls and bulls dull; all others strong.

Choice steers	7.50@8.90
Handyweight butchers	8.00@9.00
Mixed steers and heifers	7.50@8.00
Handy light butchers	7.00@7.75
Light butchers	6.00@7.00
Best cows	5.50@6.50
Butcher cows	5.00@5.50
Common cows	3.25@4.00
Canners	2.50@3.25
Choice light bulls	6.00@6.50
Bologna bulls	5.00@5.25
Stock bulls	3.50@4.50
Feeders	6.00@7.25
Stockers	5.50@6.50
Milkers and springers	45@75

#### Veal Calves.

Receipts 673. Market steady.

Best	12.00@12.50
Culls and common	6.00@11.50

#### Hogs.

Receipts 2301. Market strong.

Pigs	11.00@11.10
Mixed hogs	11.10
Roughs	8.85
Extreme heavies	9.50@10.50
Stags	5.75

#### Sheep and Lambs.

Receipts 537. Market is steady on dry-fed, very dull on grassers.

Best lambs	13.00@13.25
Fair lambs	10.00@11.00
Light to common	5.00@8.00
Fair to good sheep	5.50@6.00
Culls and common	1.50@2.50

### CHICAGO

#### Hogs.

Estimated receipts today are 32,000; holdover 4,463. Market active, mostly 10@15c higher; in spots 25c higher. Bulk of sales \$10.10@10.75; tops at \$10.85; heavy 250 lbs up \$10.30@10.50; medium 200 to 250 lbs \$10.45@10.75; light 150 to 200 lbs at \$10.70@10.80;

light lights 130 to 150 lbs at \$10.35@10.70; heavy packing sows 250 lbs up \$9.35@9.60; packing sows 200 lbs up \$9@9.35; pigs 130 lbs down \$9.50@10.45.

#### Cattle.

Estimated receipts today are 17,000. Market is active and 15@25c higher. Beef steers medium and heavy weight 1100 lbs up \$9.10@9.60; do medium and good \$8.10@9.10; do common \$7.35@8.10; light weight 1100 lbs down \$8.70@9.40; do common and medium \$7.35@8.70; butcher cattle heifers \$5.90@8.75; cows \$4.35@7.35; bulls bologna and beef \$4@6.40; canners and cutters cows and heifers \$3@4.35; do canner steers \$4.25@5.75; veal calves light and handyweight \$8.75@10.75; feeder steers \$6.15@8.60; stocker steers \$5.85@7.85; stocker cows and heifers \$4@6.

#### Sheep and Lambs.

Estimated receipts today are 22,000. Market steady to 25c lower. Lambs 84 lbs down \$9.75@12.90; do 85 lbs up \$9.75@12.85; do culls and common at \$7@9.50; feeder lambs at \$13@14.50; spring lambs \$5.75@8.50; ewes \$3@7; ewes, cull and common \$1.50@3.

## BUFFALO

#### Cattle.

Receipts 2,600. Market is uneven; steady to 10c higher. Shipping steers at \$8.25@9.35; butchers \$7.75@8.75; yearlings \$8.75@9.55; heifers \$5.75@8; cows \$2.50@6.75; bulls at \$4@5.75; stockers and feeders \$6@7; fresh cows and springers \$4@12.00.

Calves, receipts 2,800. Market 50c higher at \$3@12.50.

#### Hogs.

Receipts 16,600. Steady to 10c higher. Heavy \$11@11.25; mixed and yorkers \$11.25@11.35; light yorkers and pigs \$11.35; roughs \$9@9.25; stags at \$5@6.50.

#### Sheep and Lambs.

Receipts 3,000. Market is steady. Lambs \$10@16; yearlings \$5@12.50; wethers \$7.50@8; ewes \$2@6; mixed sheep \$6.50@7.



## 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, Shenandoah, 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 .....

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

### CARE OF DUCKS.

I would like to raise ducks. Please tell me how to care for them till they are grown.—E. F.

A good ration for young ducklings is a mash made of two parts cornmeal and one part bran, to which is added a sprinkling of grit and five per cent beef scrap. They should have plenty of green food, such as lawn clippings or vegetables, and given a range where they can gather green food. Give fresh water in dishes deep enough so they can cover their nostrils with water when drinking.

Shade should be provided for ducklings. A lack of protection from the hot sun causes severe losses during the summer. The old ducks can be given a ration of equal parts of bran, cornmeal and boiled vegetables, and ten per cent beef scrap. The mash is usually given at night and morning. A scratch grain of either cracked corn or wheat and oats can be given at noon. During the laying season a good ration for breeding ducks consists of equal parts of low-grade flour, bran, cornmeal, vegetables and twelve per cent beef scrap.

A good range is rather essential if ducks are raised at a moderate cost. A small body of water is helpful because of the natural food of ducks, such as grasses and insects which will be found in such a place. Water is not necessary, however, except that it must be supplied abundantly for drinking purposes.

### PUGNACIOUS ROOSTER.

Is there anything I can do with a rooster that fights me when I go into the coop? I don't like to kill him.—E. S.

When a rooster is pugnacious and even fights the owner, it is usually a sign of great vigor and the bird is worth keeping as a breeder as long as he is useful for that purpose. You might trim the spurs of the bird and give him moderate lessons in keeping his place. But it would not pay to break his spirit by using extreme measures.

### VETERINARY.

Sore Throat.—We have an orphan lamb four weeks old which has a bad cough and it seems to have difficulty in swallowing. E. E. B., Linden, Mich.—Give the lamb ten drops of paragoric at a dose three times a day, also rub throat with camphorated oil daily.

Feline Diphtheria.—A short time ago we had five seemingly healthy cats, but one after another sickened and now they are all dead. None of them were ill more than two days. We believe this sickness must be infectious. Is there a remedy? H. K., Hudsonville, Mich.—Feline diphtheria is an infective disease of cats, one of the most fatal that affects cats, and very similar to human diphtheria. Treatment: At the outset of the symptoms I usually give a full dose of diphtheria antitoxin, hypodermically. Also give half grain of calomel. The antitoxin may be repeated with advantage in twenty-four hours after the first dose and if necessary, and I find it good practice to increase this second dose. This is the only remedy and it proves very effective, but don't delay treatment. Clean and disinfect their sleeping quarters.

### Farms and Farm Lands

#### 400-Acre Michigan Farm With Crops, 4 Horses, 10 Cattle,

Poultry, hogs, implements, machinery, vehicles, quantity household furniture if taken soon; handy RR station, advantages; 140 acres rich tillage; 75-cow pasture; about 1500 cords wood; 100 apple trees, etc.; excellent 8-room house, 3 barns, tenant house, etc.; insurance \$5400. Owner retiring, \$6800, gets all, part cash. Details page 90 Illus. Catalog 1200 Bargains FREE. STROUT FARM AGENCY, 814 BC Ford Bldg., Detroit, Mich.

For Sale 100 acres of land with good buildings, only three miles from Clare, the best town in Michigan, will sell for \$3000, give possession at once with all crops and live stock, \$2000 down, the bal. on long time payments. If you want a well located farm at a bargain, write J. S. BICKNELL, Clare, Mich.

Want to Hear from owner having bearing apple orchard land for sale. Macomb, Oakland or near by counties. A. L. FOSTER, 1209 West Forest Ave., Detroit, Mich.

WANTED To hear from owner of land for sale. O. K. HAWLEY, Baldwin, Wisconsin.

## Richland Stock Farms

### SECOND

# Annual Shorthorn Sale

Wednesday, June 21st at 1 o'clock Central Time

44 Head of Choice Shorthorns--30 Heifers--14 Bulls

Sired by such noted bulls as Imported Lorne—Imported Newton Champion—Sterling Supreme—Imported Rodney—Anoka Champion—King's Secret and others. A breeder's offering from one of the top herds of this continent. Heifers with calves at foot and others bred to the above sires. Show cattle of rare worth in any show ring. The best of pedigrees. All sold fully guaranteed and subject to sixty day retest. The sale will be held at the Richland Stock Farms on the M-70 pike three miles east of the town of Prescott and six miles west of Whittemore. Special train will leave Bay City at 9 A. M. the morning of the sale via the Detroit & Mackinac R. R. direct for the farm and will return at close of sale. Buy round trip tickets. Write for catalog and plan to attend. Do not miss this important event—the greatest Shorthorn Sale ever held in this State. The cattle are a valuable lot and foundation material has been selected from this herd to go to all the large herds of this country and also So. America. Think what foundation material of this caliber will do to your herd. This is the time to buy and cattle bought in this sale will prove valuable investments. Remember the date and the place.

Richland Stock Farms, Prescott, Mich., June 21, 1922

## C. H. Prescott & Sons

Tawas City, Mich.

### DON'T CUT OUT A Shoe Boil, Capped Hock or Bursitis

FOR

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TRADE MARK, REG. U.S. PAT. OFF.

will reduce them and leave no blemishes. Stops lameness promptly. Does not blister or remove the hair, and horse can be worked. \$2.50 a bottle delivered. Book 6 R free.

ABSORBINE, JR., for mankind, the antiseptic liniment for Boils, Bruises, Sores, Swellings, Varicose Veins, Allays Pain and Inflammation. Price \$1.25 a bottle at drug-gists or delivered. Will tell you more if you write.

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Commission Merchants. Dressed Beef, Hogs, calves, Poultry, Live & Dressed, Provisions, etc. Correspondence Solicited. Ref. Wayne County & Home Savings Bank. Bradstreet, Detroit, Mich. Cherry 7654

### FRUIT SHIPPERS FOR HIGHEST PRICES

Quick Returns Consign to The E. L. Richmond Co., Detroit, Est. 1893.

### HOGS

O. I. C. and Chester White Spring Pigs from prize-winning stock of the most popular blood lines. We ship C. O. D., register in buyer's name and guarantee satisfaction. John C. Wilk, Alma, Mich.

O. I. C. Bred gilts all sold. Orders booked for spring pigs. A. J. BARKER & SON, Belmont, Mich.

O. I. C. Bred sows all sold. Booking orders for spring pigs. H. W. MANN, Dansville, Mich.

O. I. C. pigs at very reasonable prices for June and July shipment. C. J. THOMPSON, Rockford, Mich.

O. I. C's. last fall gilts due Aug. and Sept. Spring pigs not akin. Big Type. 1-2 mile west of Depot. Citizen Phone. OTTO B. SCHULZE, Nashville, Mich.

### L. T. P. C. Fall Boars

at bargain prices. Fall gilts open or with breeding privilege. Write or see them. A. A. FELDKAMP, R. 2, Manchester, Mich.

Big Type Poland China Spring boars at \$15 each. Sired by Clansman Buster and Hovers Liberator. Also gilts bred for Sept. farrow at \$40 each. All stock shipped on approval. Come and see them or write DORUS HOVER, Akron, Mich.

L. T. P. C. Boars ready for service also gilts. \* bred sows out of best of blood lines. They are right, so is the price. Nut sed. M. M. PATRICK, Grand Ledge, Mich.

For 30 years we have been breeding Big Type Poland China hogs on the same farm. We have sold over 100 head each year for the last 15 years for breeding purposes. There's a reason! The farmer has found our kind very profitable. We now offer 25 sows and gilts bred for summer farrow \$30-\$50. JNO. C. BUTLER, Portland, Mich.

L. T. P. C. Gilts bred for Spring litters all sold. Am offering very choice Summer Gilts bred for June and July litters also Fall Boars and Spring Pigs. Clyde Fisher, R. 3, St. Louis, Mich.

### L. T. P. C. \$15, \$20 & \$25

Spring pigs with real breeding at the above prices. We are also offering a few choice fall gilts bred for summer farrow. Hart & Cline. Address F. T. HART, St. Louis, Mich.

### Large Type P. C.

Largest herd of individuals in state. Everything sold at present. Spring pigs are ready to ship. I thank you. W. E. LIVINGSTON, Parma, Mich.

Big Type P. C. some very choice boars double im-Bmune, out 1100 lb. sire and mammoth sows from Iowa's greatest herds. E. J. Mathewson, Burr Oak, Mich.

### BIG TYPE POLAND CHINAS

Bred gilts for sale. Choice individuals of rich breeding at prices within your reach. Come see them or write. WESLEY HILE, R. 6, Ionia, Mich.

Large Type Poland Chinas. Some real classy stock carrying Mastodon Clansman and Yankee blood. Everything registered, prices right. ERNEST E. REA, Hillman, Mich.

Large Strain P. C. nothing more for sale at present. L thank you. H. O. SWARTZ, Schoolcraft, Mich.

Big Type P. C. Boar pigs that can't be beat in Mich. Bred by Big Bob Mastodon and Peter A. Pan, 50 head to pick from. C. E. Garnant, Eaton Rapids, Mich.

BIG TYPE Poland Chinas, leading strains at lowest prices. Both sex, all ages, and bred sows and gilts. G. A. BAUMGARDNER, R. 2, Middleville, Mich.

LEONARD'S B. T. P. C. Herd headed by Leonard's Liberator. Orders booked for boar pigs at weaning time. Call or write E. R. LEONARD, St. Louis, Mich.

FOR SALE. Large type Poland China pigs, \$15 each while they last. WARD W. DUNSTON, Clarkston, Mich.

Hampshires book your order for spring boar pigs now. A few gilts, now ready for summer farrow. JOHN W. SYNDER, R. 4, St. Johns, Mich.

Hampshires For sale. Fall boars, fall gilts bred to farrow in Sept., spring pigs. I. R. BAUSERMAN, R. 1, Three Rivers, Mich.

### SHEEP

## A Real Bargain at Kope Kon Farms

We offer 40 big healthy yearling Shropshire and Hampshire Rams all registered at \$25.00 each. Come or write while the picking is good. S. L. WING, Coldwater, Mich.



## Berndt Nelson MADE MONEY SO CAN YOU

Before you decide upon your next thrasher, read what this man did with a 36 x 60 Red River Special. He made money with it because it threshed fast and threshed well. Berndt Nelson, of Robinson, North Dakota, writes as follows:

"The first year I had this outfit there was a fair crop and I cleaned up above all expenses, \$2,000.00."

You cannot make money with an incompetent outfit.

## Red River Special

with its Big Cylinder, "Man Behind the Gun" and Beating Shakers is a thrasher with capacity for big and fast work and Saves the Farmer's Thresh Bill by wasting so much less of his grain and time.

A threshing outfit that is built to make money for both the thrasher and farmer. The only thrasher that separates by force.

### It Beats Out the Grain

Write for Free Circulars

Nichols & Shepard Co.

(In Continuous Business Since 1848)  
Builders exclusively of Red River Special  
Thrashers, Wind Stackers, Feeders, Steam  
and Oil-Gas Traction Engines.

Battle Creek, Michigan

## CAPITAL BRAND PAINTS

No better paint made. Compare our formula with any other.

### OUTSIDE WHITE

75% Pure White Lead  
20% Pure Zinc Oxide  
5% Magnesia Silicate  
90% Pure Refined Linseed Oil  
10% Cooked Oil and Shellac Drier.

### OUTSIDE COLORS

70% Pure White Lead  
20% Pure Zinc Oxide  
10% Ground Colors  
90% Pure Raw Linseed Oil  
10% Cooked Oil and Shellac Drier.

We guarantee our paint. Write for prices and free color card. Agents wanted. Excellent proposition in unoccupied Territory.

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## Saginaw Silos

Represent the largest, most complete line of Silos—the result of 20 years of silo building. The newest, most scientific ideas are applied in Saginaw Silo construction. You will be surprised at the low prices. Saginaw Silos soon pay for themselves. Write for full information today.

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## ATWATER KENT

SCIENTIFIC IGNITION  
For FORD All Models  
Equip your Ford with the same high quality ignition used as standard equipment on America's foremost cars. Write for Literature  
Atwater Kent Mfg. Co., Dept. Q, Phila.  
SYSTEM COMPLETE INCLUDING CABLES AND FITTINGS Price \$11.75

## Radio Department

Conducted by Stuart Seeley

### THE SIMPLEST RECEIVING SET.

AS stated last week, a receiving set consists of two parts, the tuning apparatus and the detector. The simplest receiving set that will work satisfactorily is one in which the tuning apparatus is a single coil of wire and detector is of crystal type.

The coil should be wound on a cardboard tube about three and one-half inches in diameter. Almost any size of magnet wire from No. 16 to No. 24 will work satisfactorily and one hundred turns will give a wavelength of approximately 600 meters, which is all that is required in most cases. Start the winding one-half inch from the end of the tube and cut the tube off one-half inch beyond the last turn. Shellac the coil well and then scrape the insulation with sandpaper from two quarter-inch strips the length of the coil. This is for the sliders to make connections. The two strips should be ninety degrees apart or, in other words, one should be just one-quarter of the way around the coil from the other. Use the sandpaper only enough to bare the top of each wire. Mount the coil between two square blocks of wood cut from an inch board. It is best to buy the sliders and brass rod at some radio supply store, although with a little ingenuity you can rig up some home-made ones that will work very well. Mount three binding posts on one end of the end pieces. Connect the under side of one to one end of the winding (leaving the other end free) and connect one to each rod for the sliders.

The detector is simply and easily made. Cut a piece of sheet metal, brass is preferred, four inches long and one inch wide. Taper the ends to one-half inch then bend the piece in the form of a U about one inch flat across the bottom. Notch the top of each upright then bend them down to form jaws to hold the crystals. Screw this piece down to a board on which two binding posts are mounted. Connect one binding post to the brass piece and under the other fasten one end of a very fine wire (about No. 30), two or three inches long. This wire is to bend over so that the opposite end will rest on the face of the crystal.

The only other piece of apparatus needed beside the 'phones (they must be purchased) is the 'phone condenser. Paste two four-inch squares of tinfoil, one on either side of a six-inch square of oiled paper. Place the bared end of an insulated wire against each piece of tinfoil, cover each side with another sheet of oiled paper and roll them all up together, making sure that neither the pieces of tin foil nor the wires connected to them make contact with each other. Wrap the whole thing with tape or string, and shellac. Mount it on a square piece of wood with two binding posts, one for each wire.

To connect the apparatus up, run the aerial wire to one of the slider binding posts of the coil and the ground wire to the post which connects with one end of the winding. Connect one of the terminals of the detector to the other slider post and the remaining detector terminal to one side of the condenser. The other side of the condenser is connected to the same post to which you have already connected the ground lead. The 'phones are connected directly across the condenser and the set is ready.

To adjust the detector move the point of the wire on the face of the mineral until the noises, (static, etc.), are heard loudest in the 'phones. Then move the sliders back and forth over the coil until the signals come in best.

## Prest-O-Lite Prices in Balance with Prices of Farm Produce

Prest-O-Lite prices stand fair and square with the prices a farmer gets when he sells in today's market.

A Prest-O-Lite Battery is a product he can buy knowing that there is no loss between the price you get when you sell your products.

As a matter of dollars and cents, his produce today goes as far buying a Prest-O-Lite Battery as it did in the purchase of any standard battery during the highest price market.

### Genuine Values

Consider these trade-in prices for Prest-O-Lite Batteries:

\*6 volt battery—popular makes of light cars, \$19.90.

\*6 volt battery—Buick, Chandler, Chalmers, Hudson, Maxwell, Oakland, \$24.65.

\*12 volt battery—Dodge, Maxwell, Franklin, \$32.30.

Similar reductions on all other Prest-O-Lite Batteries, and there is a correct type of Prest-O-Lite Battery for every make of car or truck.

### All Have Prest-O-Plates

These money-saving prices get regular high-quality batteries.

All have Prest-O-Plates, the

plates that mean long life to a battery, and make it the best all-weather battery.

Prest-O-Plates are one of the reasons why 87 manufacturers use the Prest-O-Lite Battery as original equipment.

Bear in mind that every Prest-O-Lite Battery is guaranteed by the regular Prest-O-Lite guaranty, a liberal specific obligation, rounded out by a policy that says the user must be pleased.

### Oldest Service to Motorists

Prest-O-Lite is a name to guide you to quality and value. The trustworthy name of the oldest service to motorists.

Drive up where you see the Prest-O-Lite Service sign, and meet our representative. No matter what battery you have you should use his service, and he will gladly give it.

If possible, he will prolong the life of your old battery. He will not tell you that you need a new battery until you do.

When you do need a new one, exchange the old for a new Prest-O-Lite with Prest-O-Plates at our low prices.

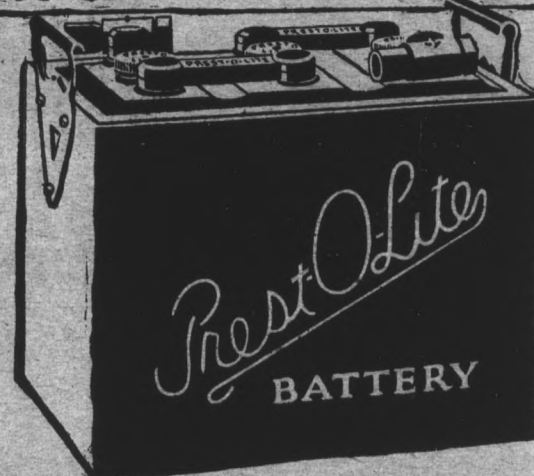
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