

MICHIGAN FARMER

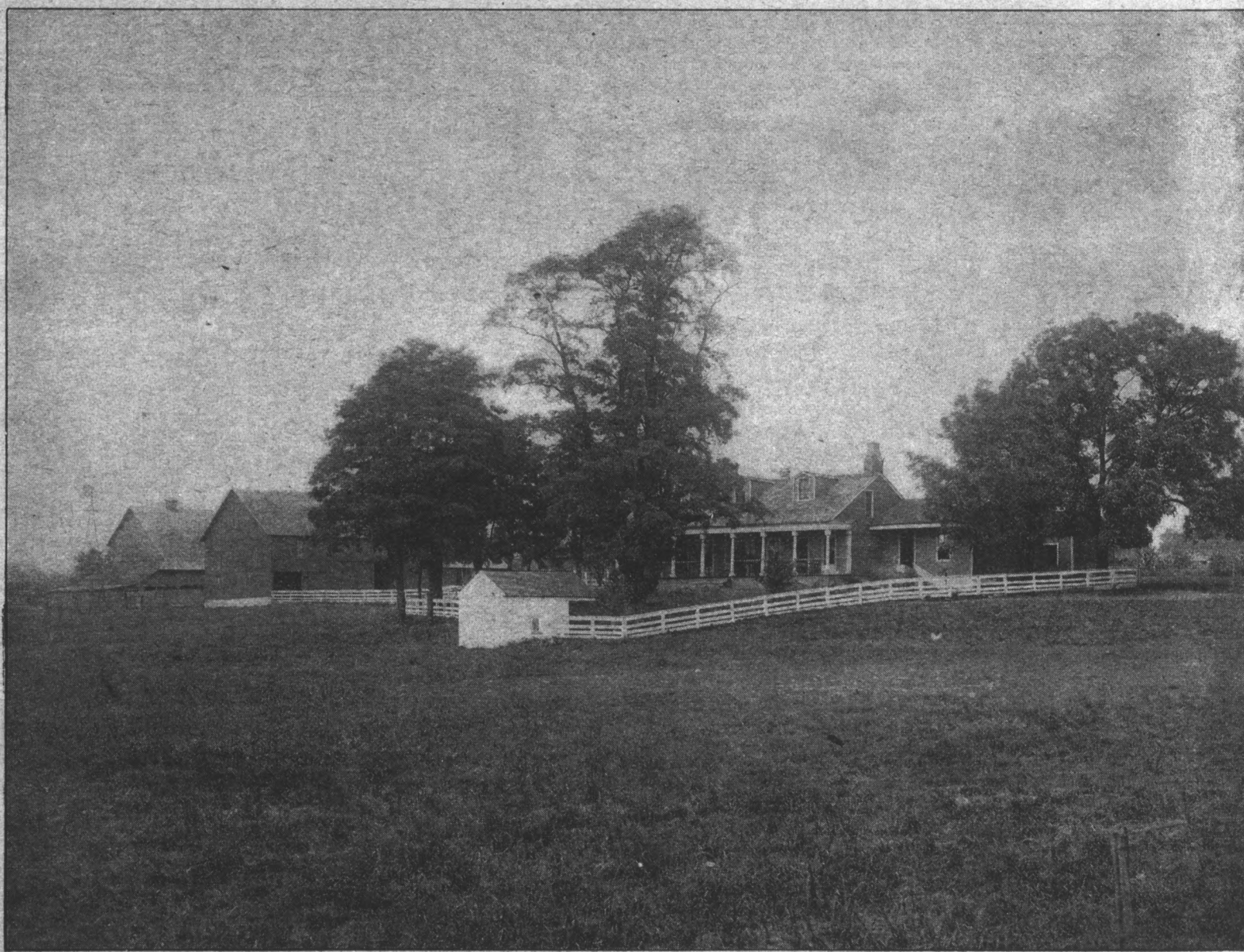
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Sire and Son Make Breeding History

NOT all the pigs owned in boyhood days by farmer boys return to father's ownership as rhymed in the accompanying couplets, but the little rhyme too nearly tells the truth to be pleasant. This condition should be a menace to the peace of every hog man's conscience until he enters into a better working agreement with the sons growing up on his farm. Early cooperation between sire and son would often prevent later regret by both, and many a father grown old in the business would retire from his life's work better satisfied if he had formed a closer partnership with his

"I left my Dad, his farm, his plow,
Because my gilt became his sow.
I left my Dad for evermore
Because my pig became his boar."

THE editors take special pride in presenting this story from the pen of Robert J. Evans to the boys of Michigan. Mr. Evans, who is secretary of one of our leading live stock associations, has had a wide experience studying and observing the relationship of fathers and sons in the business of breeding purebred live stock. What he has to say to fathers and sons too nearly tells the truth to be pleasant. Boys, read this story and pass it on to your father. It will do him good to read it.

son, while the latter was developing into manhood.

One of the cases which the inquiry from this paper brought to my mind, carries with it so much of the ideal condition that we could not refrain from trying to present to your readers a story that would give to senior readers food for thought, and give them a vision of the possibilities that lie in team work between them and their sons.

It is fortunate for any boy to be well born. It is still more fortunate if he be born of parents who have
(Continued on page 786).

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DETROIT, MAY 15, 1920

CURRENT COMMENT

The Rural School Problem

NO other single factor in moulding a high type of citizenship has been of comparable influence to our public schools.

And in days gone by our country schools have turned out a gratifying proportion of the best type of American citizens, largely because of the class of matured men and women who made teaching their profession and the country schools their field of usefulness.

But other lines of effort have yielded greater reward for service, and gradually, yet surely, these capable men and women have yielded their places to inexperienced girls, who turn to teaching as a temporary occupation, and are thus willing to serve for smaller pay which it generally affords as compared with commercial work. And for the most part, the schools have grown smaller, which generally means less efficient as well.

The present need is for larger schools and better teachers. This is a change which it seems apparent can be secured only through a change in our country school system, by which at least the more advanced grades would be taught in a centralized school.

Early experiments along this line were not as successful as their advocates had hoped, but present conditions are more favorable to the success of the plan. The general discussion of this subject would seem to be desirable as a means of crystallizing rural ideas as to the best method of revitalizing our country school system and making it measure up to the needs of the present generation.

The Farm Labor Situation

IN view of the speculative estimates of shortened production on Michigan farms this year on account of the difficult labor situation, the Michigan State Farm Bureau recently made a survey of the state to determine the facts. This survey was made statewide, and the data secured were gleaned from the most reliable sources, hence the result of the survey, while only approximate, may be taken as an accurate index of labor and production conditions on Michigan farms.

The figures compiled from this survey show that the farms of Michigan are short 24,900 farm hands this year, and that the percentage of decrease in cultivated lands as compared with 1919 is 15.8. In addition to the loss in production as a result of idle land, there will be decreased production on

farms which are being operated due to the planting of crops which can be harvested with a minimum of labor, due to a general disinclination of farmers to gamble on the proposition that the needed labor will appear at harvest time. The result of this survey also makes it clear that the farmers of the state are not inclined to place dependence for harvest needs on city vacationists, who are inexperienced in farming and obviously cannot be of great value during the two weeks' period which most of them would spend in aiding production, nor would this period of aid serve the average farmer's needs.

A fact developed by this survey of special interest to a large class of farmers, is that the dairy industry of the state is being particularly affected by the farm labor shortage. Reports from the various counties were practically unanimous in that dairymen were reducing the size of their herds, the consensus of the estimates being that during the last year dairy production has been reduced in Michigan to the extent of 11.3 per cent.

The facts developed by this survey are passed on to our readers to enable them to better judge market conditions as they develop with the harvesting of the season's crops. While the situation is not a matter for felicitation, it at least points toward remunerative prices for the season's products, even though they will almost certainly be below normal in quantity.

Keeping Up Business Morale

EVERYBODY loves an optimist better than a pessimist. Every one of us would rather live in a cheerful atmosphere than in a slough of depression. And aside from the greater pleasure derived from such an atmosphere, which is largely a habit of thought, it will in most cases prove an important factor in our business success. A hopeful and optimistic outlook will aid us in making the best of discouraging conditions instead of succumbing to them and giving up the battle as "of no use to try." Optimism is always a virtue to be appreciated in us by others, as adding to the charm of our personality. It is as well a more substantial virtue in its effect of keeping up our business morale.

The man who is able to devote his energies to making the best of a bad situation, instead of giving up to it or complaining about it has won a worthwhile victory over a natural tendency and made a long stride toward business success. Right now the country and the world is in need of more optimism. May it emanate in large measure from the men and women of our farms.

Conserving Soil Fertility

THE conservation of soil fertility is an important factor of farm management, particularly to the great class of American home-owning farmers. And there is a gratifying and very general appreciation of this fact among Michigan farmers which promises well for the future of our agriculture. But new and unusual conditions are constantly arising which make the problem a complicated one for many farmers.

Judicious crop rotations, the periodical use of leguminous crops, and the use of chemical soil correctives and plant foods have been the common means employed to the desired end of conserving and improving soil fertility. In recent years the exigencies of the occasion have necessitated the variation or abandonment of tried and established crop rotations, and production and transportation difficulties have operated to limit the use of soil correctives and fertilizers far below the desirable point. And now the scar-

city of good grades of clover and alfalfa seed and the handicap of labor conditions threaten to reduce the all important factor of leguminous crops in the rotation on many farms.

Of all the factors in the conservation of soil fertility on the average Michigan farm, this use of leguminous crops is the most important and should be most religiously adhered to. Where clover seedlings have habitually failed, some form of lime should be used as a soil corrective that the growth of the plant may be encouraged by the stimulation of the nitrogen-fixing bacteria for which it is the host plant. The constant use of clover or some kindred legume, as alfalfa or sweet clover, will be found profitable. In fact, this will help to make the industry profitable where it would otherwise fail, hence the wisdom of making any other sacrifice necessary to maintain this great factor in the conservation of soil fertility.

Dairy Prices and Prospects

FOR no class of farmers has the situation been more discouraging than for those engaged in dairying. They have been confronted by a falling market for their product and rapidly rising production costs. These conditions point unavoidably toward decreased production if long continued. But they just as surely point toward a reaction which will make the business more profitable in the end, which is a fact every dairyman should keep in mind in mapping out his future course.

Without question the skilled dairyman is in the best position to reap an adequate profit from milk production under normally favorable conditions, and if our large class of good dairymen will keep this fact in mind they will surely profit from it. If, instead of going out of the business entirely as many are doing or contemplating, they would reduce their operations by disposing of their poorer producing cows; they would be taking a long step toward ultimate prosperity. If the dairymen of every community would organize a cow-testing association, they would place themselves in a position to intelligently weed the unprofitable individuals from their herds, thus enabling them to better survive the present crisis and profit from a return of normal production costs or an era of more compensatory prices, which will surely follow present conditions.

Valuable cows should not be sacri-

FRANK H. WILLIAMS



The recent death of Frank H. Williams removes one of the leading workers for the uplift of agriculture in Allegan county and in Michigan. It was largely through his untiring labors that the present Allegan Farm Bureau was put on a solid basis. Interested in agriculture during his early life, he never lost interest in any movement for the betterment of rural living.

ficed because of temporarily discouraging conditions. They will be doubly valuable when the reaction comes. Nor should the "star boarders" in the dairy herd be longer harbored under present conditions. Keeping them is poor business at any time and doubly poor in view of present production costs and market prices.

News of the Week

Tuesday, May 4.

POLISH troops continue to drive Bolshevik forces back and are now within fifty miles of Kiev; two hundred American-built locomotives are said to have been captured by the Poles.—An international time bureau is being installed in Belgium by which time signals will be transmitted to railroad and water transportation agencies throughout the world.—Revolutionists improve their position in the Mexican imbroglio.

Wednesday, May 5.

JOHNSON leads Hoover in the race for the support of California in the republican nomination for president.—Great Britain and Russia deal directly in the arrangement for a trade parley.—Carranza receives ultimatum to abdicate the office of president of Mexico on May 15.—America's officials are investigating Japan's political aggressions in Siberia.—Utah's eight republican delegates will go to the national convention uninstructed.—Japanese trade is feeling the full effects of the financial crisis now being experienced in that country.

Thursday, May 6.

THE advance of the Polish troops toward Kiev is creating consternation among the Bolshevik dictators at Moscow.—Delaware senate passes woman suffrage amendment to federal constitution.—A new Spanish government has been formed under Premier Dato.—Carranza's army appears to be rapidly crumbling before Mexican revolutionists.—The railway strike in France is reported to have been broken.—The Soviet government of Russia is warned to protect property of foreigners.—The scarcity of material for the manufacture of newsprint paper is the basis for another advance in paper for July 1.

Friday, May 7.

CARRANZA is reported to have fled from Mexico City.—According to the war-risk board there are 641,900 veterans of the world war who are dependent upon the bounty of the country for future existence.—German delegates will arrive in Paris shortly to discuss economic problems in which France is interested.—Iowa boys' and girls' club leaders are holding conference at Des Moines.—Despite the drop of seventeen cents in the wholesale price of butter in New York the retail price has declined only seven cents.

Saturday, May 8.

CONFERENCE is held in Chicago under the supervision of Julius C. Barnes, United States wheat director, for the reestablishment of an open market for wheat.—Representative Platt, of New York, is appointed a member of the Federal Reserve Bank Board.—Eastern bankers are opposed to additional loan fund for railways.—One hundred stock exchanges organize to fight the proposed tax on all stock transactions.—Connecticut may call a special session of her legislature to act on the ratification of the suffrage amendment.

Sunday, May 9.

MEXICAN affairs are becoming more favorable to revolutionists. Vera Cruz and Laredo fall to the rebels; Carranza's aid slaughters political foes in Mexico City, which brings the president near arrest; Francisco Villa yields to the control of the new revolutionary movement.—The Louisiana legislature will again vote on the suffrage amendment and leaders are hoping it will be the thirty-sixth state to ratify the measure and thereby extend suffrage to all women in the country.

Monday, May 10.

GERMAN government troops evacuate Essen and Mayence.—The increased service demanded from the parcel post during railway labor troubles and the increased losses of parcels, are rapidly depleting the appropriations for this branch of the post office department.—Michigan's sugar beet growers continue firm in their position that they will not grow beets until the manufacturers are willing to concede to them a hearing on the terms of a new contract, according to A. C. Ackerman, secretary of the association.

Big Business Recognizes Agriculture

AGRICULTURE was recognized as one of the country's important industries Wednesday night, April 28, 1920, when the Hon. E. T. Meredith, Secretary of the Department of Agriculture, and James R. Howard, President of the American Farm Bureau Federation, delivered addresses before over three thousand business men at the Eighth Annual Convention of the Chamber of Commerce of the United States.

The chamber is distinctly a business men's organization, having headquarters in Washington. Heretofore it has confined its efforts almost entirely, if not exclusively, to industrial relations and the problems of labor and capital. Hence, it is very encouraging to the farmer that this recognition of his problems should be presented at this time when everything is in a state of deterioration after a period of war and destructive pursuits.

The subject of discussion for the session was "Agriculture in Relation to Production." Hon. E. T. Meredith explained the government's part. He outlined very clearly the work of the Department of Agriculture and how it has assisted production, how the cereals have increased from thirty-eight bushels for each man, woman and child, to fifty-two bushels, and the part of each division of the department in maintaining production. He deplored the fact that appropriations for the maintenance of the work have been cut and that present salaries are too low to attract capable men and hold them.

"The business men and the daily and business press should support the Department of Agriculture as a business proposition. Agriculture is the very basis of business," said Mr. Meredith. "No other department touches each one of you as often. It inspects your beef, stores your eggs, raises your cotton, the fabric of your auto tires and tells you whether to take an umbrella when you go to the theater. Do not say you are not interested, that you

are not farmers. Give us your support." James R. Howard discussed "The Farmer's Part." He made a very clear statement of the problems confronting the farmer, the business man, and the nation. He said in part: "Judged by the price which the farmer has received for the last year's crop compared with the cost of production, farm values of food products are the lowest in many years. This statement you will note implies that the cost of farm operation is tremendously high, an item which is too often overlooked by the public in its judgment of the farmer's prosperity.

"In considering agricultural production, allow me to say first that under present conditions an increase in the farm yields over the past year is utterly impossible. But if it were possible, let me ask, would it be desirable or necessary? Allow me to call your attention to two or three facts.

"There has been no shortage of food, food products or clothing within our borders. No one has gone hungry or ill clad. Soup kitchens and bread lines are forgotten elements of national life. Standards of living have everywhere advanced. If food is high it is not because it is scarce. To increase the amount of food would not cheapen it, since more could not be consumed, or disposed of under present conditions. To produce more would mean waste and the economic costs which went to produce the waste would necessarily be added to the cost of that which was consumed. Moreover, it is not the price paid the farmer for his product that determines the cost of the food or clothing. To ever have reduced costs of living must mean reduced costs of transportation, marketing and distribution; and the lessening of the margin between the price which the consumer pays for the ham and that which the producer gets for the hog.

"Agricultural production, moreover, has already overloaded the marketing

and transportation facilities of the country. Just now the country elevators are filled to the roof with wheat, corn, oats, with no market outlets.

"If there is no place at home or abroad for the surplus to go, why produce a surplus? Should not the farmer as well as the manufacturer study carefully, supply and demand, and not produce more than can be marketed at a profit? Has the public any more right to ask the farmer to grow his crops at less than production cost than to ask the manufacturers of shoes or steel to manufacture their products at a loss? Agricultural over-production means a waste of energy and fertility. It depletes the future food supply of the unborn generations. It must be avoided.

"I trust you will not get the thought that I am an advocate of under-production. Far indeed am I from it. Adequate production must be maintained. Under-production would, if persisted in, cripple all industry and react upon the farmer himself. The farmer is the largest single purchaser of food, shoes, clothing and lumber. He uses more steel annually than do the railroads. Under-production in any of these essential lines becomes a vital factor in increasing the cost of agricultural production.

"The time for inventory is at hand. Present stocks must be counted. The future is to be considered. What is to be the policy of the captains of industry of the next decade regarding agriculture? Is it to be a period of enforced competition with food products brought in as ballast for ships carrying outgoing cargoes? Is the hand which has fed and nurtured the nation to compete with the cooley and the serf? If so, then the farmer must demand the same import protection which he has ever contended should be granted the manufacturer. He has always insisted that the American laborer must be better fed and better paid than any other laborer in the world. Must his brain and brawn now

be placed at parity with that of low-waged competition? If that is the program of the future, definite preparation should be made to meet it for it would very soon create a situation wherein we would not produce our own sustenance. And when the time comes that we depend on other nations for our food supplies, we must be prepared to guard every road of the high seas. A permanent agricultural policy and a measure of national defense is vastly more important to our whole citizenship than is a national naval or military program.

"Hence the farmer urges that industry now give careful thought to the future of its basic materials. There are no more acres of tillable lands to be brought under cultivation, barring a few million that at great cost may yet be irrigated and small tracts of wet land which may sometime be drained. But in amount these are insignificant. America, then, must feed and clothe her growing population from lands now in tillage.

"Can it be done? Only the ignorant or the pessimist would say 'No!' Agricultural science already has done much, but in reality has only tickled the field of possibilities. But science is dependent upon man to transform knowledge into reality. Good roads, schools and churches and home owners with modern homes are vitally essential to production and these will come when the farm market comes into its own. These conditions of labor and price schedules which at present make an increased production impossible, must be adjusted.

"Sometime—and may that be soon—there shall be serious thought given to the agriculture of the future. Definite policies will be adopted that the food supply of America may ever come from her own boundaries, produced not by a peasantry, but by an educated and thoughtful husbandry. Then, and not till then, will agriculture, labor and capital be each in its proper setting."

Facilities for Pooling Michigan Wool, the Best

IT is very certain that no state in the Union has the facilities for handling wool at lower cost than is given to Michigan sheepmen. The purchase of a warehouse in Lansing for this and other purposes sufficiently large to store two million pounds of wool, equipped with complete fire protection, low insurance and a system of receipts as a bonded warehouse, will make the lowest cost of handling ever known to the wool grower.

Those engaged in actually handling the money are under bonds and a most complete system of grading, storing and selling has been worked out.

There is practically local option in each county for assembling wool. The county agent or someone else, if there is no county agent, becomes the representative of the Farm Bureau, from whom sacks are obtained. A cooperative elevator, live stock shipping association or local elevator may be the assembling place. The wool of large sheep owners may be sacked on the farm. Assembling days and points are arranged for, but in no case is it expected that the cost will exceed one cent per pound for local assembling. Sacks are not charged for except as a matter of book keeping. A minimum carload is sixteen thousand pounds. Persons having wool where carload assembling is not possible, can make good money by sending their wool in to the Farm Bureau warehouse at Lansing where local freight and charges will be paid on arrival. One county agent who is a hustler already has

Farm Bureau Furnishes Splendid Equipment for Handling 1920 Wool Clip.

one hundred and fifty thousand pounds of wool contracted for, to be handled through the Farm Bureau.

When the wool reaches the warehouse it will be weighed in bulk to check with assembler's weights, then graded by an official wool grader into a dozen or more grades as demanded by the various mills and sold on these grades. When the wool is graded any consignor can, on application have

seventy-five per cent of the estimated value remitted to him. Plans are being considered that will allow the consignor to use his local assemblers' receipt at his home bank and the remittances may be made consignor to and through the bank holding the shipper's receipt which is used as collateral. If this plan is used it provides immediate cash for the wool clip.

Every fleece of Michigan wool should

be marketed through the association because it gives volume selling power. This system of wool marketing as it is being worked out will give the various wool marketing associations the power to adjust prices on the basis of production costs. Ohio and Iowa are the pioneers in wool marketing associations and this year practically all the north middle states are establishing state selling associations. The Ohio wool growers last year were advantaged around ten cents per pound over local market range of prices. The local wool buyer has as a rule, never made much money in this line, he being the mere agent and handler for the big dealers and was powerless to pay the prices that the market would warrant. Ralph Pickell, the noted grain and farm crops editor of Rosenbaum's Review, a trade journal, has this to say of wool buyers' practices:

"During the war the United States government assumed control of the wool business. It established concentration points, fixed values of each lot as it came to market and limited dealers' profits, but the latter in many cases, especially in the farming states, ignored regulations and by making misrepresentation to growers, profited in brazen manner. Long before the 1918 clip had been marketed this was recognized and assurance given by Lewis Penwell, in charge of wool control, that these dealers would be required to make restitution.

"Penwell, however, is out of office, government wool control has been re-

The Latest Style in Milking Machines



linquished and middlemen who defied the law are in possession of illegitimate profits. Nothing more is heard of collection, or restitution, of a sum variously estimated at \$600,000 to \$1,000,000, although fourteen months have elapsed since the last of government controlled wool was valued."

This same condition has gone on for years and it was only until government control revealed it that wool growers could lay their hands on the weak spot in the system which undervalued and undergraded their wool. It is to be said, however, to the credit of one

Michigan firm of wool handlers that they have reimbursed the United States government and the latter have not distributed this to the growers. Every wool-grower who sells his wool in the old way is simply fastening this system of undervaluation which the war revealed and withdraws his support to the sales system of the united wool growers through the Michigan Farm Bureau at cost, which probably will, if the volume is large, not exceed two cents per pound after reaching the warehouse. In conversation with a local wool buyer recently he stated

an opening price from fifteen to twenty-five cents below what these actual grades were worth at the time. The past methods of wool selling compelled dealers to pay a price which meant a safe margin and the grower insured a profit to someone other than himself, even though prices should fall. To the farmer who has realized a profit on selling live stock through a cooperative live stock shipping association, or a potato grower through the potato exchange, or a dairyman through the milk producers' association, it may be said that the abuses of the wool sys-

tem heretofore has been equally flagrant and the Michigan Farm Bureau through its wool division at Lansing has opened the way for increased profits to the wool grower.

London wool auctions have shown firm prices and this is also true of the eastern markets, although a bear price movement is usually engineered during the spring buying season for the sole purpose of getting wool cheaper. The price of wool could be multiplied by one hundred per cent and then represent about one-fifth of the cost of a suit of clothes.

News of the Agricultural World

PRICES FOR MICHIGAN'S IMPROVED SEEDS.

BECAUSE Michigan has become the seed producing state for the United States and Canada as far as the cereal grains are concerned, the board of directors of the Michigan Crop Improvement Association has fixed its scale of seed prices in relation to the prevailing market figures more than a month earlier than is usually the case.

This year is the first in which the association is cooperating with the newly created seed department of the Michigan Farm Bureau in the sale of the registered seed grown by the association's members. J. W. Nicolson, manager of the department, formerly was secretary and treasurer of the association and a member of the farm crops department at M. A. C., and therefore will be in a position to cooperate closely.

Requests for information about prospective seed costs have multiplied this spring. They have come from surrounding states and from distant agricultural sections. It is believed that the unprecedented demand is the result of the splendid showing made by Michigan grains at the International Hay and Grain Exposition at Chicago last November, when Rosen rye and Red Rock wheat captured a large share of the awards.

"The average price of the Chicago market," said A. L. Bibbins, secretary of the association, following the meeting of the directors at East Lansing last week, "during the time of July 15 to the time of printing the seed list (about August 5), will be taken as the basis for the price list. To this price will be added the following margins which will cover the increased cost of producing and marketing registered seed.

"Rosen rye, Red Rock wheat and American Banner wheat, lots of one to five bushels, \$1.50; six to twenty-four bushels, \$1.25; twenty-five to ninety-nine bushels, \$1.00. Michigan winter barley, lots of one to five bushels, \$1.25; six to twenty-four bushels, \$1.00; twenty-five to ninety-nine bushels, seventy-five cents.

"For example, if the average price of wheat on the market for this stated period be \$3.00, then the association price will be \$4.25 for six to twenty-

four bushel lots, and \$4.00 for larger amounts. For amounts of one hundred bushels or more it was decided that buyers should negotiate in regard to price with the State or County Farm Bureau.—HENSCHAW.

LAND BOOM IN WEST HOLDS.

THE Farm Mortgage Bankers' Association's questionnaire to correspondents in twenty-two states regarding the land boom brought information thus summarized by E. D. Chassell, secretary of the association:

"March 1, settlement day in several Mississippi valley states, passed with failure of less than one per cent of the sales. Iowa, the 'storm center' of the boom, reported scarcely any failure of sales except forfeitures by speculators without money. Conditions in other states were similar. The well-defined impression is general that values have held steady and will continue, although the future depends upon crop returns.

"Most lands came into competent hands. Purchases in the southwest were well financed by local banks and loan companies. Rocky mountain and Pacific states had considerable activity and expect nearly all obligations will be met promptly. Montana and North Dakota, owing to poor crop conditions, have had comparatively little land movement, but expect more this year."

Mr. Chassell concludes: "Local banks, with the aid of the Federal

Reserve system, were easily able to handle the situation created by the dropping out of joint stock land banks and federal land banks at a critical time. The present has been cared for. National and international conditions will govern the future, but with such developments as we may reasonably expect, future payments will be met with normal promptness. Mortgages conservatively placed on improved farms will continue as premier security, their stability least affected by strikes, wars and financial convulsions."

FARM LABOR SHORTAGE ACUTE.

REPORTS secured by the federal department from its representatives in practically every state in the Union show that the supply of hired farm labor in this country is only about seventy-two per cent of the normal supply, compared with approximately eighty-four per cent of a normal supply a year ago. This year's shortage is almost exactly the same as that of two years ago when large numbers of men were in the military service.

The present shortage has arisen in spite of the fact that farm wages are fifteen to twenty-five per cent higher than last year. The situation, unremedied, cannot fail to have an unfavorable effect on production, according to the United States Department of Agriculture, and will tend to prevent any

reduction in the prices of farm products. While the total acreage undoubtedly will be reduced as a result of the present situation, it will not be in as large proportion as the reduction in the labor supply, because the farmers with their families are exerting themselves to the utmost to overcome their handicap.

HOME-MAKING AND JUNIOR WORK FEATURED BY NEW YORK FARM BUREAU.

NOW that the county agent is established in fifty-five New York counties the plan of county organization includes two other features, considered equally as important. Home-making, the second feature, is less than half organized and junior work, the work for boys and girls, has hardly more than its foundation laid.

The State College of Agriculture considers this last feature to be even more important than the others, because it affects the farmers of the future. Its work proper is to push specialized activities of a practical nature among the boys and girls of the state, under the direction of a trained specialist. The work will be participated in, as far as funds are concerned, by the State Department of Education, the State College of Agriculture, and local workers who are sufficiently interested to supply a portion of the funds needed. In several counties of the state the county bankers' associations are underwriting the work, which is admitted on all sides to be of prime importance throughout the state. Committees have been appointed to start local campaigns to raise the amounts needed in the various counties.

The State Department of Education gives \$600, providing \$1,200 is raised from local sources. The State College gives \$25 per month for the first two months and then after the county is thoroughly organized, \$50 per month. In the writer's county it is estimated that \$1,500 will be needed in local funds to make up the amount required to put the work on a sound basis.

In Wayne county for this year efforts will be limited to the raising of corn and to canning and sewing clubs. All are eligible to enlist in the work up to the age of twenty years.

Farmers' Automobile Trip

By J. H. Brown

DURING the past winter a number of farmers of southern Michigan, some officials of the Michigan State Grange and Farmers' Clubs in the extreme southern counties, have personally asked, and written, us regarding our conducting an automobile tour to some distant and prominent place or noted resort next summer after the close of the wheat harvest. A score or more car owners have asked us to take the matter up and said they would like nothing better than a ten-day or two weeks' tour and outing, camping out nights along the way and cooking meals whenever the opportunity presented itself.

At first it was thought that the Michigan Farmer might take charge of such a tour, and the writer, as "Field Editor," and a sort of veteran in automobile touring and camping, might take charge of the details. After due consideration it was thought best that the writer assume the entire responsibility of publicity, arranging of details and take personal charge of the tour from beginning to end; also to personally attend to all correspondence connected therewith.

And so we now announce the first automobile tour of Michigan Farmer folks, to start Monday morning, Aug. (Continued on page 772).

AL—Always Ready to Help a Fellow in Trouble.

—By Frank R. Leet



Feed Prices Discourage Consumption

Present High Level of Values Leads Stockmen to Devote Larger Acreage to Feed Crops—By Sanders Sosland

A STRAINED transportation situation is altering the price structure on feed markets of the United States. Demand and supply are the ruling factors, of course, but the serious shortage of cars and motive power and congestion of traffic at terminals have played a more vital part in swaying these basic price-making influences than ever before. Markets are on an artificial level. Railroad restrictions on country shipments, as well as the movement from terminals to consuming areas, have forced prices to a level far above their actual value to the feeder, whether dairyman, hog producer or cattle handler.

Conditions to Consider.

When the producer buys corn at the country auction sale, or privately from his neighbor, the bids are usually based upon the price prevailing at the nearest market. The producer seldom considers the value of the corn, or other grains and feedstuffs as well, by the returns from his feeding operations, which should be the correct basis for reckoning values. He overlooks the fact that serious delay would probably be encountered in shipping the grain to market and that as a result of the delay the market price is inflated. The country price should make sufficient allowance for this condition. The producer who fattens hogs and cattle for market quite often is heard to complain that he could have realized a greater profit—or offset a loss—by marketing the corn or feed in the raw form. He bases the value of the commodity upon the market value, and overlooks the fact that he probably made every effort possible to obtain cars for shipping to the terminal but failed owing to car shortage or congestion of traffic.

Not only the producers, but other close observers of market fluctuations have overlooked the transportation phase in analyzing probable price changes. However, the larger operators foresaw the difficulties under which the market would progress because of car shortage and similar factors. This element bought corn for future delivery in large volume, not necessarily because they wanted the grain—they really wanted only the profit—merely because they saw little hope for improvement in the movement of grain to terminals from the country and a consequent increase in the visible stocks. The bearish element placed stress upon the fact that the third largest crop of corn in history was harvested last fall. The fact that corn, both the carlots and the futures, have advanced approximately fifty cents a bushel in the past ten weeks, indicates who has profited.

Money Markets Give Trouble.

Still another influence, the importance of which as a price-swaying factor has become pronounced, is the tight position of money markets. In a broad sense the fluctuations in prices will represent a contest between factors surrounding the financial situation and the demand-supply situation, particularly as pertains to transportation. The strain on money markets is, of course, extremely bearish, and will tend to check the rising scale of prices, offsetting—to what extent it is yet doubtful—the effect of abnormal rail facilities. Tightness of money is forcing the sale of much grain which normally would be held for an advancing market. Country bankers are urging their customers to reduce their loan accounts by disposing of grain upon which loans have been made. Elevator

interests at terminals and other holders of grain at markets will be influenced similarly to the country holder by the tight position of money. How soon prices will be affected to any great extent by the financial situation is a question. It may not be felt until late in the fall; again, some predict it may soon be felt.

Corn Values and Hog Prices.

At the present writing, cash corn in Chicago and other middle west markets is selling around \$1.75 to \$1.81 a bushel. Some express the belief that \$2 will be paid for the grain at terminal markets before the summer season is far advanced, basing this forecast largely on the probability of a continued tight car supply and slackened

movement resulting from activity of farmers in the fields. But the "bulls" have failed to consider the fact that hogs, the heaviest consumers of corn, are selling at approximately \$5.00 per hundredweight less than a year ago, while the coarse grain already is higher than a year ago.

Oat Prices Touch New High Levels.

Strength of an abnormal character prevails in the oat market, the highest levels in history being paid for the cereal. While the traffic situation is an important factor in the oat trade, there is an acute scarcity of the grain at both interior and terminal points, resulting from the short crop a year ago. There is a heavy consumptive demand for oats, coming from the

south, where spring planting work is progressing on a large scale, and from the east and middle west. Foreigners also have bought cars freely, but the high level of prices has restricted this trade. It is improbable that oats will suffer any sharp downturns on the old crop, owing to the short supplies available. Prices for the cash grain have advanced to a level around \$1.10 per bushel, and the May delivery at this writing is up to \$1.00 per bushel. New crop oats are making only slow progress, and a late movement of 1920 offerings is expected.

Bran Consumption Restricted by High Prices.

Wheat feeds are attracting attention by their ability to maintain prices at extraordinary levels. Though it is quite often heard that bran and shorts have reached such a price level that further advances are impossible, the market has been slowly mounting upward, and quotations which a month or six weeks ago were termed as remarkable might now be considered a "low" figure. This is the basis for the extraordinary conditions which surround the offal trade. Speculative operators who for some time have maintained that the top has been reached and that further upturns "are impossible" sold "short" in the hope of realizing a profit. But the impossible has become the actual in the bran and shorts trade.

Relief is in sight, but not so long as the strike of switchmen maintains its grip on transportation. Demand for flour over the country as a whole has improved considerably, but restricted shipping conditions have acted as a serious check against an increase in mill operations. Mills have been forced to further curtail operations, either because of inability to obtain cars for loading out flour or to obtain wheat to maintain activity. Bran and shorts production has necessarily been further curtailed, and, with the reduction in the output, prices have steadily mounted upward. Bran already has reached a figure which has forced a sharp reduction in the consumption by dairymen and other buyers. This, together with the fact that the season when pastures will be available over practically the entire country already is at hand, indicates a very light actual consumptive demand in prospect. The demand for bran even at present extraordinary price levels is not active, as market conditions might reflect, the strength being due more to the acute scarcity of supplies.

At this writing bran is selling around \$50 to \$51 a ton, sacked, for carlots in Minneapolis. Chicago quotes values around \$54 to \$56, St. Louis at \$57 to \$58, and Kansas City at \$52 to \$54. In the eastern markets the price level is around \$60 to \$63. Indicative of the abnormal situation in the bran market is the fact that mills in the far west, along the Pacific Coast, are making extensive shipments of the offal as far eastward as the Atlantic Coast, including the New England states. The freight rate on such shipments amounts to \$1.00 per hundredweight, which is even higher than the average pre-war price for the feed. The far western mills have been operating on a fairly active schedule, and without sufficient local demand to absorb offerings, premiums have been obtained on the distant shipments. Never before in history have such shipments been made, nor will they long continue, owing to the abnormal rate. The bearish attitude on the part of market observ-

Farm Boys' and Girls' Club Work

The Broad Aim and Value of this Splendid Movement is here given by Hon. E. T. Meredith, Secretary of Agriculture

BOYS' and Girls' Club Work is one of the important features of the Agricultural Extension Work conducted by the States' Relations Service, United States Department of Agriculture, in cooperation with the State Agricultural Colleges and local agencies for the purpose of improving agricultural conditions and practices throughout the country. These clubs are organized to improve farm and home practices by instructing the boys in correct agricultural methods and the girls in home-making; to assist them in demonstrating these methods for the improvement of the farm and home; to aid in the development of cooperation in the family and in the community; to create a more favorable attitude toward the business of farming and home-making by encouraging property ownership and the feeling of partnership; and to make rural life more attractive by providing organization which tends to diminish isolation and develop leadership.

These objects are in process of attainment. Wherever club work has been pushed by our agents, larger yields have been obtained, better pigs have been raised and finer cattle, both dairy and beef, have been grown. The motto of the clubs is "To Make the Best Better." Registered animals are now common where only a few years ago they were unknown, and there is a systematic effort to cull out scrub live stock and poultry. Large yields of crops have been made by club members on lands which were considered as worthless, and little girls are vying with the best packers in canning and preserving fruits and vegetables, and are becoming a potent factor in helping to make the farm home more attractive and enjoyable.

The average yield per acre made by club members in the growing of field crops is two to three times as large as the average yields made in the states in which the members are located. Many people, seeing a boy or girl here and there engaged in club work, do not realize the value of the products produced by these young folks in the aggregate. In 1918, while under the stress of war and responding to an appeal made to club members in the furrows "over here" to help feed the boys in the trenches "over there," the records in the office show that these young people produced food and feed to the value of more than \$20,000,000.

The money value of the products of club members is only a small part of the value of club work. Many boys and girls have had their vision of life enlarged by club membership. Many have taken and are taking college training. The agricultural colleges of the country especially have profited in enrollment from the clubs. Many boys and girls have made their own money to defray their college expenses in club activities. Many after graduation have returned to the farms or have engaged in extension work as county agents. Rural life has been greatly enriched in recent years by the trained leadership obtained from agricultural clubs. The results obtained in this work justify many times the expenditures made in securing them and appeal strongly for a large development of this very useful work.



Can You Think of a Better Companion for a Young American?

(Continued on page 790).

Congress and Food Production

PRESIDENT J. R. Howard, of the American Farm Bureau Federation, has returned to Washington, after having made an extended trip throughout the farming sections of the country, where he has investigated the food production situation.

Conditions Affecting Farm Production.

Mr. Howard presents a rather gloomy prospect for the consumers in the large cities. Every immediate condition indicates lower production. The labor shortage is practically identical everywhere. Easy hours and high wages in the city have drained the farm of its labor supply. Iowa is 150,000 farm workers short of her needs. Alabama farmers are leaving untilled one million acres of cultivated land formerly devoted to the production of food crops. Thousands of farms in New York state will lie idle this year for lack of labor. Throughout the entire country farmers are letting their fields stand in hay or pasture because they either cannot get, or cannot afford, to pay the prices demanded by farm labor.

The southern farms are being deserted by colored laborers in about the same proportion as the northern farms are being depleted of their white labor. An attempt will be made to maintain the cotton acreage, owing to the high prices for the staple, but there will be a heavy reduction in food crops. The seasonal conditions are worse in the south than in the north. Planting is late and the weather has been unfavorable for growing crops. The Farm Bureau membership is increasing in the south as in all other sections. It is especially strong in Tennessee and Arkansas.

In New England Mr. Howard found a spirit of progressiveness among the farmers, who have the advantage of good markets, but many are flocking to the manufacturing cities. The Farm Bureaus all through the New England states have voted for a membership fee of five dollars, which will enable them to build up strongly efficient county organizations as a permanent foundation for the national federation.

Live Stock Produced at Loss to Farmers.

The meat situation is especially bad, according to Mr. Howard. Farmers have been producing hogs at a tremendous loss. The market for beef cattle is unsatisfactory. Farmers are producing more beef animals than ever before. The government statistics show an average for ten years of 65,477,000 head, while in 1919 there was 74,584,000 head, an increase of 10,000,000 head of cattle over the ten-year period. But owing to the larger demands for some cuts of beef over others this increase in cattle numbers is not helping the situation or benefiting the farmers.

The people have got money to buy the best cuts and they demand only the best. This has developed a situation where there is a difference of between eight and twelve cents a pound between the forequarters and hind-quarters, and a government investigation shows that a very large proportion of the butchers are not buying the forequarters. There are about four hind-quarters to one forequarters sold to the retail trade, which indicates that the cattle producers will have to develop a breed that produces all hind-quarters or the people will have to change their methods of buying meat. This discrimination between the hind-quarters and the forequarters of beef is causing serious losses to the producers.

The millions of victims of sugar profiteering have a champion in Con-

Measures Bearing Upon the Necessities Are Having a Hard Berth in Our National Legislative Chamber

gressman E. B. Howard, of Oklahoma, who has introduced a bill in the house designed to curb sugar speculation, by forbidding resales from one dealer to another. It has been found that there are from two to seven non-essential dealers between the refiners and the retailer. Representative Howard's bill would limit the number of sugar handlers from the refiner to the broker, wholesaler and retailer.

Sugar Speculation Under Cloud.

While Congressman Howard believes his bill would curb speculation in sugar, he does not regard it as meeting the present emergency, knowing well that if it should ever get through congress it would be only after having passed through a long and tortuous course. As a remedy for immediate application he suggests a great national boycott of sugar, candies and other delicacies made from sugar for three days each week until prices are

ly interested because so many farmer boys joined the colors in the great war, and it is of equal interest to all because of the taxes that must be raised to pay the bonus.

The bonus proposition agreed to by the ways and means committee includes five optional plans for rewarding the soldiers and for raising the money, as follows: (1) a cash payment to all service men at the rate of \$1.25 per day in excess of sixty days of active service; (2) payment at the rate of \$1.75 per day if service men wish to take vocational training; (3) advance payment to apply on home purchase, either city or country, at the rate of \$1.75 per day for time actually spent in service; (4) paid-up war risk insurance policy maturing in twenty years on basis of \$1.75 per day to service men not exceeding \$1,000 for reclamation and development of farm

Since We've Signed Up

By Mrs. L. A. Seamans

We've done a lot of diggin', a workin' mighty hard,
We've done a lot of figurin', an' a hustlin' on the farm,
We've done a lot of savin', an' there ain't a bit of doubt,
But that things we've really wanted, lot's of times we've gone without.

Its mattered very little, if crops were good or bad,
For raisin' much or little, the farm took all we had.
So we're breathing somewhat easy, for we'll sure get out the rut,
Since we've joined the State Farm Bureau an' all-signed-up.

Its cost a heap of money, to buy things for the farm,
To cheat the workin' farmer, "profiteers" think good form.
We've paid out lots of money to get our crops to grow
And when we went to sell them the prices were so low.
We couldn't pay expenses, an', too, the hired man,
With all the crops we've harvested to save our countrymen.
So we're feeling more contented, an' happier with our lot
Since we joined the State Farm Bureau an' all-signed-up.

We've reached the time, I reckon, when farmers sure must fight,
An' we must fight together, if we would do it right,
So give us time to figur', the the things for us to do
Then get behind together, an' let us put 'em thru.
For with our heads together, an' our pocketbooks as well,
There'll be no "man between" then, when we go up to sell,
So we're not a worryin' any, an' with frettin' we have stopped
Since we've joined the State Farm Bureau, an' all-signed-up.

reduced. If there is a shortage of lands. All service men may be beneficiaries of one plan, if in service more than ten days, except those above the rank of captain.

The five parts of the tax scheme are: (1) a one per cent tax on all retail sales, contracts and leases; (2) one per cent increase over present surtaxes on incomes between five and ten thousand dollars a year, two per cent increase on incomes between ten and twenty-six thousand dollars per year; (3) graded increase in tobacco revenue tax up to sixty-six per cent; (4) a one-fifth of one per cent tax on all stock and bond transfers; (5) a one-half per cent tax on all real estate transfers.

Legislators Uneasy Over Soldiers' Bonus.

Soldiers' bonus legislation is causing congressmen and senators more sleepless nights and worry than any other proposition that has come before them for many years. And they are largely to blame for the present situation, having been foremost in advocating a bonus for the returned service men. It is a problem, however, in which the folks on the farms are deep-

ly interested because so many farmer boys joined the colors in the great war, and it is of equal interest to all because of the taxes that must be raised to pay the bonus.

There is a bitter fight on over the proposition to levy a tax on all retail sales, an element in congress demanding that the money for the bonus be raised by levying a tax upon excess war profits. This discussion over the tax feature has attracted so much attention that it has apparently overshadowed the fact that the Fordney bill includes the obnoxious features that were in the old Mondell Land Settlement bill which was so strongly opposed last summer by the farm organizations and the farm press.

I find by examining this bill that

provision is made for establishing the "National Veterans' Settlement Board," authorized to establish "veteran settlement projects for the reclamation and settlement of lands by means of irrigation, drainage, or other method of development;" that this board will be empowered to purchase lands, develop farm units, contract with irrigation corporations, build roads, establish townships, and "as far as practicable" employ veterans in the development of these reclamation projects. It is further provided that at the earliest practicable date each soldier so employed upon a project shall be allowed to select and shall be allotted a farm unit upon which he may construct a dwelling and make other improvements."

A significant clause in this soldier bonus bill land proposition, one worthy of considerable study, says that "any unit not allotted to a veteran or repatriate within one year after public notice in respect thereto, as provided by this section, may be disposed of to qualified citizens under the provisions of the reclamation laws."

It is possible that this resurrected land reclamation scheme will be allowed to slip through under cover of bonus legislation, while the friends of helpful soldier legislation are quarreling over the methods of raising the taxes.

Will Congress Give Farmers Cheaper Nitrate?

Senate hearings on the Wadsworth-Kahn bill for the government operation of the Muscle Shoals air nitrate plant are completed. In summing up the arguments for the bill before the committee, R. F. Bower, legislative agent of the Farmers' Union, made a convincing argument in favor of the measure. In the testimony given during the hearings little was produced in opposition to the bill, and much in its favor, not only as a military preparedness proposition, but as a means of supplying the farmers with an abundance of nitrogenous fertilizers and freeing them from the Chilean nitrate monopoly. The senate committee on agriculture is expected to make a favorable report, and it is reasonable to expect that favorable action will be taken on this measure. Representatives of all the farm organizations have appeared for the nitrate bill.

Improving Parcels Post.

Reporting to the senate in reply to inquiries regarding the parcels post as a means of food transportation, Fourth Assistant Postmaster-General Blaklee said the farmers were threatening to reduce food acreage unless the cost of living on the farms comes down. Every one of the seventy thousand replies to the post office questionnaires sent to farmers contained complaints against the high cost of living and farm operations. The farmers have written the department that they will not work fourteen or sixteen hours a day to raise food for city consumers who are working seven or eight hours and demanding and getting high wages, while on the farms the returns are not keeping pace with expenses. All these complaints and the warnings given the congressional committees during the hearings, by the farm organization representatives, however, are not sufficient to awaken congress to the need of prompt action in dealing with the problem of farm production.

As the railroads are permitted under the Esch-Cummins transportation act to bring their income to a six per cent dividend basis, an additional \$1,017,000,000 will be required to in-

(Continued on page 795).

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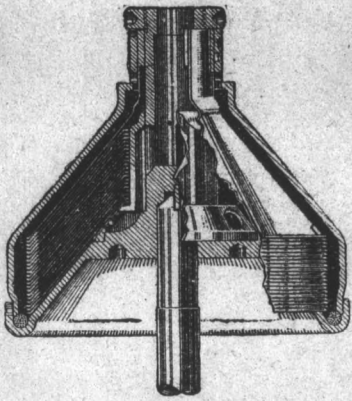
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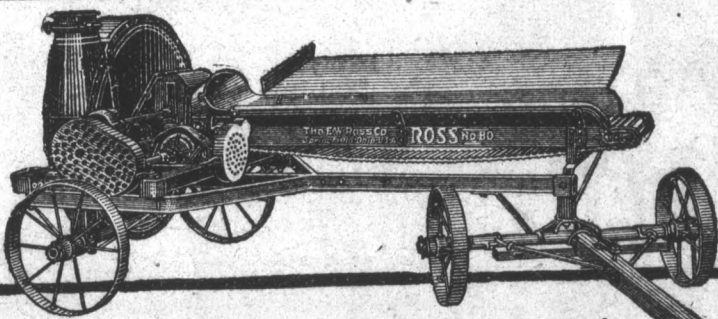
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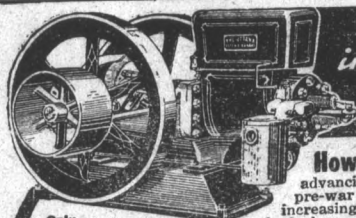
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Farmers' Automobile Trip

(Continued from page 768).
ust 9, from various points in southern Michigan. Those who live east of Lansing, Jackson and Hillsdale will drive to Bay City for the first "night control," or camp. Those around Battle Creek and southwestern Michigan will drive to Grand Rapids and camp on the shore of Reed's Lake the same night, and those tourists who do not have camping equipment of their own will be provided with everything needful, as explained further on.

The plan is to run two tours, one up the east Michigan pike, the other up west Michigan pike, both tours to meet at Mackinaw City the late afternoon of Friday, August 13. A big tourist camp will be set up for our accommodation and pleasure in the park and we will all spend Saturday there in a big meeting and celebration that will include music, speaking by some of the noted agriculturists of Michigan, a fine fish dinner, etc.

From Mackinaw City some of the tourists may wish to start on the return trip for home because of limited time. These tourists can drive their cars back over a good road by way of Petoskey, Cadillac, Big Rapids, Mt. Pleasant, St. Johns and Lansing, as they may desire.

Some of us expect to cross over the Straits of Mackinac on the big car ferry and drive on to Sault Ste. Marie, commonly called "The Soo." We may camp out there for two or three days, then return to Mackinaw City and on home by way of Cadillac, Big Rapids and Lansing. It will take about ten days to two weeks to complete the entire trip to the Soo and return home in a leisurely fashion. Tourists can join us along the way and return home whenever they wish.

We have made full arrangements with T. F. Marston, secretary of the Northeastern Michigan Development Bureau, to take personal charge of the eastern pike tour from Bay City. This is the east division of the Dixie Highway, and Frank F. Rodgers, the State Highway Commissioner, has just written us that the road will be in good condition nearly all the way during August. He will make a map of the route, with all detours marked showing new road construction, etc., and we will print it in the Michigan Farmer some time in July.

Mr. Marston will meet the tourists in Bay City late in the afternoon of Monday, August 9. Both a camp and hotel accommodations will be provided, as desired by each individual tourist. Tuesday, breakfast at Bay City. Stop for dinner at Standish. Stop for buttermilk at Whittemore (my! that sounds good). Stop for inspection of Prescott Farm Shorthorns. Tawas—swim at Tawas Beach or at State Park. Supper at camp. Dance at pavilion at Tawas Beach.

Wednesday, August 11.—Breakfast at East Tawas. Visit AuSable River Dam. Pass through Oscoda, AuSable, and stop for lunch and farmers' picnic by the lake at Lincoln. Pass through to Alpena for supper, night camp and breakfast.

Thursday forenoon tourists will be given a tour of Alpena, and will have dinner at Alpena State Park. Drive to Rodgers for supper, lodging and breakfast. Friday the tourists will drive to and visit State Park at Onaway, where they will have lunch. That day they will see some of the fine apple orchards of Cheboygan county,

and stop at Cheboygan for supper. They will then drive on to Mackinaw City and join the west pike tourists in the fine tourists' camp in the State Park. A truck will accompany the east pike tour with baggage, and include repair men in attendance on the trip.

East pike tourists will have four options. Board and lodging furnished; board alone; lodging alone. And those who have their own equipment for cooking and sleeping in and around the car will be independent. The price of meals and lodging will be announced later on. Meals will be served camp style, and a lodging tent provided for each family. This plan has just been submitted to us by Mr. Marston. It is a fine one and Mr. Marston is delighted to take charge of such a tour. Those who take that trip will surely have one of the times of their lives and know far more about that wonderful northern country by the time they get back home.

Those who go up the west pike will assemble at Reed's Lake late in the afternoon of Monday, August 9. The writer will head a good-sized delegation of tourists and cars from around Battle Creek and that section. Both H. J. Gray, secretary-treasurer of the Michigan Tourist and Resort Association, and John I. Gibson, secretary of the Western Michigan Development Bureau, will look after the comfort and entertainment of the west pike tourists as soon as they reach Grand Rapids. Tourists' camps will be set up at each night control or camping site, and some will be ideal permanent camps built especially for motor car tourists.

Our first night will be at Reed's Lake, Tuesday night at Manistee, and Wednesday we expect to reach Traverse City in the early afternoon. Here we will camp two nights and thus spend a whole day (Thursday) at Traverse City. Our fine tourist camp will be located beside the delightful bay, and Mr. Gibson has promised us some enjoyable stunts that we will call attention to in these columns later on. However, a fine fish dinner and one or more side trips on and around the bay, up to Old Mission, etc., are in the list of treats that every tourist will enjoy. Traverse City folks are going to give us the glad hand, and that's enough mention for a starter.

Music and speaking will be on the camp program at nearly every night's camp on both pike tours. Farmers in the sections we pass through are invited to join us and attend the camp meetings along the way.

We would be pleased to have every farmer along both routes set out along the road in front of his home certain signals and a small American Flag. Later on we will arrange a plan whereby the signals in front of each home may indicate that the owner is a member of the Farm Bureau, Grange, takes the Michigan Farmer, etc. Certain individuals in each pike tour will have a handy record tablet and mark down the signal indications all along the way. It will be interesting to report in the Michigan Farmer later what the records show. Each farmer, or his son or daughter, will know just when these tourists will pass by their farm homes and when to set the flags and signals.

Those who wish to take this trip should write me at Battle Creek, Mich.





The Real Meaning of *"Best in the Long Run"*

"BEST IN THE LONG RUN" is a slogan that is almost as old as the history of tires. It grew out of the performance of Goodrich Tires on bicycles, and it grew into the *dependability* of Goodrich rubber products of all kinds.

It is not just a catch phrase. It is a plain statement of fact. It is really a mirroring of the confidence placed in Goodrich products by their users.

In five words it crystallizes the

ideals, the policies, the principles of Goodrich.

It means "the long run" of good faith and good will—the steady building up of a confidence in the minds of the users, *which is the greatest asset a manufacturer can have.*

That is how Goodrich translates this slogan into terms of longest average wear, utmost dependability and known quality in all kinds of rubber products.

THE B. F. GOODRICH RUBBER COMPANY, AKRON, OHIO

Goodrich Tires

"Best in the Long Run"

POTASH PAYS

The Potash shortage of the last five years has been felt most severely by the farmer of

Swamp Land

Some Kainit, 20 per cent Potash Manure Salt, and Muriate of Potash have come forward from Germany, not so much as formerly, but enough to help those who insist on having it.

Urge your dealer to get it for you at the earliest possible moment.

Soil & Crop Service Potash Syndicate

H. A. HUSTON, Mgr.

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New York

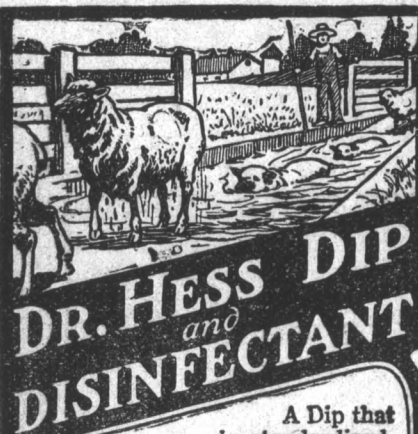
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For Scab, Ticks and Skin Troubles

Dr. Hess Dip and Disinfectant cleans and makes the skin healthy. It is more than a Dip—it is also a Disinfectant. Use it freely about stables, hog pens and poultry houses to destroy disease germs and maintain good health conditions. Also for home use, in garbage cans, sinks, cesspools. Sold by 28,000 dealers on a money-back guarantee.

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—FOR—
Separating
Vetch
from
Wheat
Rye
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The Sinclair Scott Co.
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Model "D" Bates Tractor. Good condition. Has been in use less than 3 months. Price \$350. F.O.B. Detroit. Box 515, care of Michigan Farmer, Detroit, Michigan



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Farmers, buy the Wade Portable Gasoline Drag Saw and have one man do the work of six. S. N. CASTLE CO., Constantine, Mich.

A Colony Hog House

By Harley M. Ward

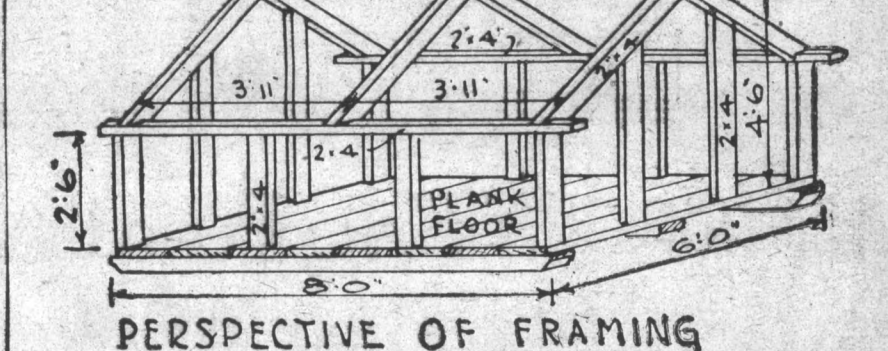
THIS six by eight-foot colony the middle of the gable end, or near house has proved its value one corner of the end or side. The where it has been used. It is a side or end is the best because the gable-roof house with the roof doors swine are better protected from drafts, on one side to be opened for sunlight. The size of doorway is twenty-four by

The colony hog house has made itself almost indispensable through its adaptability to varied conditions. When properly built and used, this type of piggery has proved very successful. Proper housing is essential in live stock raising of any kind and more especially swine. Dry, sanitary, comfortable conditions must be provided if one wishes the best returns in the pork producing business.

Build the plank floor first. Timbers four inches square for the outside four in the center stiffens the frame. Next comes the framing work, which is made of two by four lumber. This is placed on top of the plank floor. The outside studdings are two and a half

feet high and are placed at equal distances, or about two feet eight inches apart. The two by four rafters are set shown with a center three feet eleven inches apart. On the north slope, or opposite the slope where the doors or windows are to be placed, there should be some sort of a wind brace in between the rafters so as to keep the house rigid at all times.

The siding material used is a ten-inch dressed shiplap. This material can be used all over the house for the doors, roof and siding and will result in a good tight and warm building that will be free from drafts.



PERSPECTIVE OF FRAMING

feet high and are placed at equal distances, or about two feet eight inches apart. The two by four rafters are set shown with a center three feet

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The siding material used is a ten-inch dressed shiplap. This material can be used all over the house for the doors, roof and siding and will result in a good tight and warm building that will be free from drafts.

The roof doors, which are on the east or south slope of the house are hinged at top or side and each door is two by four feet in size. Extra heavy eight-inch strap hinges are used. The entrance door may be placed in

M. A. C. News Letter

SELDOM do officers of the Michigan Crop Improvement Association, though they frequently resort to distant states to procure seed for Wolverine growers, look so far afield as Scandinavia for a needed variety.

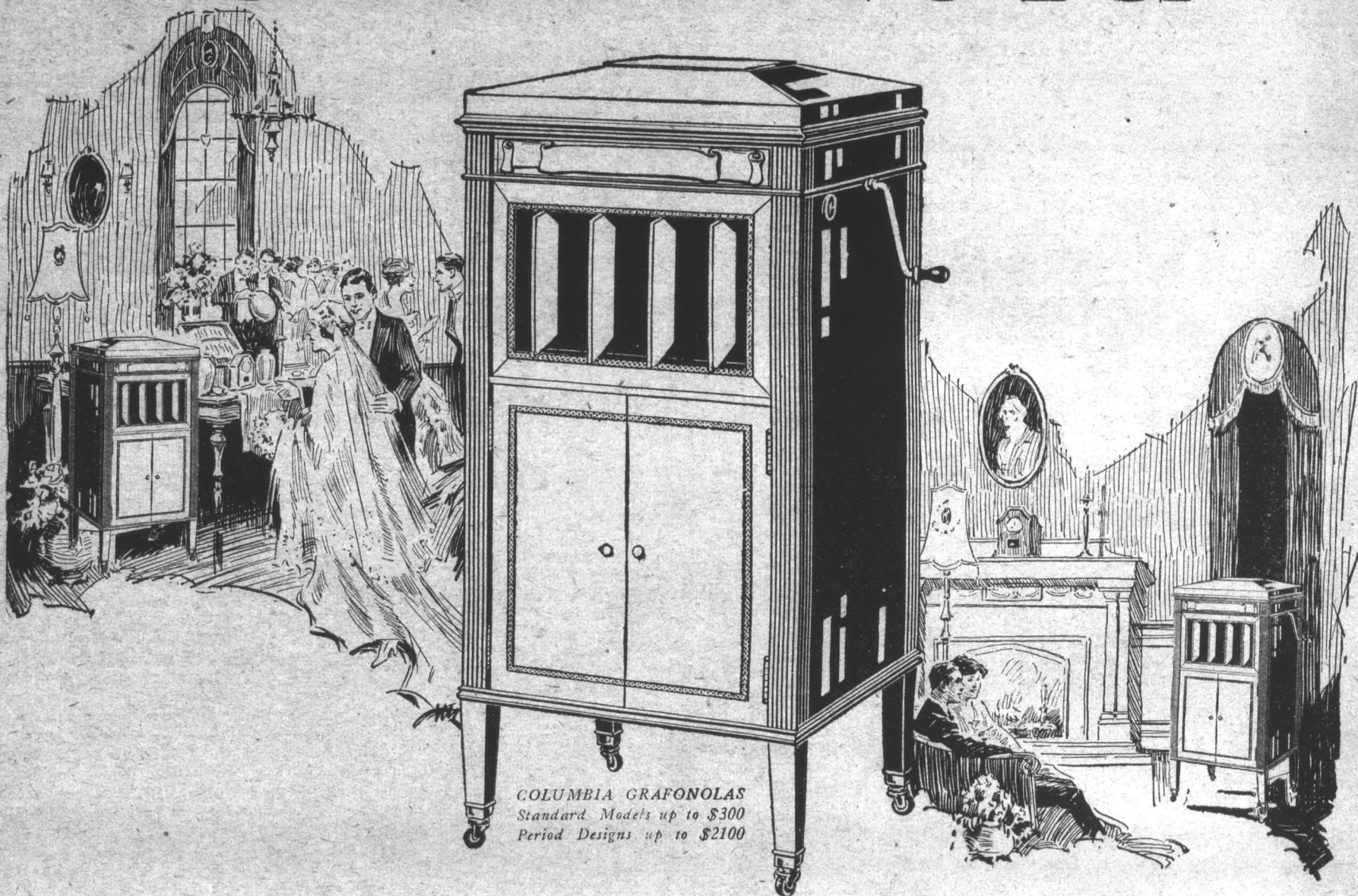
A. L. Bibbins, of the M. A. C. farm crops department, secretary of the association, has announced that it is possible that hairy vetch seed, of which there is a marked scarcity throughout America this year, may be secured from north European countries in time for this season's use.

A temporary option, subject to inspection, has been placed on this supply and arrangements have been made with the seed department of the Michigan Farm Bureau, headed by J. W. Nicholson, for distribution to farmers of the state. The price has not been definitely set, but it is expected to run from twenty-eight to thirty cents per pound.

The seed is said to be of high quality. Persons interested should mail their orders to 221 North Cedar street, Lansing, Michigan.



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Cabinets of exquisite beauty. Pure, unmuffled richness of tone. And last, but by no means least, the new Grafonola models are equipped with the exclusive Columbia Non-Set Automatic Stop, the only automatic stop that requires absolutely no setting.

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The Separator with the MILLION DOLLAR BOWL



THE first impression you get when you see an EMPIRE-BALTIC is—simplicity. Almost automatically the design which brought efficiency brought simplicity also. For efficiency demanded compactness and freedom from "ginger-bread work"—a machine that could be used and misused without affecting its efficiency in skimming. The EMPIRE-BALTIC, the Separator with the Million Dollar Bowl, is the product of years of study and experiment by a score of the foremost separator engineers. It sets a new standard of separator performance.

The Million Dollar Bowl is self-centering and self-balancing; practically no vibration; and so does not agitate the milk; it skims clean all the time; it is easy to turn, frictionless; once adjusted it is adjusted for life; its discs are interchangeable—a great convenience in cleaning and assembling. It is the last word in Bowl construction—Simple, efficient, convenient and practically everlasting.

You'll find other separators as good looking as the EMPIRE-BALTIC—no manufacturer has a corner on good looks. You'll find other Separators made, like the EMPIRE-BALTIC, out of the best materials obtainable—any one can buy the best grades of materials. But you'll find only one Separator with the Million Dollar Bowl—an exclusive EMPIRE-BALTIC feature—fully covered by basic patents. Clip and mail the coupon below.

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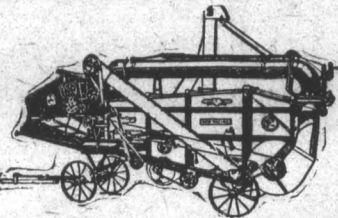


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Garage Book, showing styles, THE EDWARDS MFG. CO., 517-567 Pike St., Cincinnati, O.

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Will Soon Earn Its Cost

With a NEW RACINE Individual Thresher you can pocket the threshing profits yourself and prevent the usual losses. Besides, you can soon get back its cost by threshing for your neighbors. Your farm tractor will supply the power.

Made in two sizes—20x32 and 24x40. Will thresh any kind of grain or seed, peas or beans.

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Works in any soil. Makes V-shaped ditch or cleans ditches up to four feet deep. All steel. Reversible. Adjustable. Write for free book and our proposition. Owensboro Ditcher & Grader Co., Inc. Box 315 Owensboro, Ky.

Our Service Department

GROWING WHITE BLOSSOM SWEET CLOVER.

At what time should the white blossom sweet clover be sown, and how does one tell when the hay is ready to cut, how many crops a year, etc. Please give full particulars.

Subscriber.

The white blossom biennial sweet clover may be seeded successfully at any time from early spring until the middle of the summer, provided conditions are right and thorough preparations have been made. Three things are necessary: lime, inoculation and scarified seed. The same soil conditions must prevail as would be necessary for the successful seeding of alfalfa; except that sweet clover seems to thrive better in a soil low in organic matter than alfalfa. Plenty of lime must be used. Probably two tons per acre would be the minimum application. Seed may be sown alone or with a light grain crop. If seeding is made after the latter part of April, it would be best to seed alone.

If the crop is cut for hay, two cuttings may be obtained if the first cutting is made early enough and care is taken to cut the stubble about six inches high. This is necessary because of the fact that your second growth comes from the buds on the stubble left and not from the crown of the plant. The usual way is to make hay out of the first growth and cut the second crop for seed or pasture it. The first cutting should be made usually between June 1 and June 15. From one to two tons of hay per acre will be harvested.

TITLE ABSTRACTS.

My wife's parents died a short time ago, leaving a little real estate. She being the only child and heir what would be the least expensive and yet legal way to have her name appear on the abstract of title, or is there no other way than through the probate court?—B. D.

Abstracts are only abridgements of what appears on the records. There are many titles that do not appear of record. Inheritance is one, marriage is another, homestead is another, adverse possession is another. The probating of the estate bars all claims for debts of the deceased, and the probate proceedings may be included in the abstract; but conveyance by the heirs without any probate proceedings would pass whatever title they had; which would be the whole title subject to possible debts. J. R. R.

STOCK ON HIGHWAYS.

There have been several cases here of cattle and horses killed and injured by autos. Kindly give the laws relating to live stock running on the highways. Can a man take cattle off the highway, or does he have to wait until they get in his crop? There seems to be many who make a practice of allowing their stock to run on the road where some have no road fences. How far from the road does a man have to plant trees in order to not have them cut down by the telephone company? They cut them down here for about five miles and dropped them right in the ditches or anywhere. Some nice maples of ten to fifteen years' growth have been trimmed up by the county. I have a nice growth along part of the front of my farm, and put up a notice to not cut anything out, but the notice has been torn down.—H. W. S.

By Comp. Laws, (1915), Sec. 7447, any resident freeholder of the town may take up stray horses, mules, and asses, going at large any time of year, and may take up stray cattle, sheep and hogs from December 1 to March

1. Otherwise, private citizens have no right to take the animals of others not found on their own premises. A person negligently killing stock of another in the road is liable in damages.

The statute provides that shade trees shall be planted from twenty-three to twenty-five feet from the center of the road. Telephone companies have been held liable for injuries to trees along the road in putting up and maintaining their lines. J. R. R.

LINE FENCE.

A and B own adjoining farms, and A has notified B to keep his sheep and horses off his, A's, land. B has built his portion of the line fence but A has not put up his half. A's land is fenced on the other three sides. This is wild land and no crops on it. Can B be compelled to keep his sheep and horses off of A's land, or put up A's portion of the fence?—O. G. P.

If the line has been duly divided, and the part assigned to one has been built by him, he can have an order by the fence viewers that the other build his half, and if it is not done he may himself build it, and have the cost added to the other's taxes, or he may let his cattle run as in this case. J. R. R.

LOGS WASHED ASHORE.

I own property that fronts on lake, and also runs into the lake. Last summer a lumber company were rafting some logs when a storm came up and most of the logs in the raft were lost. Now some of these logs washed up on my property, and after leaving them there till this winter I hauled them to the saw mill. A man in this place bought these logs from the lumber company and now he claims them at the mill. What rights have I in regard to these logs?—E. M.

The logs belong to the purchaser from the lumber company. The inquirer has no rights. J. R. R.

WHEN INTEREST IS DUE.

A note running four or five years bears interest at six per cent, with no mention made as to when this interest should be paid. Can the holder of this note collect interest annually, and if so can he collect interest on unpaid interest, or is the giver of the note with in his legal rights when he pays the total amount of interest at the time the note matures?—A. F.

In the absence of agreement to the contrary, the interest is all due when the principal is due; and there is no interest on the interest. J. R. R.

CLAIMS AGAINST ESTATE.

Can a wife collect a note from her husband's estate, the money being loaned to him before their marriage? Also, what part of real and personal property does a widow hold in Michigan, if there are no children and no nearer kin than cousins?—A. B.

The widow would have the same rights as any other creditor. The husband's debts to her are not cancelled by the marriage. She should prove her claim to the probate court, and get an order that it be paid by the administrator. J. R. R.

DESCENT—LAND CONTRACT.

We have bought a farm on contract intending to have a joint deed. When my husband made contract it was between the former owner and himself. In case of my husband's death would I receive contract? How would it be settled, and also personal property? Could contract be made a joint contract?—Mrs. P. L.

The land would be disposed of as if the husband had a deed to the land in his own name. J. R. R.



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The Ottawa Log Saw falls trees or cuts off stumps level with ground. Saws up logs, cuts up branches, ice cutter, runs pump jack and other belt machinery. Mounted on wheels. Easy to move anywhere. 10 Year Guarantee. 30 Days Trial. Write for Free Book and Cash or Easy Terms. OTTAWA MFG. CO., 1501 Wood St., Ottawa, Kans.

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Letters we receive from thousands of our 100,000 satisfied users tell us that "Delco-Light makes chore work easier."

When so many users say that Delco-Light is a good investment, that it saves time and labor and that it increases the joys of life, you have assurance it will do as much for you.

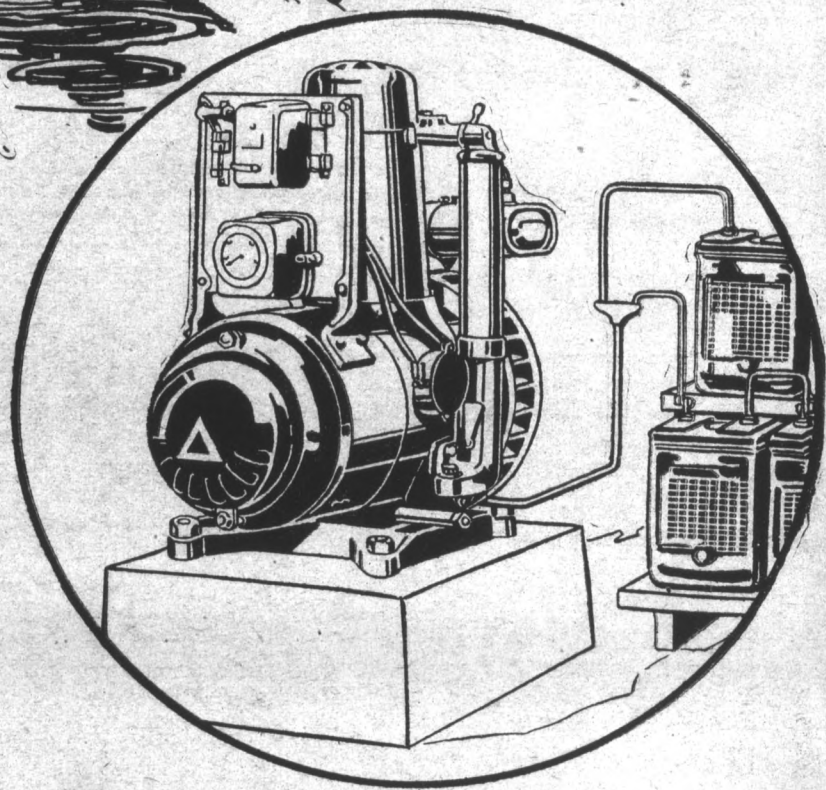
Delco-Light does away with all dangerous open-flame lamps and lanterns.

At the push of a button, clean, safe electric light floods the house and all farm buildings, speeding up the work and making everyone just a little bit happier.

Electric power pumps water quickly to the kitchen, bathroom and watering troughs, turns the cream separator, churn or grindstone or operates an electric iron, fan or vacuum cleaner.

Delco-Light helps answer the labor shortage problem and in addition makes the farm home more attractive and comfortable.

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A complete electric light and power plant for farms and country homes, self-cranking—air cooled—ball bearings—no belts—only one place to oil—thick plates—long-lived battery.

**Valve-in-Head Motor
Runs on Kerosene**

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Detroit, Michigan

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Grand Rapids, Michigan

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Illustration shows Everlastic Slate-Surfaced Shingles on barn, silo and residence and Everlastic "Rubber" Roofing on out-building.



A Western Farm Paper Says—

"Sightly farm buildings create home pride in the owner and his family; keep him up-to-date, and strengthen his credit".

Barrett Everlastic Roofings fully meet the requirements of the farmer who realizes that the appearance of his place goes a long way towards fixing his standing in the community.

Barrett Everlastic Roofings are low in cost, easy to lay, weather-proof, fire-resistant and extremely serviceable.

Both forms of Everlastic Shingles and one of the Roll Roofings have a real crushed-slate surface in a natural art-shade of red or green which gives them rich and lasting beauty.

They will improve the appearance of the finest residence, yet are economical enough for steep-roofed farm buildings, of every type, that require an attractive roof.

And where a plain-surface roll roofing will do, Everlastic "Rubber" Roofing provides the utmost in economy and durability.

Illustrated booklet describing any one of the four styles of Everlastic Roofings will be sent free on request.

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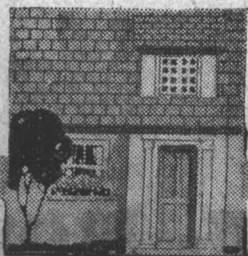
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Everlastic "Rubber" Roofing

A recognized standard among "rubber" roofings. Famous for its durability. Made of high-grade waterproofing materials, it defies wind and weather and insures dry, comfortable buildings under all weather conditions. Nails and cement with each roll.

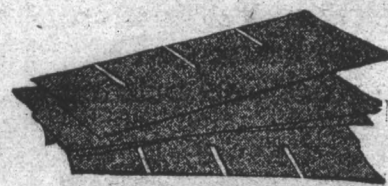


Everlastic Slate-Surfaced Roofing

A high-grade roll roofing, surfaced with genuine crushed slate, in two natural shades, red or green. Needs no painting. Handsome enough for a home, economical enough for a barn or garage. Combines real protection against fire with beauty. Nails and cement with each roll.



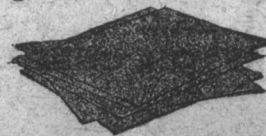
Everlastic Multi-Shingles (4 Shingles in One)



Made of high-grade thoroughly waterproofed felt and surfaced with crushed slate in beautiful natural slate colors, either red or green. Laid in strips of four shingles in one at far less cost in labor and time than for wooden shingles. Give you a roof of artistic beauty worthy of the finest buildings, and one that resists fire and weather. Need no painting.

Everlastic Tylike Shingles

Made of the same durable slate-surfaced (red or green) material as the Multi-Shingles, but cut into individual shingles, 8 x 12 3/4 inches. Laid like wooden shingles but cost less per year of service. Need no painting.



WORLD EVENTS IN PICTURES



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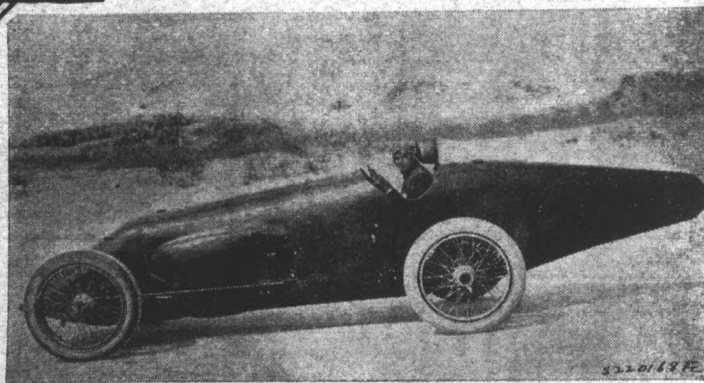
These men are anxiously waiting for some indication that their ambitious attempt to send a wireless message to Mars has been successful.



"Pussyfoot" Johnson, who returns to the United States after varied experiences in his campaign in England against John Barleycorn, is received by a big delegation.



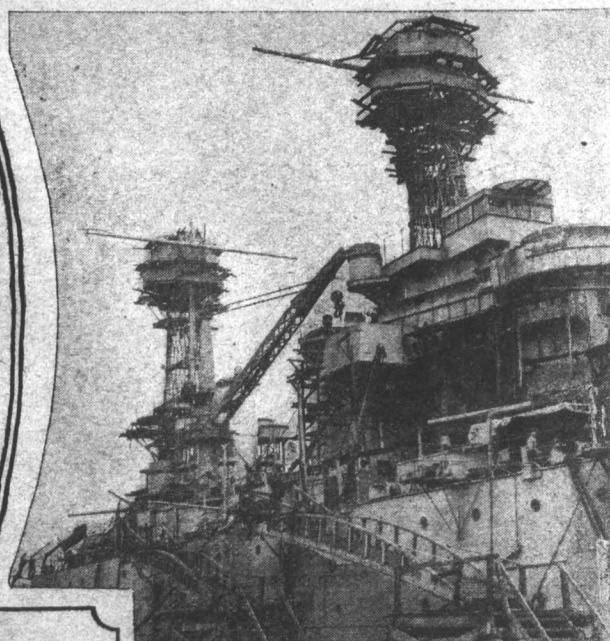
Frank Bacon, famous American actor, finds relaxation with his carpenter's tools.



This sixteen-cylinder racing car established six new world records at recent meet at Daytona, Fla.



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THE VALLEY OF THE GIANTS

A ROMANCE OF THE REDWOODS

By Peter B. Kyne

CHAPTER X.

FOR many years there had been installed in Cardigan's mill a clock set to United States observatory time and corrected hourly by the telegraph company. It was the only clock of its kind in Sequoia; hence folks set their watches by it, or rather by the whistle on Cardigan's mill. With a due appreciation of the important function of this clock toward his fellow-citizens, old Zeb Curry, the chief engineer and a stickler for being on time, was most meticulous in his whistle-blowing. With a sage and prophetic eye fixed upon the face of the clock, and a particularly greasy hand grasping the whistle-cord, Zeb would wait until the clock registered exactly six-fifty-nine and a half—whereupon the seven-o'clock whistle would commence blowing, to cease instantly upon the stroke of the hour.

It was old Zeb's pride and boast that with a single exception, during the sixteen years the clock had been in service, no man could say that Zeb had been more than a second late or early with his whistle-blowing. That exception occurred when Bryce Cardigan, invading the engine-room while Zeb was at luncheon, looped the whistle-cord until the end dangled seven feet above ground. As a consequence Zeb, who was a short, fat little man, was forced to leap at it several times before success crowned his efforts and the whistle blew. Thereafter for the remainder of the day his reason tottered on its throne, due to the fact that Bryce induced every mill employee to call upon the engineer and remind him that he must be growing old, since he was no longer dependable!

On the morning following Bryce Cardigan's return to Sequoia, Zeb Curry, as per custom, started his engine at six-fifty-eight. That gave the huge bandsaws two minutes in which to attain their proper speed and afforded Dan Kenyon, the head sawyer, ample time to run his steam log-carriage out to the end of the track; for Daniel, too, was a reliable man in the matter of starting his daily uproar on time.

At precisely six fifty-nine and a half, therefore, the engineer's hand closed over the handle of the whistle-cord, and Dan Kenyon, standing on the steam-carriage with his sand on the lever, took a thirty-second squint through a rather grimy window that gave upon the drying-yard and the mill-office at the head of it.

The whistle ceased blowing, but Dan Kenyon stood at his post, oblivious of the hungry saws. Ten seconds passed; then Zeb Curry, immeasurably scandalized at Daniel's tardiness, tooted the whistle sharply twice; whereupon Dan woke up, threw over the lever, and walked his log up to the saw.

For the next five hours Zeb Curry had no opportunity to discuss the matter with the head sawyer. After blowing the twelve o'clock whistle, however, he hurried over to the dining-hall, where the mill hands already lined the benches, shoveling food into their mouths as only a lumberman or a miner can. Dan Kenyon sat at the head of the table in the place of honor sacred to the head sawyer, and when his mouth would permit of some activity other than mastication, Zeb Curry caught his eye.

"Hey, you, Dan Kenyon," he shouted across the table, "what happened to you this mornin'? It was sixteen seconds between the tail end o' my whistle an' the front end o' your whin-

in'. First thing you know, you'll be gettin' so slack an' careless-like some other man'll be ridin' that log-carriage o' yours."

"I was struck dumb," Dan Kenyon replied. "I just stood there like one o' these here graven images. Last night on my way home from work I heerd the young feller was back—he got in just as we was knocking off for the day; an' this mornin' just as you cut loose, Zeb, I'll be danged if he didn't show up in front o' the office door, fumblin' for the keyhole. Yes, siree: That boy gets in at six o'clock last night an' turns to on his paw's job when the whistle blows this mornin' at seven."

"You mean young Bryce Cardigan?" Zeb queried incredulously.

"I shore do."

"Tain't possible," Zeb declared.

"You seen a new bookkeeper, mebbe, but you didn't see Bryce. He ain't no such hog for labor as his daddy before him, I'm tellin' you. Not that there's a lazy bone in his body, for there ain't, but because that there boy's got too much sense to come bolin' down to work at seven o'clock the very first mornin' he's back from Yurup."

"I'm layin' you ten to one I seen him," Dan replied defiantly, "an' what's more, I'll bet a good cigar—a ten-center straight—the boy don't leave till six o'clock tonight."

"You're on," answered the chief engineer. "Them's lumberjack hours, man. From seven till six means work

WHITE LIES.

Bill Smith was just a P-V-T
A-serving in the Infantry
And taking orders under me.

A simple cuss he seemed to me;
I never thought that he could be
A teacher of philosophy,

Till suddenly one awful night,
In rain and cold and sorry plight,
The Boche attacked upon our right.

Then just before that bloody fight
Bill scrawled this note by candlelight:
(I censored it with blurring sight).

"Dear Ma," he wrote, "here's just a line

To let you know I'm feeling fine.
This kind of life is hard to beat.
You ought to see the way I eat;
But then we've got the finest chow
In all the army anyhow.

They feed us meat and eggs and cakes
Until we all have tummyaches.
Our grub is always piping hot;
That stuff is all a lot of rot
About our being poorly fed,
And using pig-pens for a bed.
Why, listen, Ma, I'm sleeping high
Up where it's nice and warm and dry;
It's in a dandy old chateau
Where princes slept not long ago.
There's shower baths and everything
That I could wish, if I were king.
It sure is great to see the way
The mail from home comes in each day;

I guess I've had my full share, too,
Most every day I hear from you.
Now don't you worry, Ma, for me;
I'm just as safe as safe can be.
For we are miles in the rear
And far from any danger here.
I guess the bloomin' war'll stop
Before I once go o'er the top.
I'm just as happy as can be.
This soldier-life agrees with me.
So, smile, Ma, 'twill not be long
Until we sing the victor's song,
And great will be your pride and joy
To greet your grown-up little boy."

I've marked his grave beyond the hill,
And though I wear a Sam Browne,
still

I learned a heap from Private Bill.
—John M. Martin in American Legion Weekly.

—an' only fools an' hosses keeps them hours."

The head sawyer leaned across the table and pounded with the handle of his knife until he had the attention of all present. "I'm a-goin' to tell you young fellers somethin'," he announced. "Ever since the old boss got so he couldn't look after his business with his own eyes, things has been goin' to blazes round this sawmill, but they ain't a-goin' no more. How do I know? Well, I'll tell you. All this forenoon I kept my eye on the office door—I can see it through a mill winder; an' I'm tellin' you the old boss didn't show up till ten o'clock, which the old man ain't never been a ten o'clock business man at no time. Don't that prove the boy's took his place?"

Confused murmurs of affirmation and negation ran up and down the long table. Dan tapped with his knife again. "You hear me," he warned. "Thirty year I've been ridin' John Cardigan's log-carriages; thirty year I've been gettin' everythin' out of a log it's possible to git out, which is more'n you fellers at the trimmers can git out of a board after I've sawed it off the cant. There's a lot o' you young fellers that've been takin' John Cardigan's money under false pretenses, so if I was you I'd keep both eyes on my job hereafter. For a year I've been claimin' that good No. 2 stock has



"All about Bryce were scenes of activity, of human endeavor; and to him in that moment came the thought: 'My father brought all this to pass—and now the task of continuing it is mine!'"

been chucked into the slab-fire as refuse lumber." (Dan meant refuse lumber). "But it won't be done no more. The raftsmen tell me he seen Bryce down at the end o' the conveyin' belt givin' that refuse the once-over—so step easy."

"What does young Cardigan know about runnin' a sawmill?" a planer-man demanded bluntly. "They tell me he's been away to college an' travelin' the past six years."

"Well," drawled the head sawyer, "you git to talkin' with him some day an' see how much he knows about runnin' a sawmill. What he knows will surprise you. Yes, indeed, you'll find he knows considerable. He's picked up loose shingles around the yard an' bundled 'em in vacation times, an' I want to see the shingle-weaver that can teach him some tricks. Also, I've had him come up on the steam carriage more'n once an' saw up logs, while at times I've seen him put in a week or two on the sortin' table. In a pinch, with a lot o' vessels loadin' here at the dock an' the skippers raisin' Cain because they wasn't gettin' their cargo fast enough, I've seen him work nights an' Sundays tallyin' with the best o' them. Believe me, that boy can grade lumber."

"An' I'll tell you somethin' else," Zeb Curry cut in. "If the new boss ever tell you to do a thing his way,



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you do it an' don't argue none as to whether he knows more about it than you do or not."

"A whole lot o' dagoes and bohunks that's come into the woods since the blue-noses an' canucks an' wild Irish went out had better keep your eyes open," Dan Kenyon warned sagely. "There ain't none o' you any better'n you ought to be, an' things have been pretty durned slack around Cardigan's mill since the old man went blind, but —you watch out. There's a change due. Bryce Cardigan is his father's son. He'll do things."

"Which he's big enough to throw a bear uphill by the tail," Zeb Curry added, an' you fellers all know how much tail a bear has."

"Every mornin' 'for 'thirty years, 'ceptin' when we was shut down for repairs," Dan continued, "I've looked through that winder, when John Cardigan wasn't away from Sequoia, to watch him git to his office on time. He's there when the whistle blows, clear up to the time his eyes go back on him, an' then he arrives late once or twice on account o' havin' to go careful. This mornin', for the first time in fifty year, he stays in bed; but—his son has the key in the office door when the whistle blows, an'—"

Dan Kenyon paused abruptly; the hum of conversation ceased, and silence fell upon the room as Bryce Cardigan strolled in the door, nodded to the men, and slid in on the bench to a seat beside the head sawyer.

"Hello, Dan—hello, Zeb," he said and shook hands with each. "I'm mighty glad to see you both again. Hello, everybody. I'm the new boss, so I suppose I'd better introduce myself, there are so many new faces here. I'm Bryce Cardigan."

"Yes," Zeb Curry volunteered, "an' he's like his daddy. He ain't ashamed to work with his men, an' he ain't ashamed to eat with his men, nuther. Glad you're back with us again, boy—mighty glad. Dan, here, he's gittin' slacker'n an old squaw with his work an' needs somebody to jerk him up, while the rest o' these here—"

"I noticed that about Dan," Bryce interrupted craftily. "He's slowing up, Zeb. He must have been fifteen seconds late this morning—or perhaps," he added, "you were fifteen seconds earlier than the clock."

Dan grinned, and Bryce went on seriously: "I'm afraid you're getting too old to ride the log-carriage, Dan. You have been at it a long time; so, with the utmost good will in the world toward you, you're fired. I might as well tell you now. You know me, Dan. I always did dislike beating about the bush."

"Fired!" There was unmistakable finality in Bryce tones. "You're hired again, however, at a higher salary, as mill-superintendent. You can get away with that job, can't you, Dan? In fact," he added without waiting for the overjoyed Dan to answer him, "you've got to get away with it, because I discharged the mill-superintendent I found on the job when I got down here this morning. He's been letting too many profits go into the slab-fire. In fact, the entire plant has gone to glory. Fire-hose old and rotten—couldn't stand a hundred-pound pressure; fire-buckets and water-barrels empty, axes not in their proper places, fire-extinguishers filled with stale chemical—why, the smallest kind of a fire here would get beyond our control with that man on the job. Besides, he's changed the grading rules. I found the men putting clear boards with hard-grained streaks in them in with the No. 1 clear. The customer may not kick at a small percentage of No. 2 in his No. 1 but it's only fair to give it to him at two dollars a thousand less."

"Well," purred Zeb Curry, "they don't grade lumber as strict nowadays as they used to before you went away. Colonel Pennington says we're a lot o'

back numbers out this way an' too generous with our grades. First thing he did was to call a meetin' of all the Humboldt lumber manufacturers an' organize 'em into an association. Then he had the gradin'-rules changed. The retailers hollered for a while, but bimeby they got used to it."

"Did my father join that association?" Bryce demanded quickly.

"Yes. He told Pennington he wasn't goin' to be no obstructionist in the trade, but he did kick like a bay steer on them new gradin'-rules an' refused to conform to 'em. Said he was too old an' had been too long in business to start goug'n his customers at his time o' life. So he got out o' the association."

"Bully for John Cardigan!" Bryce declared. "I suppose we could make a little more money by cheapening our grade, but the quality of our lumber is so well known that it sells itself and saves us the expense of maintaining a corps of salesmen."

"From what I hear tell o' the Colonel," Dan observed sagely, "the least he ever wants is a hundred and fifty per cent the best of it."

"Yes," old Zeb observed gravely, "an' so far as I can see, he ain't none too particular how he gets it." He helped himself to a toothpick, and followed by the head sawyer, abruptly left the room—after the fashion of sawmill men and woodsmen, who eat as much as they can as quickly as they can and eventually die of old age rather than indigestion. Bryce ate his noonday meal in more leisurely fashion and at its conclusion stepped into the kitchen.

"Where do you live, cook?" he demanded of that functionary; and upon being informed, he retired to the office and called up the Sequoia meat-market.

"Bryce Cardigan speaking," he informed the butcher. "Do you buy any pigs from our mill cook?"

"Not any more," the butcher answered. "He stung me once with a dozen fine shoats. They looked great, but after I had slaughtered them and had them dressed, they turned out to be swill-fed hogs—swill and alfalfa."

"Thank you," Bryce hung up. "I knew that cook was wasteful," he declared, turning to his father's old manager, one Thomas Sinclair. "He wastes food in order to take the swill home to his hogs—and nobody watches him. Things have certainly gone to the devil," he continued.

"No fault of mine," Sinclair protested. "I've never paid any attention to matters outside the office. Your father looked after everything else."

Bryce looked at Sinclair. The latter was a thin, spare, nervous man in the late fifties, and though generally credited with being John Cardigan's manager, Bryce knew that Sinclair was in reality little more than a glorified bookkeeper—and a very excellent bookkeeper indeed. Bryce realized that in the colossal task that confronted him he could expect no real help from Sinclair.

"Yes," he replied, "my father looked after everything else—while he could." "Oh, you'll soon get the business straightened out and running smoothly again," Sinclair declared quite confidently.

"Well, I'm glad I started on the job today, rather than next Monday, as I planned to do last night."

He stepped to the window and looked out. At the mill-dock a big steam schooner and a wind-jammer lay; in the lee of the piles of lumber, sailors and longshoremen, tallymen and time-keeper lounged, enjoying the brief period of the noon hour still theirs before the driving mates of the lumber-vessels should turn them to on the job once more. To his right and left stretched the drying yard, gangway on gangway formed by the serried rows of lumber-piles, the hoop-horses plac-

idly feeding from their nosebags while swung inward, and descended to the the strong-armed fellows who piled steamer's decks.

the lumber sat about in little groups All about Bryce were scenes of activity, of human endeavor; and to him conversing with the mill-hands. in that moment came the thought: "My father brought all this to pass—and now the task of continuing it is mine! All those men who earn a living in Cardigan's mill and on Cardigan's dock—those sailors who sail the ships that carry Cardigan's lumber in to the distant marts of trade—are dependent upon me; and my father used to tell me not to fail them. Must my the donkey-engines aboard the vessels father have wrought all this in vain? rattled; the cargo-gaffs of the steam And must I stand by and see all this schooner swung outward, and a mo-go to satisfy the overwhelming ambition later two great sling-loads of tion of a stranger?" His big hands newly sawed lumber rose in the air, clenched. "No!" he growled savagely. (Continued next week).

Whose Neighbor Are You?

(Our Weekly Sermon)

By N. A. McCune

A RANCHMAN in Montana sent to Chicago for a fur overcoat. His tailor let the making of the coat to a Jew. Smallpox broke out in the Jew's shop, the germs were carried in the overcoat to Montana, and the ranchman died. In a town where the writer lived was a man who kept a cow and sold milk to a few families. Every child using the cow's milk was sick. It was then found that the stable where the cow was kept was in a filthy condition. A quarrel between two nations sprang up in Europe. It began in a town scarcely anyone in America had heard of, and whose name no one could pronounce. But before the quarrel was over, men had to go from America, three thousand miles away, to settle it. We live close together. We are neighbors whether we want to be, or not. We influence each other, even when we do not want to be influenced. There are some families, perhaps, in your neighborhood, with whom you do not associate. They are not the sort of people whom you incline to know intimately. But your children associate with their children. In school they sit side by side. Your boy brings home yords and habits that he acquired from that source. If you get desperate and move away, as I know of one family doing, you may move alongside some family more objectionable than the one you left. If being a neighbor is such a vital matter, it may be well to inquire, what kind of neighbor am I? Maybe someone is preparing to move, because they do not like my family. It is an art to be a neighbor.

The story of the Good Samaritan, told in Saint Luke, is one of the most pungent and powerful stories Jesus ever told, and that is saying much, for Jesus was a master of the short story. In this story he says that a neighbor is anyone whom you can help. If that was important in Christ's time, it is a thousand fold more so now. People lived far apart then. They were separated by great distances. There are no great distances now. We live close together. We contact fifty people now, for one in Christ's time. What affects a man in Michigan, will affect his brother-in-law in Texas. We are tied together by an army of forces, social, business, racial and class, and we cannot escape. When the switchmen go on strike, it keeps the flour out of your bin, the coal out of your cellar, and you cannot ship your stock.

A mean neighbor can make us a heap of trouble, though we never saw him, and he lives five hundred miles away.

THERE are no "local ills" any more. What is local this evening may be a world curse by morning. We are told by good authority that if the churches of the United States had spent a million dollars in sending missionaries to Russia twenty-five years ago, to spread the gospel of good will and peace, that the results would have been sufficient to offset the Bolshevik frenzy. Why is China not a menace to the world, like Russia? She has more people, they are at least as ignorant, and they have grievances enough. Well, one reason is, many of the Chinese leaders have been influenced by Christian ideals. In fact, not a few of the men in high office are professing Christians. Y. M. C. A. men and others have spoken to thousands of Chinese students, and these meetings are frequently presided over by government officials, and are sometimes held in government buildings. There has been some good neighboring of China, by Americans.

Christ taught that to love God aright is the art of arts. And next to that is the art of loving our neighbor. It must be a great art, if we are to love him as we do ourselves. Most people love themselves enough. John A. Andrew, war governor of Massachusetts, said that he had never discriminated against a man because he was poor, or because he was ignorant, or because he was black. Probably if he were living now, he would add, or because he was foreign-born. An old couple lost their only son. A year later, they were sitting by the fire one night, in silence and loneliness. Neither spoke. It was the anniversary of the death of their boy. There came a knock at the door, and a big powerful man came in and sat down. He lived near by. The excuse he made for coming was, that he thought they would like to try a few of his Baldwins. But the real reason was, he remembered it was a year, since the funeral. That man is one of the best known statesmen in America and the world. He was not doing it to make votes. He was unconsciously living all over again those words spoken so long ago, about the Samaritan who helped the poor fellow who fell among thieves. He was trying to be a good neighbor.

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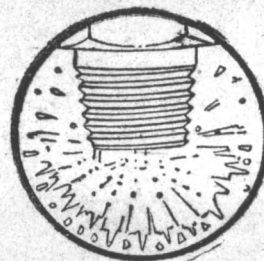
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The special Ford mounting holds the Unisparker in an upright position where it is fully protected from oil and grit, and readily accessible for inspection.

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5. This easy starting prolongs the life of the storage battery.
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7. The regular spark lever permits of additional spark advance if desired.
8. Fool-proof in construction—one adjustment only and that made with an ordinary screw driver.

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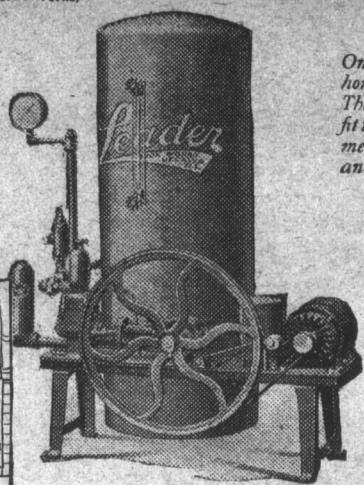
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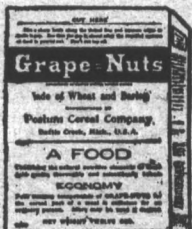
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Woman's Interests

Talk Up Your Job---

THERE'S one sort of propaganda I'd like to see American women start, and start right away. Indeed, if they don't start it and keep it going day and night for the next decade, they are going to be a lot of sorry women. And the men—well, they'll be much sorrier than the women. I refer to a propaganda in favor of women sticking to housework.

I am fully aware that just at present this would not be a bit popular. With publicity urging women to get out of the home and into the trades, business or profession, any movement suggesting that the time-honored trades of cooking, cleaning, washing, ironing and mending are highly necessary and demand women's time and thought would be frowned upon. But, then, just what are we going to do if all the women leave these lines of work and go into factories, offices, schoolrooms or studios? Someone has got to cook and wash dishes, and you can jolly well bet George won't do it. And there's another highly necessary occupation that must be carried on if we don't want this generation to be the last. Women always have done that, and an office or factory, it seems to me, would make a mighty poor nursery.

Seriously, we've got to have homes in the real sense of the word if we want to continue American ideals. And we can't have a home without someone right on the job to keep the wheels oiled and running smoothly. A community kitchen that sends us our dinner, community laundries, and cleaners who come in by the hour may rid us of the hard work, if we have the money to pay for this sort of service. But few of us can pay the prices, and even if we could, this sort of a life doesn't spell home. We'll hear a great deal this summer about what America needs, but in reality what America needs most of all is for women to stop running about trying to reform the outside world and help stricken Europe, and to settle down in their own workshops and sew on kiddies' buttons.

Every mother of a daughter should make it her business to talk up housework. Instead of starting the day with a groan at the everlasting dishwash-

ing, she should start it with a song of thanksgiving that she has the dishes to wash. Even if she doesn't feel thankful, if she'd really like to pitch every dish through the window, she has no right to let her daughter sense this feeling of dissatisfaction. She accepted the job of dishwashing when she accepted her wedding ring, and it is up to her to make the best of it.

I'll admit that housework has its hours of drudgery, but what job hasn't? For the woman who is tired of dishes and cleaning, I would recommend the job of trying to teach the multiplication table to a child who, by rights, belongs in the school for the mentally deficient. To her who is sick and tired of planning meals and thinking of something different to eat, I would suggest trying to think up something new every week—or day—for a husband who doesn't know, anyway, what women want on the so-called woman's page. Take it from one who is humbly trying to fill both jobs, getting something for dinner that will satisfy the family isn't to be mentioned in the same breath with writing something which will get by the editor.

Housekeeping—home-making—is just now under a cloud. Why I don't know. There is no more necessary, honorable, satisfying—and just now more highly paid—trade or profession if you wish to call it that, than this first occupation of woman's. Let's start a propaganda in its favor. Let's talk up housekeeping, not groan it down. Let's pretend we like it even if we don't. If we go about it in this spirit, it will not be long before it will have lost its terrors and we'll be surprised to find out we really like it after all.

Above all, let's not urge our daughters to take up some other line of work. They're bound to marry as the sparks fly upward, and it will be harder for them to settle down to home-making if we've got them used to some other line of work. Let's try to make it fashionable to be proud of our neat homes and good cooking. It used to be good form to be an excellent housekeeper. Let's make it so again.

DEBORAH.

Spring's First Fruit

By Lulu G. Parker

NATURE knew just what our jaded spring appetite needed when she started the first rhubarb plant and every home garden should have a few of the roots. The leaves are ornamental enough for a place among the flowers and shrubbery, in fact, they are quite as good looking as the caladium, which is so commonly used around canna beds in city parks.

Several years ago we set out a dozen two-year-old roots that would cost now about one dollar and fifty cents, and they have increased in size until they have furnished plenty of pie and sauce for a large family every spring since the second year. Ours is a good variety, sometimes called Wine Plant in the catalogs. It has dark red stalks, which make a pink sauce of excellent flavor. The roots should be set in a location that is sheltered from north winds. Ours extend along outside the chicken yard fence, where they are as ornamental as useful. We mulch them well with stable manure in the late fall. This is spaded under or removed in the spring in order to get early stalks for the first pie.

Last spring we cleared the snow off from one end of the row, and set a barrel over one root, banking it outside with horse manure. From under the barrel we got long tender stalks several weeks earlier than from the rest of the bed. Perhaps a small hot-bed frame with a sash would have been better to cover the roots, but the barrel worked very well.

Besides the usual pie and sauce there are other delicious ways of serving rhubarb. At canning time we put it, half-and-half, with raspberries, thus

spreading the raspberry flavor and making the more expensive fruit go twice as far. We cook the rhubarb with a little water until the little half-inch slices break down into a mushy sauce, and use it instead of water for canning the berries. The following recipes are favorites in our family:

Rhubarb and Ginger.

Wash and cut the stalks into inch pieces. To each cup of fruit add one-half cup of sugar. Boil five minutes and add one tablespoonful of candied ginger. Boil three minutes longer. Use as pudding sauce or filling for cake.

Baked Rhubarb.

Peel the stalks unless the skin is very tender and easily cut. Cut them into inch lengths. Put into a deep crock or pudding dish with one part of sugar, two parts of fruit, or a little more sugar if the sauce is liked quite sweet. Do not add water. Stand the crock or dish in a pan of boiling water to keep the rhubarb from burning, and set it in the oven. Bake until the stalks are clear, but whole. This makes a pretty pink sauce and takes less sugar than when it is stewed. A little lemon juice, or the yellow peel of a lemon may be added as a flavor.

Rhubarb Meringue.

Stew one pint of rhubarb stalks or bake it as above. While very hot remove it from the fire and add one tablespoonful of butter and a few drops

of vanilla, or lemon juice. Beat the yolks of three eggs very light and whip them into the rhubarb. Whip the whites of the eggs to a stiff froth and fold them into the mixture. Turn the whole into a pudding dish, set the dish in a pan of hot water and bake in a slow oven for fifteen minutes. Serve with cream.

Rhubarb Brown Betty.

Wash enough rhubarb to make three cups when cut into small pieces. Stir into the stalks one and one-third cupfuls of sugar. Melt two tablespoonfuls of butter and stir it into one and one-half cupfuls of bread crumbs. Put a layer of buttered crumbs on the bottom of a shallow pudding dish, cover with a layer of rhubarb, then more crumbs, and alternate the rhubarb and crumbs till all is used. Have the top layer of crumbs. Cover and bake in a slow oven for half an hour. Serve warm with sugar and cream.

One-crust Pieplant Pie.

Stew the pieplant until soft. To two cups of the sauce beat in one tablespoonful of flour, yolks of two eggs, and sugar to taste. Line a pie pan with crust, pour in the mixture, dot the top with bits of butter, and bake until firm like custard. Beat whites of the eggs to a stiff froth, with two tablespoonfuls of sugar. Spread over the pie, return to the oven, and allow it to remain until it is a delicate brown. Serve cold.

Means to Govern the Child

By Ella E. Rockwood

TO claim that a child can be governed entirely by love and moral suasion is to set at variance the wisdom of one supposed to have been the wisest man who ever lived. Yet there is a growing theory which is being borne out by actual practice that children do yield to gentler influences than those advocated by the aforesaid wise man, and that by appealing to the better instincts, commending the good qualities rather than arousing antagonism by direct opposition when undesirable tendencies are manifested, the child is led along in the desired direction unfolding and developing its life as no doubt nature intended.

It is impossible to say what would have been the result in any given case had an opposite course been pursued, but it is undoubtedly true that many children possessed of a violent temper had it made worse instead of better by being ruled by force. A case of this nature calls for rare good judgment and self-control on the part of the parent. If by any degree of tactfulness an outbreak can be avoided and the child safely guided past the danger signal, it is the far better method to pursue.

There are occasions however, when a firm hand is necessary, even so far as to follow the wise man's advice. Yet is it doubtful if whipping a child ever did any real good, although it usually furnishes a convenient safety valve for the temper of the parent.

The older one grows the more sympathy one has for children. This is why grandparents are usually not in favor of much punishment. Things look different than they used to, and minor offenses seem insignificant enough even to be overlooked entirely rather than to indulge in a hand-to-hand encounter which some otherwise excellent parents seem to consider a necessary accompaniment to good government.

One little girl who is of a rather nervous, excitable temperament yields instantly whenever matters are approaching a crisis if it is suggested that she go and put on her very best dress. While engaged in this fascinating occupation every vestige of temper vanishes and she becomes the most

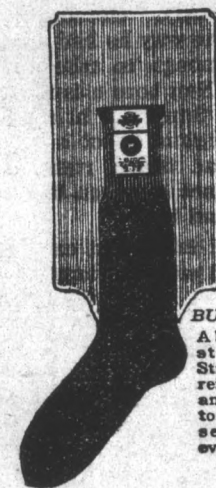
tractable child imaginable. Her mother considers this better than having a scene or trying to conquer her by reason of superior physical strength. Often the suggestion of a visit to the barn to see the calves or little lambs or even to gather the eggs, answers every purpose in routing the gathering storm clouds.

I am reminded of a six-year-old who was quite inclined to make things lively if crossed in his wishes. Left to himself he was goodness personified. Yet he could not always be left to himself. Lying on the floor of the living-room he was amusing himself by lifting first one foot then the other and letting it drop heavily on the carpet. His mother said nothing for a few minutes, evidently thinking he would turn his attention in some other direction. Finally, without even a suggestion that he stop making the noise she said: "John, do you know there are some roses out there on that bush? Don't you want to go and pick some for a bouquet?" John scrambled eagerly to his feet, his face fairly shining, and was off after the roses. When he came back he was too busy arranging them in a bowl his mother provided for the purpose, to even think of resuming his former occupation. Who shall say this is not a better way than so many "Don'ts?"

We are all of us more or less susceptible to the law of suggestion. Any physician knows this, and it is made useful in many ways by the medical fraternity. Praise is better than flogging. Emphasize the good, be generous even to a child with "Thank you, dear," and nine times out of ten it will respond readily to a parent's wishes. I cannot believe any parent looks back with satisfaction upon severe punishment of children.

HOME QUERIES.

Household Editor.—I would like to ask if a baby well and healthy at better than a year old would be able to take different kinds of milk, that is, I mean in case the mother was away with it, would change of milk be bad, providing it was good milk?—D. H.
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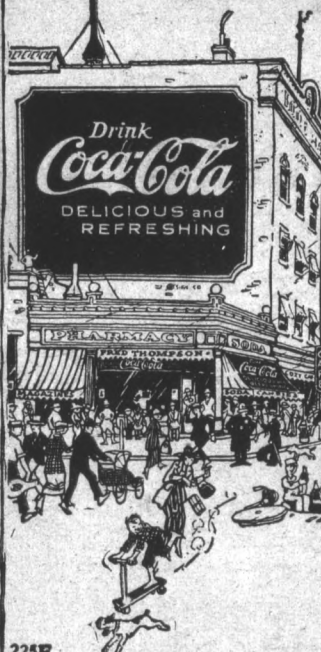
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Our Boys' and Girls' Department

The Trouble of a Big Boy

A Great Hope and The End it Came To—By Uncle Ed.

ONE of the first things boys and girls have to learn in this world is to meet hard things with a cheerful heart. It is not always easy to do it. Some folks, live as long as they may, always drop right down the moment they feel the touch of trouble. Have you ever seen that funny little plant that grows in low swampy places, often near the woods, which has little seed pods which snap and fly away out a good many feet just as soon as you put your finger on them? It is quite that way with some men and women. They "fly all to pieces" if they are called upon to bear difficult burdens.

One of our boys had a bit of experience once that gave him a pretty severe test in that way. Grandfather gave him a lamb, the way he had after the boys got old enough to take care of it. In due time Nan bore a lamb. It was a pretty little thing and in fancy the boy saw the beginnings of a good big flock. Nan had begun right, at any rate, and why not count on her to do still better by and by?

If ever a boy did take good care of a lamb, our boy did of Nan's lamb. He surely was on hand every time the feeding was to be done, and often between times, too. And the lamb did fine. It got so it could nibble grass as well as any of the sheep; and it was that fresh green grass that proved to be the undoing of Nan's lamb. We had a board fence about the barnyard where the sheep ran. The panels hung on iron hooks, quite the fashion in those days.

Like a great many folks, the lamb thought the grass on the other side of the fence looked a great deal fresher and greener than it did where she was. And she liked to get down on her knees and reach under the lower board of the fence and nip the grass as far as she could reach. That was the way the other sheep did; why not she?

One day the boy came scampering from the sheep yard, with trouble written all over his face.

"Come quick, Pa! Come! Nan's lamb is caught and can't get away!"

Sure enough. There was the beautiful little thing part way under the fence with a heavy panel of boards across her neck. Somehow while she had been eating the grass on the other side, the panel had been lifted high

enough to unlock it from the hook and down it came, catching the lamb and choking it to death.

You can imagine how hard it was to bear up against a thing of that kind. It takes a stout heart to be brave under such circumstances, but our boy was a man about it. We were proud of his way of facing that big piece of trouble.

After the first sting of the loss was over, he set to work to do the best he could for Nan's lamb. He dug a deep hole at one side of the yard, not far from where the lamb had been caught, hunted up a nice smooth flat stone from the little stream that ran through the lane, and with a pencil of stone put these words on the side of the marker:

"NAN'S LAMB."

Since that time our boy has had many things to meet that were not easy to be borne; but I am sure that the brave and manly way in which he faced that loss has helped him to take with a courageous heart the more serious troubles that have been his lot. For we do gain strength by meeting

hard things. If men want to get a timber for the mast of a ship, they do not go deep into the woods, for they know that trees that grow there may be tender and snap off when the wind blows hard. But they seek the tree that grows out in the open, where the storms have whipped it and wind and hail and snow have pelted it. There they get a spar that will stand against any tempest. It is so with men. Testing makes strong.

But one thing we did after Nan's lamb was caught. We got some more fence hooks, like those the panels hung on, and put one above the second board of the panel, with the hooks turned down. That prevented the sheep ever lifting any of the panels off.

In some such way as that many of the most valuable suggestions come to us. They are the result of accidents like that which took the lamb away, or they have come because we had to have them so that losses might be the better withstood and prevented. It is fine to keep one's heart steady in the time of testing. It leads to real manliness of character.

Sire and Son Make Breeding History

(Continued from first page).

pulled away from the thickly settled portions of the country's developed section where they have grown up, and have turned their backs on the sentimental things of the past and gone to a newer section to carve for themselves and theirs a home and an inheritance. The great men of the nation have been the offspring of pioneers, for the builders of a country seem to get more into life and get more out of it. They have usually been forced to live in lean circumstances and earn their bread by honest to goodness perspiration. These are people who can appreciate best the good things of life that come to them.

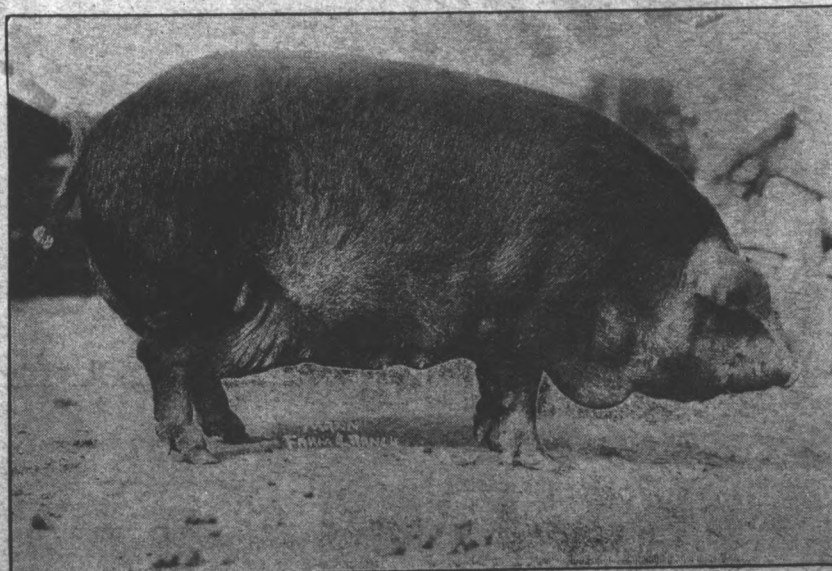
The subject of this story had such surroundings as described above in his youth and whatever of substance or wealth the father attained has been through the Duroc-Jersey route on their western farm, and during the



Encouraged by a thoughtful father, Dwight Putman, at an early age gains national fame as a swine judge.

young life of this breeder in embryo, while the father was building a herd of Durocs and disseminating good breeding stock to his neighbors all over the west. After completing high school this young man spent some time at the state university, taking particularly a course in feeds and feeding of swine and for a time had charge of the swine herd of the state institution. Scientific knowledge intelligently applied is doing wonders in the purebred industry today and it was to add this to his store of experience on the farm and in the herd that he took this university course. Returning to the herd he at once jumped into their care and conditioning and in his second year of that work had the pleasure of seeing a litter he had fitted walk off with the highest honors in the futurity show of Durocs. Every year since that date this firm has driven purple winners into the great shows of their own and neighboring states, and their public sales have been milestones in the breed's history.

One other thing which this father did. He gave the son access to the bank account as soon as he was old



Model Maude from the Putman Herd is Awarded First Prize at National Swine Show.

enough to know what a check was, and the privilege was never abused. It engendered the confidence that could have been secured in no other way.

There is no denying the fact that much of the success of this herd in the past four or five years has been the result of this boy's close application to detail and his undivided interest in the work in which his father was wise enough to give him a part when his habits and likes were being formed.

It must have been with a good deal of pardonable pride that the subject of this sketch just passed his majority, departed in September, 1919, with his bride of a few weeks, to do the judging of all breeds at three of the largest fairs on the Pacific coast. We have it from one of the best posted men in the United States, who was present at those fairs representing another breed, that the young man acquitted himself most creditably and gave general satisfaction.

Has Dwight Putman made any money out of the business, and has he the vision of the hog business of the future that looks good to him? I haven't talked with him on that subject but I do know that he but recently turned down an offer of a position that would next year at least, if it didn't this, make him a clear salary of \$10,000. Why did he turn it down? He sees more pleasure, more profit, more outcome to the management of a good herd of Durocs than he does in any other job that has yet been offered. This isn't at all bad for a young man who is sticking to his father's "trade" and following in the footsteps of a pioneer in Duroc building.

Sunshine Hollow Items

By Rube Rubicon

When the storm struck Sunshine Hollow, Norman Pierce was singing, "Good-Bye My Blue Bell," accompanied by his wife on the back porch. They changed their tune to, "Oh, How it Blew Belle," for just then the family cow named Belle, went sailing over the orchard. They traced Belle as far as Dewitt after the storm, as she was a heavy milker. When last seen she was headed for St. Johns at an altitude of ninety feet. Several times Belle used her tail as a rudder and dodged the buildings in the air. Norman will give \$10 reward to find out where it blew Belle.

Herman Wolf has been working out east in the shipyards and has often seen them christen ships. His wife wants to take their baby to church next Sunday to be christened but Herman says he can't bear to see the preacher soak little Fritz on the head with a bottle.

After the cyclone a farmer came along through our section and said he was looking for a house. We didn't know of any for rent and told him so. He said, "I don't want to rent one, I just peeped around the cement water trough over in the next township and saw my house going in this direction."

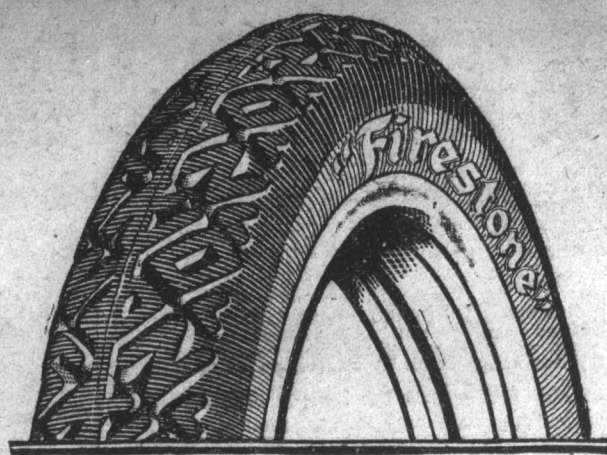
THE "HALF-BAGANI."

Among the Filipinos, apparently, it is the custom to base your position in society on the number of men you have killed. If you have slain five or more, according to the April Everyland, you become a "Half-Bagani" and are entitled to wear a fancy dress costume every day in the week. If you reach the magnificent record of ten killed, you are a full Bagani and may wear a still fancier dress costume. Since the American occupation, however, the number of candidates for Bagani distinctions has very rapidly decreased, and it is only in the remote interior places, nowadays, that one ever catches a glimpse of the honorable scarlet.

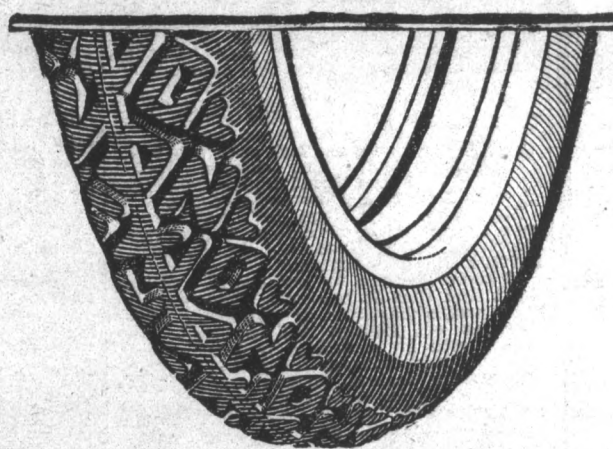
HERE is the first tire that ever was given a whole factory to itself!—the 3½-inch Firestone special molded.

Firestone Plant No. 2, with a capacity of 16,000 tires per day is devoted solely to the production of the 3½-inch size.

It was a problem made to order for Firestone—big volume production of a high grade article.



Doing the BIG things FIRST



Most miles per dollar is a Firestone pledge, to the big car owner as well as to the owners of light cars. See the new Standard Oversize Firestone Cord.

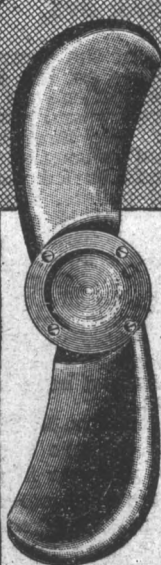
Firestone met this need with a typical Firestone answer—a separate \$7,000,000 factory.

Again Firestone has done the big thing—and done it first—for the millions of car owners who use the 3½-inch size tire.

Firestone has taken the lead in finding the one way to give extra value at a moderate price.

Buy Firestones!

Firestone



Stop Your Ford Overheating!

New Fan Pulls More Air Through Radiator

For only \$1.60 you can equip your Ford with a Juelson Aeroplane-Type Two-Bladed Fan. And then your overheating troubles are ended. No necessity for an expensive new radiator. Nothing else to buy or install.

Just attach this improved fan which fits exactly in place of old fan and be sure of ample cooling always. Aeroplane shaped blades do the trick. Pull more air through radiator; drive it back evenly over all the cylinders. Uses less power; lasts longer; doubles life of fan belt and bearings.

No doubt about it. Thousands in use. Proved to excel any other fan for Ford cars and trucks. Get one now and keep your Ford cool even on the hottest days and hardest pulls.

Ask your dealer for the JUELSON TWO-BLADED FAN. If he hasn't yet received his stock, write us and we will see that you are supplied.

THE AMERICAN AERO CO., Dept. 65, South Bend, Ind.

JUELSON Two Bladed FAN

MINERAL HEAVE COMPOUND In use over 50 years
CURES HEAVES

Booklet Free

\$2.25 Box guaranteed to give satisfaction or money back.
\$1.10 Box sufficient for ordinary cases. (Includes War Tax.)

MINERAL HEAVE REMEDY CO., 463 Fourth Ave., Pittsburgh, Pa.

A GUARANTEED REMEDY FOR Contagious Abortion

Easily administered by hypodermic syringe. Kills abortion germs quickly without injuring cow. Write for free booklet with letters from users and full details of moneyback guarantee.

Aborn Laboratory Section 9 Lancaster, Wis.

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

FOR

ABSORBINE

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. Alleviates Pain and Inflammation. Price \$1.25 a bottle at druggists or delivered. Will tell you more if you write.

W. F. YOUNG, INC., 268 Temple St., Springfield, Mass.

NEWTON'S FOR HORSES, CATTLE, HOGS.

20 YEARS SALE
HEAVES, COUGHS, COLDS, DISTEMPER, INDIGESTION
Cures Heaves by correcting the cause—Indigestion. Prevents Colds, Staggers, etc. Best Conditioner and Worm Expeller. Three large cans guaranteed to cure Heaves or money refunded. \$1.65 and \$1.30 per can (includes War Tax). At dealers or mail. Largest packages. Dose is small. Cheapest to use.

THE NEWTON REMEDY COMPANY, Toledo, Ohio

PURE PARIS GREEN 39c.

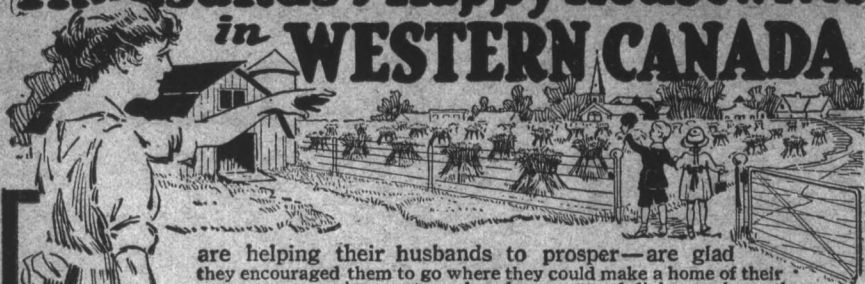
per pound; Arsenate of calcium 26c. Arsenate of lead 32c. Bordeaux Mixture 22c. Bordeaux arsenate 26c. Dry Lime Sulphur 15c. Quality only. Buy it the co-operative way. Special prices on large quantities. Write for complete price list. Reference, any bank.

American Co-operative Association, Dept. 16 Milwaukee, Wis.

WANTED Collie Puppies. Write me if you have thoroughbred Collie Puppies or trained stock dogs for sale. State price in first letter. I buy both males and females.

DR. EWALT'S COLLIE FARMS, Mt. Clemens, Mich.

Thousands of Happy Housewives in WESTERN CANADA



are helping their husbands to prosper—are glad they encouraged them to go where they could make a home of their own—save paying rent and reduce cost of living—where they could reach prosperity and independence by buying on easy terms.

Fertile Land at \$15 to \$30 an Acre

—land similar to that which through many years has yielded from 20 to 45 bushels of wheat to the acre. Hundreds of farmers in Western Canada have raised crops in a single season worth more than the whole cost of their land. With such crops come prosperity, independence, good homes, and all the comforts and conveniences which make for happy living.

Farm Gardens—Poultry—Dairying

are sources of income second only to grain growing and stock raising. Good climate, good neighbors, churches, schools, rural telephone, etc., give you the opportunities of a new land with the conveniences of old settled districts.

For illustrated literature, maps, description of farm opportunities in Manitoba, Saskatchewan, and Alberta, reduced railway rates, etc., write Department of Immigration, Ottawa, Can., or

M. V. MacInnes,
176 Jefferson Ave., Detroit, Mich.
Canadian Government Agent.



OVIE'S BABY CHICKS

They Lay and Pay!

There is more than a tingle of satisfaction when you receive Ovie's Baby Chicks, which are beyond comparison in quality, from free range flocks. That is why, once a customer, always a customer.

25,000 SELECTED CHIX WEEKLY
Hatched by an expert with our new system used exclusively by us, in the world's most up-to-date Hatchery.

14 LEADING VARIETIES
Safe delivery guaranteed by P. P. prepaid. Write us for illustrated booklet on Ovie's Chix
OVIE'S HATCHERY CO.
24 State Street MARION, IND.

Baby Chicks S.C. White Leghorns, bred to lay. After Apr. 1 will sell chix and eggs from my exhibition pens, write for prices.
HILLSIDE POULTRY FARM, Hillsdale, Mich.

KENDEL'S SUPERIOR STRAINS BABY Chix
Famous for High Standard, Utility, Quality. 35 varieties. Leghorns, Rocks, Reds, Wyandottes, Anconas, Minorcas, Brahmas, Langshans, Orpingtons, Ducks, Circular free. A. O. Kendel, 210 Prospect Ave., Cleveland, Ohio.

chicks

Better Produced Day Old Chicks are the kind you want—17 leading breeds at reasonable prices. Our free cat. tells all about them. Send for it today.
Springfield Hatcheries & Poultry Farms, Box K, Springfield O.

Buff Leghorn and White Leghorn Cock-
Eggs and baby chicks. A few pens.
Dr. WILLIAM SMITH, Petersburg, Mich.

Barred Rock Eggs from Chicago and Indianapolis
winners. Great layers. \$2 per 15, \$10 per 100 and up.
Buff Duck Eggs. 28th year. Circular free.
G. EARL HOOVER, R. 3, MATTHEWS, IND.

BARRED ROCKS 15 eggs, \$1.75; by prepaid mail. 100
hens laid 10,421 eggs from January
1 to November 1, 1919. Lewis B. Avery, Clinton, Mich.

Barred Rock Baby Chicks and Hatching eggs.
Order in advance. Apply for
terms. H. H. PIERCE, Jerome, Mich.

BUFF LEGHORNS
Eggs for hatching \$2.00 per 15; \$12.00 per hundred.
White Pekin Duck eggs 25 cents each. LAKE SIDE
STOCK AND FRUIT FARM, Pinckney, Mich.

EGGS from trapped S. C. White Leghorns, Barron
strain, also White Wyandottes that lay, at
\$10.00 per hundred or \$2.00 per setting of 15 eggs.
MACALWHITE POULTRY YARDS, Caro, Michigan

For Sale 4 laying pullets and cock from 280 egg
strain and blooded stock. S. C. White
Leghorns. Mrs. Henderson, Leesville, Mich.

CHICKS AND EGGS
Rose and Single Comb R. I. Reds. Barred Plymouth
Rocks. Superior Color. Prolific Layers. Prepaid by
parcel post and safe delivery guaranteed. Illustrated
catalogue free.
INTERLAKES FARM, Box 39, Lawrence, Mich.

CHICKS CHICKS

12,000 chicks a week after Mar. 20. Grand laying strains
utility S. C. White Leghorns and Mottled Anconas.
Strong, sturdy chicks shipped everywhere parcel post
guaranteed safe arrival in lots 25-50; 100 or more. 12th
season, order now. Fine free catalogue.
W. VAN APPELDORN, R. 7, Holland, Mich.

Chicks, Leghorns, Minorcas, Spanish, Houdans, Cam-
pines, Reds, Rocks, Orpingtons, Brahmas,
Wyandottes. Tyrone Poultry Farm, Fenton, Mich.

Chicks Bred-to-Lay and Exhibition S. C. W.
Leghorns, stock that produced the win-
ners in the state demonstration farm work. Winners
at Detroit, Toledo and Oil City, Pa. Shows \$10.50 per
50, \$20 per 100, \$35 per 500. Safe delivery postage paid.
Sunnybrook Poultry Farm, Hillsdale, Mich.

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

Baby Chicks The fluffy lively kind, the kind
that live and grow. Hatched
in the most modern incubators built, all eggs are from
pure blood farm stock. Catalogue and price list
mailed upon request.
NORWALK CHICK HATCHERY, Norwalk, O.

DAY OLD CHICKS S. C. W. Leghorns. Exclus-
ively. Vigorous, sturdy
chicks. From heavy laying strain. Seventh season.
Send for price list to CITY LIMITS HATCHERY,
R. No. 5, Box 11, Holland, Michigan

Saves Baby Chicks

Put Avicol in the drinking water.

Most people lose half of every hatch, and seem to expect it. Chick cholera or white diarrhoea is the trouble. The U. S. Government states that over half the chicks hatched die from this cause.

An Avicol tablet in the drinking water will positively save your little chicks from all such diseases. Inside of 48 hours the sick ones will be as lively as crickets. Avicol keeps them healthy and makes them grow and develop.

Mrs. Wm. May, Rego, Ind., writes: "I was losing 10 or 15 chicks a day from diarrhoea before I received the Avicol. I haven't lost a one since."

It costs nothing to try Avicol. If you don't find that it prevents and promptly cures white diarrhoea and all other bowel diseases of poultry, tell us and your money will be refunded by return mail. Avicol is sold by most druggists and poultry remedy dealers, or you can send 25c or 50c today for a package by mail post-paid. Burrell-Dugger Co., 495 Columbia Bldg., Indianapolis, Ind.

AVICOL stops chicks dying

Hubers Reliable Chicks

500,000 FOR 1920

By Parcel Post Prepaid. Delivered to You. Guarantee Live Delivery. Eggs for Hatching by the Setting or 100.

We have installed the most modern features of the Hatching Industry which will insure chicks as strong as Hen Hatched Chicks and Full of Pep.

This is our 11th season. With the great increased demand for our chicks and the fine reports and praise we receive from our customers, proves that our chicks are from Stock of Good Quality. Bred for Heavy Egg Production and that they are Properly Hatched. Stop your loss by buying our Reliable Chicks.

We hatch all our chicks from pure bred, free range farm stock. S. S. White and Brown Leghorns, S. C. Anconas, Barred Rocks, S. C. and R. C. Reds, S. C. Black Minorcas, and S. C. Buff Orpingtons. Special combination offer on chicks, hoppers and brooder stoves. Before buying elsewhere send for free illustrated catalog and prices. Place your order at once and avoid disappointment in the rush of the season.

Hubers Reliable Hatchery
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DAY OLD CHICKS

HOMESTEAD FARMS

A cooperative work in Pure Breed Practical Poultry. Chicks and eggs delivered at your door prepaid.

Standard Heavy and Laying Breeds.

You will be interested in the Extra Quality White Leghorns inspected and certified as Heavy Producers by the Poultry Extension Specialist of the Agriculture College.

Live and healthy chicks and satisfactory hatch from Eggs guaranteed. S. C. Reds. One pen only Cockerel and five Pullets; large egg conformation.

Send for new Catalog with illustrations; it will help you raise your Chicks. Also it explains the Homestead Farms plan of cooperation.

STATE FARMS ASSOCIATION,
Desk 1, Kalamazoo, Michigan.

Baby chicks; Standard Bred S. C. White and Brown
Also English White Leghorns. Bred to lay large
white eggs. Safe arrival guaranteed, shipped up to
your door by parcel post. Free catalogue with list.
WOLVERINE HATCHERY, R. 2, Zeeland, Mich.

BARRED ROCKS—Eggs from vigorous
early maturing stock
from heavy laying strain. \$2 per 15, \$5 per 45. Prepaid by
parcel post. R. G. Kirby, Route 1, East Lansing, Mich.

Poultrymen's Perplexities

WILL HUMAN BEINGS CONTRACT TUBERCULOSIS FROM HENS?

Can we contract tuberculosis from sick hens? We keep a large flock of hens, and now and then one will get lame, droop around and live for some months if not killed. Is there danger in eating eggs soft boiled from such a flock? Please explain all you can.

Monroe Co. Mrs. A. B.

There is no reliable evidence which indicates that man can contract tuberculosis from tuberculous hens or other birds. Of course, direct experimental attempts to transmit the avian tubercle germ to man have not been attempted. While it is possible to transmit the disease to some experimental mammals, the pig seems to be the only mammal highly susceptible to chicken tuberculosis. In our laboratory we have produced the disease in calves, and guinea pigs can be made to sicken as a result of the injection of the avian tubercle germ. In those instances where human victims of tuberculosis are to be found in association with tuberculous chickens, there is every reason to believe that the human disease was acquired in some other way than through eating either chicken or eggs, or through contact with the diseased chicken.

It is possible for the egg to contain the avian tubercle germ. The heating required to soft boil an egg is not sufficient to kill the tubercle germ. Therefore, eating soft-boiled eggs might result in rare instances in introducing the live avian tubercle germ into the body of man. But from what I have said above, there is very little reason to fear the consequences of such a possibility. And yet, I would strongly recommend against using the eggs or the diseased chickens. It is the part of wisdom to take every precaution in such matters and it is our belief that the best way to handle a flock such as described is to determine through laboratory examination the exact nature of the disease. If the disease is tuberculosis, I would recommend killing the entire flock and selling for meat those that are not affected and destroying those that are. In other words, I consider it an economic loss to maintain a flock of tuberculous chickens. Experimentally a tuberculin test has been discovered which is of some assistance in picking out the affected birds but this test has not been made generally available and we are not in a position to recommend it as yet.

W. G.

SWELLING NEAR EYE.

Early last fall some of the summer chickens had a swelling on the left side of the head. The first one we let go and the lump got yellow and broke, pus running from it. We have had several more since, and as soon as we noticed them, killed and buried them. I have a fine flock of pullets, Barred Rocks, and I hate to kill them. Is there any help for them? Their appetites are good while the swelling is there, but it destroys the eyesight on that side, and think it also affects the other eye. We feed barley, oats, silage, cooked pumpkin, cabbage and apple peelings. I have about one hundred and forty chickens and have lost seven or eight of them.

Gratiot Co. Mrs. E. M.

This condition near the eye starts from a cold and is apt to occur in the fall when the birds have been exposed to cold winds and rains. If taken in the early stages an incision may be made to thoroughly drain the swelling. Usually it will be filled with a thick cheesy pus which easily drains out. Rub the head of the bird with camphorated vaseline and isolate it from the flock until healed. Sometimes the swelling will need draining several times. Whether a cure results or not usually depends upon the inherited vigor of the bird. Very good poultry management is needed in the fall to keep the birds free from colds. If they go

into the laying houses in the fall in healthy condition, only good management is needed to keep them fit until spring. If colds do get a start it may mean more or less fussing and doctoring for several weeks.—G. K.

BREEDING AND FEEDING GEESE.

Two years ago I bought three young geese, one a gander, and am sure all were of the same hatch. Now this year I have raised one gander and two geese from the ones I bought, and intended to keep them for breeding next year, but someone told me that I will have to change ganders, that I cannot inbreed geese like one does chickens. Is this true? What is the best feed for young geese when first hatched, also young ducks?

Wayne Co. J. L. H.

It would probably be best to purchase a gander that is unrelated to the present flock. When young goslings are first fed they should be given grass on sod. The second day they can be started on three feeds per day of corn meal mash or scalded cracked corn. If the goslings must be confined where the grass is scarce or tough it will pay to add plenty of succulent feed to their ration as they need considerable of it to keep in health. When the goslings are six weeks old they can be fattened on a mash given three times per day, consisting of equal parts of corn meal and bran. Some breeders do not fatten for market until they are eight or ten weeks old. A little sand and charcoal mixed in the corn meal mash improves the ration for young geese.

The first feed for ducks can consist of one part corn meal, four parts bran with a sprinkling of low-grade flour and about five per cent of coarse sand or grit. After the third day some breeders add a little green cut rye and beef scrap. Some duck raisers feed the ducklings for about five days on corn meal and bread crumbs, equal parts. Sometimes hard-boiled eggs are added, equal to about ten or fifteen per cent of the mash and it is mixed with milk. Then five per cent of sand should also be added.

R. K.

STONE POULTRY HOUSE.

Will you give me your opinion of a chicken house built from stone with wire partitions. I have plenty of the above mentioned material, and have been told by old stone masons that stone does not draw moisture, is cool in summer and warm in winter.

Wayne Co. E. R. A.

If you were a stone mason with spare time it might pay to work up your field stone into a poultry house. But such construction work is rather slow and if you had to hire stone masons at the present rate per hour it would be a very expensive poultry house. When long houses are divided into sections it usually pays to make the partitions of matched lumber and this keeps down draughts in the house. A long house divided only by wire might be cold. It is usually best not to have each section more than twenty feet wide.

The value of a stone poultry house can best be judged by visiting the farms of poultrymen who have been in the business for many years. If stone houses were the best these men have been in the business long enough to find it out. But there are few stone houses built because of the expense of construction, and it is usually safest to follow the methods of house building generally recommended by the experiment stations and the commercial poultrymen who have been making a study of the business.—R. G.

MATING BREEDING GEESE.

I have six geese with two ganders. Is it advisable to have them run together for hatching purposes, or sep-

arate? Should I put three geese and one gander in separate pens? Would three geese be too many for one gander?
C. G.

The easiest form of management will be to let the geese all graze together. If the two ganders have been raised together or came from the same flock, they will probably not quarrel. Three geese are nearly always mated to one gander unless they are very large birds, when the results are often better if only two geese are mated to a gander. The ganders will select three mates when placed with the flock. To one of the three he will appear to be the most attentive but he will seem to think considerable of his entire family. When the matings are made they can remain together for several years and if one of the mating is sold or killed it will seem to cause the others considerable anxiety. Geese are interesting birds and seem to have more brains than they are generally credited with.
R. G. K.

VALUE OF SKIM-MILK.

What is the feeding value of skim-milk as compared with meat scraps for laying hens, and how much do you consider skim-milk worth per hundred pounds when fed with a balanced ration?

Washtenaw Co.

E. A.

High-grade meat scrap contains 10.7 per cent water, 4.1 per cent ash, 60.2 per cent protein and twenty-five per cent fat. Skim-milk contains 90.6 per cent water, 0.7 per cent ash, 3.1 per cent protein, 5.3 per cent carbohydrates and 0.3 per cent fat. It is therefore apparent that a hen must consume a large quantity of milk to obtain as much protein as in a small amount of high-grade meat scrap. Most poultrymen seem to like to use a combination of meat and milk in the ration. From ten to twenty per cent of meat scrap can be placed in the dry mash. Then sour milk is always placed before the birds in crocks. Between the sour milk and the meat scrap the hens receive enough protein to produce a profitable number of eggs.

The value of skim-milk depends upon the cost of getting it to the farm and the comparative prices of other feeds. I know one poultryman who said sour milk was worth five cents per quart to him as a feed for chicks and laying hens. One milk dealer sells sour milk for fifty cents per can when he happens to have it on hand. At the present price of other feeds I believe that sour milk should be worth about \$1.50 per hundred pounds and more or less depending on the ease of obtaining the supply and the value of the poultry to which it is to be fed.

SYMPTOMS OF TUBERCULOSIS.

What is the trouble with my chickens, and can you give me a remedy? They begin to droop, get lame in one leg and seemingly blind, and die. We have lost about six or eight in two months.
H. P.

The symptoms of lameness and extreme emaciation often indicate tuberculosis in fowls. A post mortem would pay to find if there are small greyish nodules on the liver. That is often the determining factor in diagnosing cases of tuberculosis in fowls. There is no cure and it is necessary to kill and burn the sick birds to reduce the risk of infecting the remainder of the flock. It is very contagious and it usually pays to clean up the old flock and obtain new foundation stock after the house has been thoroughly sprayed and the soil freshened by plowing. In cases of this kind it will pay to have a veterinarian give the flock a personal inspection.

Green food is a good appetizer.

Meat scrap or skim-milk help to make early broilers.

A small hopper containing grit, charcoal and granulated bone tends to correct leg weakness.

MAKING THE DAIRY PAY BIGGER PROFITS

About eighty-four billion pounds of milk are produced in the United States each year.

Of this total the butter industry consumes approximately thirty-four billion pounds.

But—approximately thirty billion pounds of the amount devoted to butter-making becomes skimmed milk—having practically no market as human food.

If someone should come to you and say—"I have discovered a new way to convert your corn-husks into paper-pulp, or—"I can make a new fabric from your wheat-straw," or—"I have found a commercial use for the chaff from your wheat," you then would suddenly realize the value of new markets.

In such manner Hebe comes to you and says, "I have created a new and more profitable market for your by-product, skimmed milk. I have done this by restoring to the skimmed milk a fat content—the element it lacks to make it more desirable, and therefore more readily salable as human food, for certain purposes. This I have accomplished by scientifically emulsifying the fat pressed from the pure white meat of the cocoanut with the skimmed milk, creating a product that serves in the home as an auxiliary to the daily milk supply in cooking and for baking."

The utilization of by-products is a big problem in every industry. Gluten, coal-tar, gasoline and cotton-seed were valueless by-products until someone found a commercial use for them. Skimmed milk is the big by-product of the dairies—thirty billion pounds of it are produced yearly.

The greater part of this by-product, which science tells us is a highly nutritious food, is being fed to stock, when according to the Department of Agriculture it could be used

to better and more profitable advantage as human food. Hebe points the way to marketing skimmed milk as human food. It is the first big effort in this direction.

You will ask the question—How is Hebe to benefit the dairy farmer who is not near enough to a Hebe condensery to sell his milk there?

Remember, the Hebe industry is only in its infancy. It will grow with every can sold. Every bit of advertising put out by The Hebe Company will exert a beneficial influence on the dairy product market as a whole. Witness the influence on the market by the sale of nearly four billion pounds each year to the ice-cream manufacturers. While not every farmer is within shipping distance of an ice-cream factory, yet every milk-producer benefits by the demand.

There is no camouflage about Hebe. It is produced, labeled, advertised and marketed for just what it is—"A Compound of Evaporated Skimmed Milk and Vegetable Fat," for cooking purposes. It is not a substitute; it is not an imitation. It is Hebe and nothing else. Hebe creates a distinct place of its own, separate from the general class of dairy products. In seeking and finding its proper place in the market, Hebe will prove a substantial benefit to the entire dairying industry, increasing the general use of dairy products.

You will be interested in our booklet, "The Missing Third." Ask us to send you a copy. There is no charge for this. Address 2560 Consumers Building, Chicago.

THE HEBE COMPANY

CHICAGO

SEATTLE

CHICKS THAT BRING BIGGER CHECKS

Strong, sturdy—from Record Layers. Four big hatchings weekly. 100 50 25
\$20.00 \$10.00 \$5.00
White Leghorns 25.00 13.50 7.00
R. I. Reds 25.00 12.50 7.00
Barred Rocks
Safe delivery anywhere in U. S. A. guaranteed. Postpaid.
W. F. HILLPOT, Box 69, FRENCHTOWN, N. J.

POULTRY

B-A-B-Y C-H-I-C-K-S

Crescent White Leghorns; also, Anconas, Brown and Buff Leghorns, Black Minorcas, Reds, Rocks (Barred and White), and Wyandottes (Silver-laced and White). WE HATCH the eggs of Hoganized flocks on range on separate farms. Crescent Egg Company, Allegan, Mich.

Baby Chicks. Eleven leading varieties, bred from show-stock, to produce eggs, at utility prices. Send for illustrated catalog and price list. Ohio Poultry Yard and Hatcheries, Dept. B, Marion, O.

CHICKS We have shipped thousands each season since 1901. Are booking orders now for Spring delivery, booklet and testimonials. FREEPORT HATCHERY, Box 12, Freeport, Mich.

Edgewood Chicks

S. C. White Leghorns, Barron Strain \$20 per 100. Guaranteed. EDGEWOOD POULTRY FARM, Brighton, Mich.

Fowler's Buff Rocks.

We are now booking orders for eggs. A few choice cockerels left. R. B. FOWLER, Hartford, Mich.

DANGER

If chicks and eggs are not shipped right. Chix 15c Up 100,000 Chix this season. Best Blooded stock ever produced at low prices quoted. Selected Utility, Exhibition trapnested stock. 16 varieties. Hatching eggs, Hens, Ducks. Book your orders early. Avoid disappointment. Stamps appreciated. Bockman Hatchery, 26 E. Lyon St., Grand Rapids, Mich.

HATCHING EGGS

Plymouth Rocks (all varieties), Wyandottes, Anconas, and Rouen Ducks. Catalog 2c. Sheridan Poultry Yards, R. 4, Sheridan, Mich.

Hatching eggs from a vigorous heavy laying stock. S. C. W. Leghorns, Barred Rocks, W. Wyandottes, Buff Orpingtons. 15, \$1.50; 50, \$4.50; 100, \$8.00. Shipped prepaid. Miller Poultry Farm, Nappanee, Ind.

BIG 5 to 6 POUND

White Leghorn males. On account of their larger size they stand cold weather better and lay all winter. Free catalog gives winter egg records, describe feeding methods, etc. A. WAUGHEN, Gobleville, Mich.

JOHN'S Big Beautiful Barred Rocks are hen hatched and grow quick good layers 30 eggs \$3.50; 50, \$5. Cockerels \$3 to \$5. Photos. John Northon, Clare, Mich.

Rhode Island Whites

Are the best all purpose birds being year round layers, egg and chicks and a few good males. H. H. JUMP, Jackson, Michigan.

LAYBILT S. C. W. LEGHORNS

large, great layers, pure white. Strong, Day-Old Chicks. Hatch every week. Guaranteed delivery, full count, alive and lively \$18.00 per 100. Parcel postpaid.

V. A. MORSE, IONIA, MICHIGAN

Additional Poultry Ads on Page 795

Thousands of Happy Housewives in WESTERN CANADA



are helping their husbands to prosper—are glad they encouraged them to go where they could make a home of their own—save paying rent and reduce cost of living—where they could reach prosperity and independence by buying on easy terms.

Fertile Land at \$15 to \$30 an Acre

—land similar to that which through many years has yielded from 20 to 45 bushels of wheat to the acre. Hundreds of farmers in Western Canada have raised crops in a single season worth more than the whole cost of their land. With such crops come prosperity, independence, good homes, and all the comforts and conveniences which make for happy living.

Farm Gardens—Poultry—Dairying

are sources of income second only to grain growing and stock raising. Good climate, good neighbors, churches, schools, rural telephone, etc., give you the opportunities of a new land with the conveniences of old settled districts.

For illustrated literature, maps, description of farm opportunities in Manitoba, Saskatchewan, and Alberta, reduced railway rates, etc., write Department of Immigration, Ottawa, Can., or

M. V. MacInnes,
176 Jefferson Ave., Detroit, Mich.
Canadian Government Agent.



OVIE'S BABY CHICKS

They Lay and Pay!

There is more than a tingle of satisfaction when you receive Ovie's Baby Chicks, which are beyond comparison in quality, from free range flocks. That is why, once a customer, always a customer.

25,000 SELECTED CHIX WEEKLY
Hatched by an expert with our new system used exclusively by us, in the world's most up-to-date hatchery.

14 LEADING VARIETIES

Safe delivery guaranteed by P. P. prepaid. Write us for illustrated booklet on Ovie's Chix

OVIE'S HATCHERY CO.

24 State Street

MARION, IND.

Baby Chicks S.C. White Leghorns, bred to lay. After Apr. 1 will sell chix and eggs from my exhibition pens, write for prices.
HILLSIDE POULTRY FARM, Hillsdale, Mich.

KENDAL'S SUPERIOR STRAINS Famous for High Standard, Utility, Quality. 35 varieties. Leghorns, Rocks, Reds, Wyandottes, Anconas, Minorcas, Brahmas, Langshans, Orpingtons, Ducks, Circular free. A. C. Kendal, 210 Prospect Ave., Cleveland, Ohio.

Better Produced Day Old Chicks

are the kind you want—17 leading breeds at reasonable prices. Our free cat. tells all about them. Send for it today.
Springfield Hatcheries & Poultry Farms, Box K, Springfield, O.

Buff Leghorn and White Leghorn Cockerels from 200 egg strains. Eggs and baby chicks. A few pens.
Dr. WILLIAM SMITH, Petersburg, Mich.

Barred Rock Eggs from Chicago and Indianapolis winners. Great layers. \$2 per 15, \$10 per 100 and up. Buff Duck Eggs, 28th year. Circular free.
G. EARL HOOVER, R. 3, MATTHEWS, IND.

BARRED ROCKS 15 eggs, \$1.75; by prepaid mail. 100 hens laid 10,421 eggs from January 1 to November 1, 1919. Lewis B. Avery, Clinton, Mich.

Barred Rock Baby Chicks and Hatching eggs. Order in advance. Apply for terms.
H. H. PIERCE, Jerome, Mich.

BUFF LEGHORNS

Eggs for hatching \$2.00 per 15; \$12.00 per hundred. White Pekin Duck eggs 25 cents each. LAKE SIDE STOCK AND FRUIT FARM, Pinckney, Mich.

EGGS from trapnested S. C. White Leghorns, Barron strain, also White Wyandottes that lay, at \$10.00 per hundred or \$2.00 per setting of 15 eggs.
MACALWHITE POULTRY YARDS, Caro, Michigan

For Sale 4 laying pullets and cock from 280 egg strain and blooded stock: S. C. White Leghorns. Mrs. Henderson, Leesville, Mich.

CHICKS AND EGGS

Rose and Single Comb R. I. Reds. Barred Plymouth Rocks. Superior Color. Prolific Layers. Prepaid by parcel post and safe delivery guaranteed. Illustrated catalog free.
INTERLAKES FARM, Box 39, Lawrence, Mich

CHICKS CHICKS

12,000 chicks a week after Mar. 20. Grand laying strains utility S. C. White Leghorns and Mottled Anconas. Strong, sturdy chicks shipped everywhere parcel post guaranteed safe arrival in lots 25-50; 100 or more. 12th season, order now. Fine free catalogue.
W. VAN APPELDORN, R. 7, Holland, Mich.

Chicks, Leghorns, Minorcas, Spanish, Houdans, Cam-pines, Reds, Rocks, Orpingtons, Brahmas, Wyandottes. Tyrone Poultry Farm, Fenton, Mich

Chicks Bred-to-Lay and Exhibition S. C. W. Leghorns, stock that produced the winners in the state demonstration farm work. Winners at Detroit, Toledo and Oil City, Pa. Shows, \$10.50 per 50, \$20 per 100, \$35 per 500. Safe delivery postage paid. Sunnybrook Poultry Farm, Hillsdale, Mich

Barred Rocks egg contest winners, eggs from strain with records to 250 a year. \$2.00 per setting prepaid by P. P. Circular 15 reqs.
FRED ASTLING, Constantine, Mich.

Baby Chicks The fluffy lively kind, the kind that live and grow. Hatched in the most modern incubators built, all eggs are from pure blood farm stock. Catalogue and price list mailed upon request.
NORWALK CHICK HATCHERY, Norwalk, O.

DAY OLD CHICKS S. C. W. Leghorns. Exclusively. Vigorous, sturdy chicks. From heavy laying strain. Seventh season. Send for price list to CITY LIMITS HATCHERY, R. No. 5, Box 11, Holland, Michigan

Saves Baby Chicks

Put Avicol in the drinking water.

Most people lose half of every hatch, and seem to expect it. Chick cholera or white diarrhoea is the trouble. The U. S. Government states that over half the chicks hatched die from this cause.



An Avicol tablet in the drinking water, will positively save your little chicks from all such diseases. Inside of 48 hours the sick ones will be as lively as crickets. Avicol keeps them healthy and makes them grow and develop.

Mrs. Wm. May, Rego, Ind., writes: "I was losing 10 or 15 chicks a day from diarrhoea before I received the Avicol. I haven't lost a one since."

It costs nothing to try Avicol. If you don't find that it prevents and promptly cures white diarrhoea and all other bowel diseases of poultry, tell us and your money will be refunded by return mail. Avicol is sold by most druggists and poultry remedy dealers, or you can send 25c or 50c today for a package by mail post-paid. Burrell-Dugger Co., 495 Columbia Bldg., Indianapolis, Ind.

AVICOL stops chicks dying

Hubers Reliable Chicks

500,000 FOR 1920

By Parcel Post Prepaid. Delivered to You. Guaranteed Live Delivery. Eggs for Hatching by the Setting or 100.

We have installed the most modern features of the Hatching Industry which will insure chicks as strong as Hen Hatched Chicks and Full of Pep.

This is our 11th season. With the great increased demand for our chicks and the fine reports and praise we receive from our customers, proves that our chicks are from Stock of Good Quality. Bred for Heavy Egg Production and that they are Properly Hatched. Stop your loss by buying our Reliable Chicks.

We hatch all our chicks from pure bred, free range farm stock. S. S. White and Brown Leghorns, S. C. Anconas, Barred Rocks, S. C. and R. C. Reds, S. C. Black Minorcas, and S. C. Buff Orpingtons. Special combination offer on chicks, hooovers and brooder stoves. Before buying elsewhere send for free illustrated catalogue and prices. Place your order at once and avoid disappointment in the rush of the season.

Hubers Reliable Hatchery
East High St. FOSTORIA, OHIO

DAY OLD CHICKS

HOMESTEAD FARMS



A cooperative work in Pure Breed Practical Poultry. Chicks and eggs delivered at your door prepaid.

Standard Heavy and Laying Breeds.

You will be interested in the Extra Quality White Leghorns inspected and certified as Heavy Producers by the Poultry Extension Specialist of the Agriculture College.

Live and healthy chicks and satisfactory hatch from Eggs guaranteed.
S. C. Reds. One pen only Cockerel and five Pullets; large egg conformation.

Send for new Catalogue with illustrations; it will help you raise your Chicks. Also it explains the Homestead Farms plan of cooperation.

STATE FARMS ASSOCIATION,
Desk 1, Kalamazoo, Michigan.

Baby chicks; Standard Bred S. C. White and Brown Also English White Leghorns. Bred to lay, large white eggs. Safe arrival guaranteed, shipped up to your door by parcel post. Free catalogue with list.
WOLVERINE HATCHERY, R. 2, Zeeland, Mich

BARRED ROCKS. Eggs from vigorous early maturing stock from heavy laying strain. \$2 per 15, \$5 per 45. Prepaid by parcel post. R. G. Kirby, Route 1, East Lansing, Mich.

Poultrymen's Perplexities

WILL HUMAN BEINGS CONTRACT TUBERCULOSIS FROM HENS?

Can we contract tuberculosis from sick hens? We keep a large flock of hens, and now and then one will get lame, droop around and live for some months if not killed. Is there danger in eating eggs soft boiled from such a flock? Please explain all you can.

Monroe Co. Mrs. A. B.

There is no reliable evidence which indicates that man can contract tuberculosis from tuberculous hens or other birds. Of course, direct experimental attempts to transmit the avian tubercle germ to man have not been attempted. While it is possible to transmit the disease to some experimental mammals, the pig seems to be the only mammal highly susceptible to chicken tuberculosis. In our laboratory we have produced the disease in calves, and guinea pigs can be made to sicken as a result of the injection of the avian tubercle germ. In those instances where human victims of tuberculosis are to be found in association with tuberculous chickens, there is every reason to believe that the human disease was acquired in some other way than through eating either chicken or eggs, or through contact with the diseased chicken.

It is possible for the egg to contain the avian tubercle germ. The heating required to soft boil an egg is not sufficient to kill the tubercle germ. Therefore, eating soft-boiled eggs might result in rare instances in introducing the live avian tubercle germ into the body of man. But from what I have said above, there is very little reason to fear the consequences of such a possibility. And yet, I would strongly recommend against using the eggs or the diseased chickens. It is the part of wisdom to take every precaution in such matters and it is our belief that the best way to handle a flock such as described is to determine through laboratory examination the exact nature of the disease. If the disease is tuberculosis, I would recommend killing the entire flock and selling for meat those that are not affected and destroying those that are. In other words, I consider it an economic loss to maintain a flock of tuberculous chickens. Experimentally a tuberculin test has been discovered which is of some assistance in picking out the affected birds but this test has not been made generally available and we are not in a position to recommend it as yet.

W. G.

SWELLING NEAR EYE.

Early last fall some of the summer chickens had a swelling on the left side of the head. The first one we let go and the lump got yellow and broke, pus running from it. We have had several more since, and as soon as we noticed them, killed and buried them. I have a fine flock of pullets, Barred Rocks, and I hate to kill them. Is there any help for them? Their appetites are good while the swelling is there, but it destroys the eyesight on that side, and think it also affects the other eye. We feed barley, oats, silage, cooked pumpkin, cabbage and apple peelings. I have about one hundred and forty chickens and have lost seven or eight of them.

Gratiot Co. Mrs. E. M.

This condition near the eye starts from a cold and is apt to occur in the fall when the birds have been exposed to cold winds and rains. If taken in the early stages an incision may be made to thoroughly drain the swelling. Usually it will be filled with a thick cheesy pus which easily drains out. Rub the head of the bird with camphorated vaseline and isolate it from the flock until healed. Sometimes the swelling will need draining several times. Whether a cure results or not usually depends upon the inherited vigor of the bird. Very good poultry management is needed in the fall to keep the birds free from colds. If they go

into the laying houses in the fall in healthy condition, only good management is needed to keep them fit until spring. If colds do get a start it may mean more or less fussing and doctoring for several weeks.—G. K.

BREEDING AND FEEDING GEESE.

Two years ago I bought three young geese, one a gander, and am sure all were of the same hatch. Now this year I have raised one gander and two geese from the ones I bought, and intended to keep them for breeding next year, but someone told me that I will have to change ganders, that I cannot inbreed geese like one does chickens. Is this true? What is the best feed for young geese when first hatched, also young ducks?

Wayne Co.

J. L. H.

It would probably be best to purchase a gander that is unrelated to the present flock. When young goslings are first fed they should be given grass on sod. The second day they can be started on three feeds per day of corn meal mash or scalded cracked corn. If the goslings must be confined where the grass is scarce or tough it will pay to add plenty of succulent feed to their ration as they need considerable of it to keep in health. When the goslings are six weeks old they can be fattened on a mash given three times per day, consisting of equal parts of corn meal and bran. Some breeders do not fatten for market until they are eight or ten weeks old. A little sand and charcoal mixed in the corn meal mash improves the ration for young geese.

The first feed for ducks can consist of one part corn meal, four parts bran with a sprinkling of low-grade flour and about five per cent of coarse sand or grit. After the third day some breeders add a little green cut rye and beef scrap. Some duck raisers feed the ducklings for about five days on corn meal and bread crumbs, equal parts. Sometimes hard-boiled eggs are added, equal to about ten or fifteen per cent of the mash and it is mixed with milk. Then five per cent of sand should also be added.

R. K.

STONE POULTRY HOUSE.

Will you give me your opinion of a chicken house built from stone with wire partitions. I have plenty of the above mentioned material, and have been told by old stone masons that stone does not draw moisture, is cool in summer and warm in winter.

Wayne Co.

E. R. A.

If you were a stone mason with spare time it might pay to work up your field stone into a poultry house. But such construction work is rather slow and if you had to hire stone masons at the present rate per hour it would be a very expensive poultry house. When long houses are divided into sections it usually pays to make the partitions of matched lumber and this keeps down draughts in the house. A long house divided only by wire might be cold. It is usually best not to have each section more than twenty feet wide.

The value of a stone poultry house can best be judged by visiting the farms of poultrymen who have been in the business for many years. If stone houses were the best these men have been in the business long enough to find it out. But there are few stone houses built because of the expense of construction, and it is usually safest to follow the methods of house building generally recommended by the experiment stations and the commercial poultrymen who have been making a study of the business.—R. G.

MATING BREEDING GEESE.

I have six geese with two ganders. Is it advisable to have them run together for hatching purposes, or sep-

arate? Should I put three geese and one gander in separate pens? Would three geese be too many for one gander? C. G.

The easiest form of management will be to let the geese all graze together. If the two ganders have been raised together or came from the same flock, they will probably not quarrel. Three geese are nearly always mated to one gander unless they are very large birds; when the results are often better if only two geese are mated to a gander. The ganders will select three mates when placed with the flock. To one of the three he will appear to be the most attentive but he will seem to think considerable of his entire family. When the matings are made they can remain together for several years and if one of the mating is sold or killed it will seem to cause the others considerable anxiety. Geese are interesting birds and seem to have more brains than they are generally credited with. R. G. K.

VALUE OF SKIM-MILK.

What is the feeding value of skim-milk as compared with meat scraps for laying hens, and how much do you consider skim-milk worth per hundred pounds when fed with a balanced ration?

Washtenaw Co.

E. A.

High-grade meat scrap contains 10.7 per cent water, 4.1 per cent ash, 60.2 per cent protein and twenty-five per cent fat. Skim-milk contains 90.6 per cent water, 0.7 per cent ash, 3.1 per cent protein, 5.3 per cent carbohydrates and 0.3 per cent fat. It is therefore apparent that a hen must consume a large quantity of milk to obtain as much protein as in a small amount of high-grade meat scrap. Most poultrymen seem to like to use a combination of meat and milk in the ration. From ten to twenty per cent of meat scrap can be placed in the dry mash. Then sour milk is always placed before the birds in crocks. Between the sour milk and the meat scrap the hens receive enough protein to produce a profitable number of eggs.

The value of skim-milk depends upon the cost of getting it to the farm and the comparative prices of other feeds. I know one poultryman who said sour milk was worth five cents per quart to him as a feed for chicks and laying hens. One milk dealer sells sour milk for fifty cents per can when he happens to have it on hand. At the present price of other feeds I believe that sour milk should be worth about \$1.50 per hundred pounds and more or less depending on the ease of obtaining the supply and the value of the poultry to which it is to be fed.

SYMPTOMS OF TUBERCULOSIS.

What is the trouble with my chickens, and can you give me a remedy? They begin to droop, get lame in one leg and seemingly blind, and die. We have lost about six or eight in two months. H. P.

The symptoms of lameness and extreme emaciation often indicate tuberculosis in fowls. A post mortem would pay to find if there are small greyish nodules on the liver. That is often the determining factor in diagnosing cases of tuberculosis in fowls. There is no cure and it is necessary to kill and burn the sick birds to reduce the risk of infecting the remainder of the flock. It is very contagious and it usually pays to clean up the old flock and obtain new foundation stock after the house has been thoroughly sprayed and the soil freshened by plowing. In cases of this kind it will pay to have a veterinarian give the flock a personal inspection.

Green food is a good appetizer.

Meat scrap or skim-milk help to make early broilers.

A small hopper containing grit, charcoal and granulated bone tends to correct leg weakness.

MAKING THE DAIRY PAY BIGGER PROFITS

About eighty-four billion pounds of milk are produced in the United States each year.

Of this total the butter industry consumes approximately thirty-four billion pounds.

But—approximately thirty billion pounds of the amount devoted to butter-making becomes skimmed milk—having practically no market as human food.

If someone should come to you and say—"I have discovered a new way to convert your corn-husks into paper-pulp, or—"I can make a new fabric from your wheat-straw," or—"I have found a commercial use for the chaff from your wheat," you then would suddenly realize the value of new markets.

In such manner Hebe comes to you and says, "I have created a new and more profitable market for your by-product, skimmed milk. I have done this by restoring to the skimmed milk a fat content—the element it lacks to make it more desirable, and therefore more readily salable as human food, for certain purposes. This I have accomplished by scientifically emulsifying the fat pressed from the pure white meat of the coconut with the skimmed milk, creating a product that serves in the home as an auxiliary to the daily milk supply in cooking and for baking."

The utilization of by-products is a big problem in every industry. Gluten, coal-tar, gasoline and cotton-seed were valueless by-products until someone found a commercial use for them. Skimmed milk is the big by-product of the dairies—thirty billion pounds of it are produced yearly.

The greater part of this by-product, which science tells us is a highly nutritious food, is being fed to stock, when according to the Department of Agriculture it could be used

to better and more profitable advantage as human food. Hebe points the way to marketing skimmed milk as human food. It is the first big effort in this direction.

You will ask the question—How is Hebe to benefit the dairy farmer who is not near enough to a Hebe condensery to sell his milk there?

Remember, the Hebe industry is only in its infancy. It will grow with every can sold. Every bit of advertising put out by The Hebe Company will exert a beneficial influence on the dairy product market as a whole. Witness the influence on the market by the sale of nearly four billion pounds each year to the ice-cream manufacturers. While not every farmer is within shipping distance of an ice-cream factory, yet every milk-producer benefits by the demand.

There is no camouflage about Hebe. It is produced, labeled, advertised and marketed for just what it is—"A Compound of Evaporated Skimmed Milk and Vegetable Fat," for cooking purposes. It is not a substitute; it is not an imitation. It is Hebe and nothing else. Hebe creates a distinct place of its own, separate from the general class of dairy products. In seeking and finding its proper place in the market, Hebe will prove a substantial benefit to the entire dairying industry, increasing the general use of dairy products.

You will be interested in our booklet, "The Missing Third." Ask us to send you a copy. There is no charge for this. Address 2560 Consumers Building, Chicago.

THE HEBE COMPANY

CHICAGO

SEATTLE

CHICKS THAT BRING BIGGER CHECKS

POULTRY

B-A-B-Y C-H-I-C-K-S

Crescent White Leghorns; also, Anconas, Brown and Buff Leghorns, Black Minorcas, Reds, Rocks (Barred and White), and Wyandottes (Silver-laced and White). WE HATCH the eggs of Hoganized flocks on range on separate farms. - Crescent Egg Company, Allegan, Mich.

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Additional Poultry Ads on Page 795

STYLEPLUS CLOTHES

Which is it with you—
Is it highest price or Styleplus?

Are you going to pay an extravagant price to insure getting good clothes—or buy Styleplus, which guarantee you style and all-wool quality at moderate price?

The all-wool Styleplus fabrics are splendidly tailored. The clothes have style. Every suit is guaranteed to give satisfaction. Yet you pay a moderate price! A known price printed on the sleeve ticket!

See before you pay! Visit your Styleplus dealer and try on the clothes. It's the safe way to buy clothes.

Sold by one leading clothing-merchant in most cities and towns. Write us (Dept. H) for name of local dealer.

HENRY SONNEBORN & CO., INC.
Baltimore, Md.

The big name in clothes

Styleplus
Clothes

Trade Mark Registered

\$45-\$50-\$55-\$60

"The sleeve ticket tells the price"



Trade Mark Regd.

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Henry Sonneborn
& Co., Inc.

BREEDERS' DIRECTORY

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

Wildwood Farms Angus

Home of Edgar of Dalmeny one of the world's greatest sires.
He produced Erodemas, the grand champion bull at show in Perth, Scotland in Jan. 1919, and the produced Blue Bell a cross-bred heifer which was awarded the championship at the Smithfield, (Eng.) fat stock show in Dec. 1919. (The latter is Englands, equivalent of our Chicago International).
Edgar is now an American Citizen, and is here for the purpose of bettering the breed in this country.

Edgar's calves are as yet too young to offer for sale but they are a promising lot and are being spoken for fast.
We have a few choice young bulls by Black Monarch III who won the Mich. State Fair Grand Championship in 1914-1915-1916, still for sale.

Our herd is under State and Federal supervision
A visit will interest you, write for particulars.

WILDWOOD FARMS ORION, MICHIGAN

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

WOODCOTE ANGUS

Established in 1900

Trojan-Ericas and Blackbirds.

Write for 1920 Bull sale list.

WOODCOTE STOCK FARM,
Ionia, Mich.

For Sale At reasonable prices. Registered Aberdeen-Angus bulls from ten to twenty-two months of age. LANG BROS., Davison, Mich.

GUERNSEY BULL CALVES whose sire's dam made 19,460.20 milk, 909.05 fat. Their mother's sire's dam made 15,309.10 milk, 778.80 fat.
T. V. HICKS, Battle Creek, Mich.

FOR SALE Three Aberdeen-Angus bulls, age 20 months, nine months and seven months. Bred from the best stock in America. Also 320 acres land in Isabella County.
BRINTON F. HALL, Belding, Michigan

Guernsey Bull Calf. Lined of Walter Phipps Farm. Born May 2-1919. \$100.00 f.o.b. Novi or Birmingham. Walter Phipps Farm, 80 Alfred St. Detroit, Mich.

Registered GUERNSEYS—Two orders for the same bull calf the same day makes a fellow mad, just one left, that will be old enough for service in a couple of months.
J. M. WILLIAMS, North Adams, Mich.

Reg. Guernsey Bulls for sale cheap from 1 to 12 months old and from good producing and tuberculin tested cows. C. E. Lambert & Sons, Linwood, Mich.

For Sale Registered Guernsey bulls. May Rose breeding cheap if taken soon. Come or write. John Ebelis R. 2 Holland, Michigan.

Three registered Granger bull calves, May Rose breeding, closely related to Spottwood Daisy Pearl, Dolly Dimples, Langwater Nancy, Langwater Hope, Langwater Daisy and imported Ichen Daisy 3rd, cows that have the higher milk and butter fat production of the breed. Calves sired by Albany's King of Anna Dean Farm; his grand dam Spottwood Daisy Pearl. Alec Harper, Edward Lowe Robinson Rd., Grand Rapids, Mich.

Herd Federal inspected. Bull calf Guernseys. 7 mos. old, sired by son of Imp. Spottwoods Sequel. Dam, a high class cow of A. R. breeding. \$150 takes him. 5 others 3 to 6 mos. old priced right. Satisfaction guaranteed. G. W. & H. G. Ray Albion Mich.

GUERNSEYS—REGISTERED BULL CALVES
Containing blood of world champions.
HICKS' GUERNSEY FARM, Saginaw, W.S. Mich.

FOR SALE a number of pure bred Holstein heifers, age cows and very well bred Holstein bull calves.
JOSEPH H. BREWER, Grand Rapids, Mich.

REGISTERED Holstein bulls sired by King Zerna Alcartra Pontiac, son of the \$50,000 bull; some from good A. R. O. cows. C. H. Giddings, Gobleville, Mich.

Winnwood Herd

—SENIOR HERD SIRE—
Flint Maplecrest Boy (166974)

4 years old and weighs 3000 lbs. We have a few of his sons ready for service and some little fellows straight as a line and priced right the daughters of Flint Maplecrest Boy are making good.

—JUNIOR HERD SIRE—
Sir Ormsby Skylark Burke (249 66)

A brother to the world champion cow over all breeds (Duchess Skylark Ormsby) 1506 lbs. of butter in one year. He is the best bred Ormsby bull in Michigan his dam a daughter of King Segis Pontiac she is a sister to King Segis Pontiac Count and the \$50,000 bull King Segis Pontiac Alcartra, we said get a better bull (we got ours) one of his sons out of a daughter of Flint Maplecrest Boy will make some herd sire.

JOHN H. WINN, (Inc.)
ROSCOMMON, MICH.

BUTTER BOY ROSINA PRINCE 257572. Herd sire Son of King Ona. His sire is from a 30 lb. cow that made 1345 lbs. in one year, and Dam Butter Boy Rosina 2nd 200540 made 29 lbs., and almost 800 lbs. in ten months, she has a 33 and 34 lb. sister. Have some fine Bulls and Heifers and some heifers bred to him, all from A. R. O. Cows, with records from 22 to 30 lbs. Hampshire Hogs—Fall Boars ready for service, and gilts. Also looking orders for Spring Pigs. Belghim, Percheron Stallions and Mares. Imported and American bred. Write or come and see us. SAGINAW VALLEY STOCK FARM, Saginaw, W. S. Michigan.
ELI SPRUNGER & SON, Proprietors.

Facts in BLACK & WHITE

To Get Profits Get a Holstein Bull

It doesn't cost much to make a start, but every year it will cost more. Some of the most successful and prominent Holstein men started with only a few purebred animals in connection with a number of good grades, gradually weeding out the grades and replacing them with purebreds.

Grade up your herd with a purebred Holstein sire. Then when you're satisfied that you're on the right track, you'll feel like getting a few cows. Any good Holstein does the work of two ordinary cows.

But read all the Holstein facts in our free booklets. Write for them today.

THE HOLSTEIN-FRIESIAN ASSOCIATION
164 Hudson Street
Brattleboro Vermont.

Pure Bred Holsteins

Denbrook Farm offers two bull calves at greatly reduced prices

No. 1, out a 16 lb. 25 months old heifer, by a 35 lb. son of Glista Erica, Price \$150. F. O. B.

No. 2, out of the daughter of a 19 lb. three year old by a son of King of the Pontiacs. Price \$100.

Both calves almost all white and with absolutely straight top lines.

E. J. S. DENBY, Farmington, Mich.

\$150 Burs reg. Holstein heifer past 1 yr. old Good individual, high class breeding, guaranteed O. K. B. B. REAVEY, Akron, Mich.

FEED PRICES DISCOURAGE CONSUMPTION.

(Continued from page 769).

ers is reflected in the sales of bran for June shipment at a discount of as much as \$10 a ton under the spot market, with late May delivery at a discount of about \$6.00 a ton.

Shorts are in as strong position comparatively as bran, and when a downturn materializes, the heavier offal will be slow to recede sympathetically. Consumption of shorts is heavy until the opening of summer, spring pigs requiring large quantities of the feed during the spring season. Shorts prices range up to \$62 a ton in Minneapolis, \$60 in Chicago, \$57 to \$58 in Kansas City and \$63 in St. Louis. Red dog, or low grade flour, which has been used extensively by hog producers, commands a premium of about \$5.00 a ton over gray shorts.

Linseed Market Reacts from Recent Slump.

Linseed cake and meal receded to an apparently attractive level, heavy buying at the low point forcing a sharp rebound. From a top of above \$80 a ton on the Minneapolis market, prices followed a rather sharp downward trend, reaching a low level of \$64 a ton. But the \$64 figure was only short-lived, a quick rally forcing prices to around \$70 a ton. Slightly more flaxseed is being imported for domestic crushers from the Argentine, but crushing activities have been seriously restricted, either because of a lack of seed or strained transportation conditions. Northwestern seed is reported as practically exhausted. But there is no need for concern over the possibility of a further sharp upturn in linseed feed. Consumptive demand is extremely light, foreign trade is stagnant with immediate prospects for the future not bright so far as export trade is concerned. It is too close to summer to buy the feed in more than small quantities—what is actually needed.

Cottonseed Prices Headed Downward.

The cottonseed cake and meal market is in a rut. Price movements are extremely narrow, downward on the whole, lack of demand from feeders giving the market a weak tone. Cake and meal of forty-three per cent protein can be bought freely in the southwest at \$60 a ton, basis crushing plants, with the price in the important middle west feeding belt around \$67 to \$70. Fertilizer manufacturers are absorbing the cheaper offerings, but demand even from that source has fallen off. This is the period when demand is normally extremely quiet, but the dullness is probably more pronounced this year. A depressing influence is the return of considerable quantities of cake held at the seaboard for foreign shipment to be resold in domestic channels.

Forage Prices Soar.

Hay is unusually strong. The strike of switchmen has been more seriously felt in the forage trade than in any other feedstuffs market. At many terminals the trade has been at practically a standstill, owing to inability of carriers to bring the hay into market. So it is difficult to reveal the actual state of the trade. Local demand at many markets has forced a tight condition. Timothy in St. Louis is selling as high as \$52 a ton at this writing and alfalfa at that market is bringing \$45 for No. 1. Chicago quotes timothy at this writing around \$36 to \$42. Alfalfa is selling up to \$36 a ton in Kansas City, the leading forage center. The movement of alfalfa from the west would probably be of a liberal volume, as country stocks are large and producers are eager to market their remaining holdings. But consumption is comparatively as large, and because of the strain resulting from the strike, it is probable the readjustment of prices to a new crop basis will be somewhat delayed.

Cutting Down Cost of Producing Milk

By Ralph H. Sawyer

STRENUOUS efforts are now being made by the New York State Agricultural College at Cornell University to educate the farmers of that state in ways to cut down on the cost of milk production. Through extension men, farm bureau service, agricultural bulletins, and other means, a state-wide propaganda has been started, which, if successful, will go far toward relieving the great problems which have been facing farmers and dairymen since the close of the world war.

Clean cow barns, labor-saving devices, efficient use of farm machinery, cost accounting, and careful management of the animals are all advised, but particular emphasis has been laid on ways in which the farmer can cut down on his feed bill, which is his greatest single item of expense.

Professor E. S. Savage of the animal husbandry department of the college, has laid down a few simple rules which the feeder of all classes of live stock can well follow. First, the farmer should mix his own feed, rather than buying any of the various brands of ready-mixed feeds which are sold on the market. There are various reasons for this. Careful comparison of feed prices has shown that the farmer will save, on the average, at least eight or ten dollars per cow each year, if he mixes his feed at home. Furthermore, when the farmer buys a ready-mixed feed he is at a great disadvantage in not knowing what he is buying. The commercial feed manufacturers do not place a list of the ingredients in the mixtures on the bags, and too often the feeds are adulterated with cheap, indigestible grains. By mixing his own feed the dairyman knows the actual quality of the ration he is giving his cows, and he can adjust the amounts of grain per cow and the nutritive ratio according to the needs of the animals. The labor cost of mixing the grain at home is negligible, because one man can thoroughly mix a ton of grain in about forty-five minutes.

The second way of cutting down feed costs, which the farmer should consider, is to provide a minimum amount of protein in the ration. During the war, while we were feeding Europe, the carbohydrate feeds rose in price much faster, proportionally, than did the high protein feeds. Since the close of the war, however, the tendency has been the other way, and it is the protein feeds which are now costly. The farmer should study the trend of feed prices by securing monthly price lists from his grain dealer or his county farm agent, and adjust his rations so that they will contain only the most economical feeds at any particular time. This does not mean that the feeder should sacrifice the digestibility of the ration to the feeding of low-priced feeds, for this is not true economy. But he should feed more gluten to balance his ration, if this is cheaper than cottonseed meal, or vice versa, when the prices of these two grains are reversed. Under all circumstances, however, the nutritive ratio should not be narrower than 1-4, which provides a minimum amount of protein.

The farmer can save considerable by paying for his grain in cash, when discounts are allowed by the local grain dealers for cash payments. When a three per cent discount is given, this will often amount to a large and important saving for the year.

Lastly, the farmer should grow as much of his grain at home as possible. Under optimum conditions, fully fifty per cent of the feed may be grown at home, and this is almost entirely pure

Lee Union-Alls

The Most Popular Work Garment in America
Better Made-Longer Wear-Greater Comfort

BUT REMEMBER—UNION-ALLS is a trade-marked name—no garment can be UNION-ALLS unless it's a LEE.

The H. D. Lee Mercantile Company

Kansas City, Mo.
Trenton, N. J.

Kansas City, Kas. St. Louis, Mo. Chicago, Ill.
Minneapolis, Minn. South Bend, Ind.



Hillcrest Stock Farm

Home of

A 36 lb. Son of the Great King of the Pontiacs

OFFERS FOR SALE:

2 Sons of Lillie Burke Segis King, 33 lbs.

No. 1—Born Feb. 27th, 1920 No. 2—Born April 8th, 1919

Dam

Johanna DeKol Hartog of Sparta.

3½ yrs., butter 24.36, milk 536.20.

3 A. R. O. daughters, one 2½ yr.

Butter 25.11, milk 520.

Her sire 40 A. R. O. Daughters.

Her dam Butter 30.41, milk 526.10.

Dam

Korndyke Fenecia DeKol Belle

4 yr. Butter 21.62, milk 475.30

Her sire a Grand Son of Pontiac,

Korndyke.

Her dam, butter 22.81, milk 512.92

4 A. R. O. Daughters.

2 A. R. O. Sons.

Herd Under Federal Supervision

SEE THEM AT

HILLCREST FARM, Ortonville, Mich.

OR WRITE

John P. Hehl, 181 Griswold St., Detroit, Mich.

Holsteins of Quality

Fifteen High Grade Holstein Cows For Sale
E. A. HARDY, Rochester, Mich.

OUR HERD SIRE

Model King Segis Glista

By a 30 lb. son of Lakeside King Segis Alban De Kol. His dam Glista Fenelle 32.37 lbs. Her dam Glista Ernestine 35.95 lbs. His three nearest dams average over 33 lbs and his forty-six nearest tested relatives average over 30 lbs. of butter in seven days. Write for prices on his sons.

Grand River Stock Farms
C. G. Twiss, Mgr. Eaton Rapids, Mich.

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

A BULLY GOOD BULL CALF.

Born July 1919. His six nearest dams have good yearly records. Amongst them are three world's records Good individual, nicely marked, and worth in any good herd all he will cost. You can't pay too much for this kind. I have a fine four months bull, not quite so well bred but a nice one.

L. E. CONNELL Fayette, Ohio
\$125. gets bull calf born June 1.19. Sire's six nearest dams av. 33.34 lbs. butter for 7 days. Dam a good producer. Oscar Wallin, Unionsville, Mich.

REG. Holstein Bull has been my Senior Herd sire, 20 dams average 31 lbs. must sell to avoid inbreeding as I have 18 daughters of his. J. R. Hicks, St. Johns, Mich.

HOLSTEIN BULL CALVES FOR SALE

From dams with good records.
BULL CALVES Sired by 45 lb. BULL.
BULL CALVES Sired by 34 lb. BULL.
BULL CALVES Sired by 33 lb. BULL.

PRICES VERY REASONABLE.

Privilege of return if not satisfied.

A. W. COPLAND, Birmingham, Michigan.

Herd under State and Federal Supervision.

Hatch Herd

(State and Federal Tested)

Ypsilanti, Michigan

Offers young sires, yearlings and younger, out of choice advanced registry dams and King Korndyke Artis Vale: Own dam 34.16 lbs. butter in 7 days; average 2 nearest dams 37.61, 6 nearest 33.93, 20 nearest 27.83

Bazley Stock Farm YPSILANTI, MICH.

Who would like a nicely marked Bull calf, whose Sire is a Son of King of the Pontiacs 266, A. R. O. Daughters and whose dam has just made over 20 lbs. of butter in 7 days and who is a grand-daughter of Homstead Girl De Kol Sarcastic Lad 107, A. R. O. Daughters. This young Bull's Dam is also a daughter of Woodcrest De Kol Lad 26, A. R. O. Daughters. Price \$125.00. Herd under State and Federal Supervision. Never had a reactor.

JOHN BAZLEY

319 ATKINSON AVE. DETROIT, MICHIGAN.



Larro-feed
THE READY RATION

FOR DAIRY COWS
100 Lbs. Net
LARRO
GUARANTEED ANALYSIS
CRUDE PROTEIN NOT UNDER 20%
FAT 14%
FIBER 1.5%
ASH 5.0%
MOISTURE 10.0%

Larro-feed Guarantee
Feed 200 pounds Larro-feed to any one cow, then if your own figures do not show that she gave more milk on Larro-feed, or if for any other reason you are not entirely satisfied, return your empty sacks and unused Larro-feed and get every cent of your money back.
Dealers selling Larro-feed are authorized to carry out the terms of this guarantee.
THE LARRO-MILLING COMPANY

Feed Two Sacks of Larro to One Cow
Then Her Milk Yield Must Increase or You Get Your Money Back

For seven years Larro has been sold under this guarantee—just as reproduced at the left. To the man who is not yet a Larro user it is an absolute promise of better results from his cows—to the veteran Larro user it is double assurance that Larro today is the same as it was in the beginning—that its quality will never be changed.

A Balanced Ration That the Cows Enjoy
The cows like Larro because it's so palatable—tastes so good—and it's so digestible that an unusually high percentage is turned into actual milk production.
You get more milk with Larro because it isn't a one-sided ration, but a nutritious balanced food.
The protein is there—in just the proportion to maintain the highest possible milk flow over a long period and the carbohydrates are there too, and the other necessary elements—all the ingredients scientifically mixed by automatic machinery with just one purpose in view, to produce milk-pail results.

Buy Larro From Your Dealer
Go to your local dealer and buy Larro under the terms of this Money Back guarantee—with the certainty that no matter how much milk your cows are producing on their present ration they will do better on Larro. If your dealer does not carry Larro write us at once.

DEALERS: Get the Larro Proposition
The Larro-Milling Company, 509 Larro Bldg., Detroit, U.S.A.

Larro-feed
THE READY RATION FOR DAIRY COWS

gain. With the high price of protein feeds, the growing of alfalfa hay at home will reduce the feed bill greatly, since this has a higher protein content than most of the other hays, particularly timothy. Home-grown silage is probably second in importance to legume hay. The combination of good corn silage with alfalfa has no superior for economical milk production.

HOLDING TREATED OATS BEFORE PLANTING.

I have twenty-five bushels of oats which I treated according to directions for the dry method, spraying them with formaldehyde and water equal parts, using one-half a pint for the twenty-five bushels. What I want to know is, can I safely plant this grain which has now been held a week waiting for the weather to let me work?
Ingham Co. O. R.

The dry method for applying formaldehyde to grains is properly surrounded with safeguards because we have come to know that this chemical acts powerfully on grain, destroying the germination power in some instances.

The only instances of loss on the farm from holding treated seed which have come to my attention have been with wheat which is peculiarly sensitive. In the case of oats, since the grain is surrounded with a sort of protecting hull, I believe that the grain will stand the rather long wait. My attention was called last year to exactly this circumstance and on the basis of my laboratory tests I advised the farmer to sow the treated grain. This was done and the crop was as satisfactory as any oats last year.

If germination test is possible it should certainly be tried before planting. If not, the chance with oats is not a large one. Of the thousands of farmers in Michigan who have used the dry treatment last year and the year preceding, I have yet to hear of a single case of injury to stand of oats which was due to treatment. I have known of cases where the treatment was applied many times the recommended strength and no bad results.

It is not a good thing for a farmer to experiment with his crop however. The safest place for any grain after it is treated is in the ground and I believe in planting immediately after the requisite covering period, four hours. With wheat this is imperative. With oats, the protecting coat that nature has given allows more leeway.

The question also is asked, can the treated oats be used for feed? We have fed them to chickens without any bad effects and I have generally advised farmers to mix them in with other clean grains for horse feed and this has been done without injury to animals. The amount is comparatively small per bushel, and while formaldehyde has a bad effect on the digestive process in large doses, judiciously given seems to be without harmful results.
G. H. C.

BLEMISHED BEAN SEEDS UNFIT FOR PLANTING.

What is the matter with the beans when they show chewed places which are yellowed? Are they safe for planting? A local man has called them anthracnose and says they are poison.
Huron Co. M. R.

Beans such as you describe are one of the puzzles now to bean experts. The trouble has all the appearance of insect work, but no insect is known to do the depredation. The yellowing which accompanies the injury suggests bean blight and one suggestion as to the cause of the trouble is that bean blight attacking the young pod has caused the scar on the seed.

If the trouble is caused by insects it is certainly true that it is not an egg puncture as no insects can be bred out of the beans. If the trouble is bean blight, microscopic tests have not as yet revealed any bacteria on the yellowed tissues, and the spotting must

LONG DISTANCE

HOLSTEIN BULL CALF
Born Dec. 24, 1919. Seven close up dams average above 1200 lbs. butter and 24,000 lbs. milk in 1 yr. His dam untested \$100. A. Fleming, Lake, 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.

FOR SALE three Registered Holstein-Friesian 2-year old heifers. Will make fine cows, best of breeding, sired by a Pontiac Bull. Will sell one or the three.
HENRY S. ROHLFS, Akron, Mich.

For Sale: Registered Holstein Cattle, our herd sire born March 27, 1917, 8 cows, and 3 heifer calves. Write for records and particulars to the BLACK & WHITE FARM, Fremont, Mich.

HEREFORDS

20 Cows and Heifers of popular breeding for sale also bulls not related.

ALLEN BROS.
PAW PAW, MICHIGAN

HARWOOD HEREFORDS

A few young bulls from 10 to 18 months, well bred, in fine condition. Special price for the next thirty days. No females for sale at present. Visitors welcome.

Jay Harwood & Son, Ionia, Mich.
Farm Six Miles South of Ionia

Herefords. Just purchased 3 new herds, now have 150 head; we offer you anything desired either sex, horned or polled, any age. Priced reasonable.
THE McCARTYS, Bad Axe, Mich.

The Wildwood Farm
Jersey Cattle, Majesty strain. Herd on State accredited list, R. of M. testing constantly done. Bulls for sale. ALVIN BALDEN, Phone 143-S, Capac, Mich.

McPherson Farms Co. and Cluny Stock Farm

FIRST ANNUAL SALE

at Howell, Mich., June 8, 1920

Herds have been maintained for many years as strictly breeding herds, and the animals offered for sale are of our own breeding.

We are not selling out. We shall continue to develop what Holsteins we have left, and in this way will continue to boost for all of the buyers of the cattle offered in this sale.

Our herds are under Federal Supervision, and all cattle over six months old will be tuberculin tested, and will be sold on a sixty-day guarantee.

Catalogue will be ready for distribution May 20th.

B. V. KELLY, Auctioneer,

S. T. WOOD, in the box.

For Catalog Write To

McPHERSON FARMS CO.
Howell, Mich.

R. BRUCE McPHERSON
Howell, Mich.

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

FOR SALE Jersey Bulls ready for service R. of M. ancestors. Raleigh-St. Lambert breeding. Jerseys stand for economy. Waterman & Waterman, Packard Rd. Ann Arbor, Mich.

For Sale Jersey bull calves of Majesty breeding from good producing stock. Herd on Government "Accredited List." Write for price and pedigree to C. A. TAGGETT, R. 2, Fairgrove, Mich.

LILLIE Farmstead Jerseys—A few heifers bred to L. freshen soon, heifers bred to freshen next fall, 3 cows, R. of M. bull calves. C. C. Lillie, Coopersville, Mich.

Bulls ready for service from our herd bull Margueritea B. Premier, gdson, of Pogue 98th of Hood Farm, and cows now on test for R. of M. Smith & Parker, Howell, Mich.

For Sale Registered Jersey Bulls from NOTTEN FARM, Grass Lake, Mich.

MEADOW HILLS Shorthorns. Herd headed by Silver King, full brother of Lavender Sultan. Purdue University's great sire. For sale females of all ages, a few young bulls. Geo. D. Doster, Doster, Mich.

Shorthorn bull yearling, price \$70.00. Percheron stud three years old, price \$50.00. A Spanish Jack yearling, price \$20.00. E. J. Aldrich, Tekonsha, Mich.

Shorthorns Scotch and Scotch Topped, only a few left at old prices. W. J. BELL, Rose City, Mich.

St. Joseph Valley Shorthorn Ass'n has males of all ages and best breeding. Write your wants to AARON HAGENBUCH, Sec-treas. Three Rivers, Mich.

HOGS

Berkshires size with quality is our specialty. Write your wants to M. G. MOSHER & SONS, Osseo, Mich.

Registered Berkshires, Gilts, and Sows bred for April May and June farrow. A yearling Boar and a few younger Spring pigs. Chase Stock Farm, Marlette, Mich.

LARGE Berkshires. Ten years a breeder. Let us convince you that we have the kind you want. Cir. Satisfaction guar. W. H. Every, Manchester, Mich.

Duroc sows and gilts bred to Walts King 92949, who has sired more 1st and 2nd prize pigs at the State Fair in last 2 years than any other Duroc boar. Everyone will be a money maker for the buyer. Cat. and price list. NEWTON BARNHART, St. Johns, Mich.

DUROC-JERSEYS

A few extra good bred sows and gilts for sale. CAREY U. EDMONDS, Hastings, Mich.

DUROC JERSEYS

Bred Gilts for March and April farrow. Write at once for description or come and see them. Satisfaction guaranteed with every order. RUSH BROS. OAKWOOD FARM, Romeo, Mich.

be caused by the germ while still working on the pod above the blemished bean. Any suggestion as to the cause, without further observation, is guesswork.

Specimens of the trouble have been found in nearly every sample of beans examined from certain sections in Michigan, and samples have been received from Idaho and other western regions. Fortunately the percentage of such blemished beans is low, and has not been seen to increase measurably the last two or three years since the trouble was first noted.

Such beans fall into the same class as the mechanically injured beans and as such are fit for food but hardly up to the highest standard of quality. It would be well to reject them in picking beans for seed purposes, because the Michigan farmer can not afford to plant any beans which are not clear and bright and free from blemish. Beans so picked give perfect stands. I would fear that the blemished beans would rot in the ground if the season were at all favorable for quick sprouting.

The trouble is certainly not anthracnose and no worry about the poisonous quality need be felt.

WASHTENAW HOLSTEINS SELL WELL.

FAIR weather and a small, but enthusiastic crowd greeted the Washtenaw Consignment Sale of Holstein-Friesian cattle, held at Ypsilanti, Saturday, May 1. While some of the animals sold at comparatively low prices, others that were in good condition and had credible records brought good prices. Altogether the sale was a successful one. The individuality and breeding of the animals in the sales ring indicates that Washtenaw county breeders have the quality needed to attract buyers from other localities. That some of them should do more testing is evidenced by the prices their cattle sold for. Here are the sales running above \$250:

Consigned by Shady Knoll Farms, Ypsilanti.

Creamella Eagle Bay Glista 231602, sold for \$310; Corona Hengerveld Cornucopia 151536, \$310; Violet Chornita Mercedes 175006, \$305; Canary Fayne Hengerveld 208021, \$325; Rag Apple Segis Calamity 466299, \$300; Calf, born December 12, 1918, sire 217984, dam 127458, \$355; Bernardo Clotholde Rachel 5th 190089, \$400; Superior Bernardo Segis 281991, \$400; Lady Boon Jewel Pride 93582, \$250, and her calf at \$210; Lady Boon Jewel Fayne 446319, \$300; Oceola Jewel Fayne 446318, \$850; Valley Jewel Barnostine 518014, \$400; Prilly Ondine De Kol Lady, \$270, calf sold for \$155; calf born February 13, 1920, sire 170506, dam 140274, \$500; Elgin woodcrest 272277, \$255; Idlewild Fearless Mercedes 212194, \$270.

Consigned by John C. Stellwagen, Belleville.

Emily Winona Calamity 189397, \$500; Huron Hill Pontiac Winona 518393, \$305; Huron Hill Pontiac Louise, \$350; Huron Hill Pontiac Korndyke 518396, \$255; Korndyke Barnum Mechthilde 218159, \$500.

Consigned by Harvey S. Day, Willis.

Pietertje Butter Girl De Kol, \$400. Consigned by H. J. Carpenter, Wayne. Rougemont Segis Hartog 232891, \$255; Dora Jewel Gerben Starlight 455584, \$300; Janice Jewel Gerben Starlight 296575, \$305.

Consigned by L. H. Riggs, Belleville. Rachel Pauline De Kol Butter Boy, 196885, \$300; Rachel Pauline Woodcrest 255070, \$350; Norma Pontiac Mercedes Butter Boy 196887, \$500, calf \$150.

Consigned by Elmer D. Riggs, Belleville.

Canary Fayne Hengerveld 2nd 336690, \$250; Lady Boon Butter Boy 266318, \$275.

Consigned by Charles Freeman, Denton.

Stoneacres Pontiac Hilton 320324, \$250; Ypsilanti Pontiac Hilton 473132, \$250.

Consigned by H. A. Smith & Son, Wixom.

Rosie Mercedes Butter Boy 210351, \$975, calf \$325.

Consigned by William Austin, Saline. Bersheba Netherland Lass 197161, \$300.

75 Head of Holstein-Friesian Cattle 75

Will be Sold

At the SIXTH ANNUAL SALE of

The Livingston County Holstein Breeders Sale Co.

Howell, Mich., May 27th, 1920

Sale Commencing at 12 o'clock Sharp

This sale consists of a fine lot of cattle many of them with A. R. O. records or are from record dams. One daughter of a 33 lb. cow, one from 31 lb. cow, and one from a 30 lb. cow. Some choice bulls will be offered, from dams with records from 22 lb. to 29 lbs.

DO NOT MISS THIS CHANCE

Catalogues Ready May 10th

P. M. TAFT, Sec.

OAK GROVE, MICH.

R. R. 1.

Absolute Dispersal Sale

of the Entire Herd of

65 Registered Guernseys

Property of Avondale Stock Farms, Wayne, Mich., Dr. R. J. Palmer, Owner

Saturday, May 22, 1920

at 10:30 A. M.

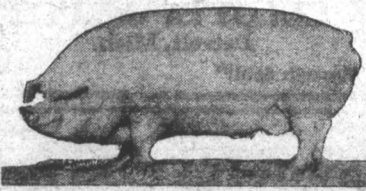
Other business is the cause of the dispersal and buyers can be assured of an excellent opportunity to secure high class animals. The best of breeding and type will be found in the herd and interested purchasers cannot afford to miss this sale. Herd is on the State and Federal accredited list. Whoever buys from this herd buys free of disease.

Auctioneers: Love and Benjamin

F. E. FOX, SALES MGR.

Waukesha, Wisconsin

THE FAMOUS O. I. C. SWINE



We have the undefeated Herd of the World. Winning premier breeder and exhibitor at every fair shown in 1919-1918-1917, including the following state fairs—Ohio, Michigan, Indiana, Illinois, Missouri, Kentucky, Tennessee, Oklahoma, New York, Alabama, Tri-state fair Memphis, and the National O. I. C. twice. Stock of all ages for sale. Registered free in the O. I. C. association. Order now. We will ship any of our stock on approval allow you to keep three days before you have to pay for it. You will be your own judge on your own farm.

CRANDELL'S PRIZE HOGS,

Cass City, Mich.

O. I. C. SOWS FOR SALE

One of the Best Herds in Michigan

Spring gilts and fall yearlings bred for March, April and May litters. I ship C. O. D., pay express and register in buyer's name. If you want a BIG TYPE sow, guaranteed right in every way, write me.

J. CARL JEWETT,

R. 5, Mason, Michigan.

CATTLE

Royal Bruce 295521 heads our herd. Three half brothers sold for \$55,000.00 one Olney Proud Augusta going to head Wm. Dutches of collyne's herd at \$21,000.00. One bull and a number of females for sale. Bad Axe, Mich. CARR BROS. & CO. Norman Carr, Secretary.

For Sale Shorthorns of Quality Scotch and Scotch Topped descendants of Archers Hope, Avondale, Max Walton Sulton and White Hall Sulton, Model Type, by the Osceola Co. Shorthorn Breeders Ass. John Schmidt, Sec. Reed City, Mich. Central Mich. Shorthorn Breeders Ass. offer 40 bulls, 38 females, write for new list. OSCAR SKINNER, Sec. Gowen, Mich.

BIDWELL SHORTHORNS

You Can Buy

a bull that will put weights on your dairy calves—the difference will soon pay for the bull. Now selling good Scotch and Scotch-topped yearlings, reasonably priced. A roan, senior yearling, a Missie of Villager breeding, a herd bull prospect, Federal Test.

BIDWELL STOCK FARM,
Box D, Tecumseh, Michigan

Richland Stock Farms

Home of the Michigan Champions. Shorthorn Sires in Service:

IMP. Lorne, IMP. Newton Champion, Sterling Supreme. Why not buy a young bull to head your herd that carries the blood that is making Shorthorn History. Only a few real headers left. Write your wants.

C. H. PRESCOTT & SONS, Tawas City, Mich.

The Kent Co. Shorthorn Assn. have males and females of quality for sale. L. H. LEONARD, Sec., Caledonia, Mich.

CHAS. WARNER Jr. Breeder of Registered Shorthorns. No stock for sale at present. Chas. Warner Jr., Imlay City, Michigan

Milking SHORTHORNS. Clay bred, bull calves Herds under Federal Supervision. Davidson & Hall, Beand & Beand, Tecumseh, Mich

Shorthorns Good Scotch bred bulls, cows and heifers, priced right. W. B. McQUILLAN, R. 7, Howell, Mich.

HOGS

Michigana Farm Durocs

We breed and sell good hogs. O. F. FOSTER, Mgr. Pavilion, Michigan

DUROC JERSEYS. Spring pigs ready for delivery. \$10.00 each. LAKE SIDE STOCK FRUIT FARM, Pinckney, Michigan.

ROYAL BRED DUROC GILTS

Dams sired by Michigan Cherry Col. Bred to Jacks Cherry Orion King, No. 169259, Son of the \$10,000 champion, Jacks Orion King 2nd, all high class stock, write for prices. The Jennings Farms, R. 1, Bailey, Mich.

DUROC JERSEYS

Bred gilts all sold. Get in your orders early for March and April pigs. Either sex or pairs not akin. F. J. DRODT, Monroe, Mich. R. 1.

DUROC JERSEYS

E. D. HEYDENBERG, Wayland, Mich.

Duroc bred sows and gilts sired by Orion Cherry King Col. 2nd., bred to All Col. of Sangamo 2nd. First class lot, reasonable. W. C. Taylor, Milan, Mich.

DUROCS for Sale Bred sows and fall pigs of both sexes and a car of grade draft colts. CHAS BRAY, Okemos, Michigan.

Duroc Jersey Boars Let us fill your order for a herd Duroc bred sows and gilts sired by Orion Cherry King Col. 2nd., bred to All Col. of Sangamo 2nd. and a few fall boars by E. D's Defender Col. FREY BROS., Caledonia, Mich.

Duroc Jersey fall and spring pigs for sale. We sell you only the best, ship C. O. D. subject to your approval. Register in buyers name and guarantee satisfaction. W. E. BARTLEY, Alma, Michigan

FOR SALE Chester Whites. Two, long, tall, heavy boned, September boars of the big type some fine gilts and a few spring pigs. HERBERT WELLWOOD, Marlette, Mich.

CHESTERS, spring pigs in pairs or mature stock. A few gilts bred for May farrow. F. W. ALEXANDER, Vassar, Mich.

Raise Chester Whites

Like This
the original big producers

I HAVE started thousands of breeders on the road to success. I can help you. I want to place one hog from my great herd in every community where I am not already represented by these fine early developers—ready for market at six months old. Write for my plan—More Money from Hogs. G. S. BENJAMIN, R. F. D. 10, Portland, Michigan

O. I. C. and Chester White Swine

Strictly Big Type with quality. Spring pigs of March and April farrow. A choice lot of boars. Will only spare a few more gilts at present. Will ship C. O. D. and record them free. Newman's Stock Farm, Marlette, Mich. R. No. 1.

O. I. C. and Chester White Swine booking orders for spring pigs from big type blooded lines. Fall pigs with size and quality. I ship C. O. D. and register in buyer's name. John C. Wilk, Alma, Mich.

O. I. C.'s 2 extra choice last spring gilts. 11 last fall boars wt. 175 to 250 also fall gilts the best I ever had. Farm 1/4 mile west of Depot, Okemos, Mich. Phone 124. OTTO B. SCHULZE, Nashville, Mich.

O. I. C.'s Am offering a few September pigs that combine size and quality. G. J. THOMPSON, Rockford, Mich.

O. I. C.'s A few choice late fall and winter boars, also a fine two year old boar. WEBER BROS., R. No. 2, Royal Oak, Mich.

O. I. C.'s Big type serviceable boars. Gilts bred for May and June farrow. G. P. ANDREWS, DANVILLE, MICHIGAN

O. I. C. Gilts bred for March and April farrow, guaranteed safe with pigs. Fall pigs and a few service boars. Herd insured by D. T. F. C. Burgess, R. 3, Mason, Mich.

O. I. C.'s Eight young boars and spring pigs for June shipment. CLOVER LEAF STOCK FARM, Monroe, Mich.

L. S. P. C.

One 400 lb. sow and 7 pigs by side, price \$100.00. One 275 lb. gilt and 6 pigs by side, price \$85.00. Two choice boars. H. O. SWARTZ, Schoolcraft, Mich.

Big Type Poland Chinas

Our herd is representative of the best in Big Type. The \$40,000.00 "The Yankee", the \$50,000.00 "The Olansman" and the priceless "Giant Buster" are all represented. We aim to keep up-to-date blood lines and only quality stuff. Come over and see us. PUBLIC SALE OCT. 27th. WESLEY HILE, R. 6, Ionia, Mich.

Additional Stock Ads on Page 795

CONGRESS AND FOOD PROTECTION.

(Continued from page 770).

crease their revenues to this standard of earnings. If the Interstate Commerce Commission grants the demands presented by the railroads this sum will be realized through increased freight charges, leaving the passenger rates at the present level. The advances in freight rates proposed by the railroad executives are as follows: Eastern roads, 30.3 per cent; southern roads, 30.9 per cent, and western roads 23.3 per cent. This increase, which undoubtedly will be made and may be necessary, will give another boost to the cost of farm machinery, fertilizers, stock feeds, and all supplies used by the farmers. It will add considerably to the already large margin between the price received by the producer and that paid by the consumer. It means that the consumer will have to pay more for his food or the farmer receive less for his products.

Hold Up Farm Loans.

At a meeting of land bank presidents called by Commissioner Lobdell of the Farm Loan Board, to discuss the situation growing out of the action of the supreme court in ordering a rehearing of the suit to test the constitutionality of the Farm Loan Act, the fact developed that more than fifty million dollars have been held up by the litigation. A large number of the applications for government aid had reached the stage where only final approval was needed to complete the transactions when it became necessary for the farm loan banks to suspend loaning operations.

The situation confronting the loan banks and local associations was said to be "exceedingly regrettable" but according to Mr. Lobdell the board's hands are tied. It was also agreed that expansion of the farming industry was daily being retarded through inability of the banks to make further loans to the farmers.

While the land banks are compelled to follow the system of "watchful waiting" until there is a rehearing of the suit to test the constitutionality of the act under which the banks operate, it was stated that thousands of farmers had abandoned their plans for the extension of crop production. If there is a serious food shortage next fall the interests that are fighting the federal farm loan system will be in part responsible for it.

As a means of meeting the financial needs of the farmers, Representative Ferris, of Oklahoma, has introduced a bill in the house authorizing the secretary of the treasury to purchase, during 1920 and 1921, farm loan bonds amounting to \$100,000,000.—E. E. R.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

Bunch in Teat—Lame Sow.—One of my cows has bunch in teat and for the past three weeks I have applied iodine and lard three times a week, but the bunch is still there. I also have a sow nine months old that is stiff in forequarters. R. B., Mason, Mich.—Continue to apply the iodine ointment to teat. Perhaps it will be necessary to have bunch cut out. Feed sow less corn, more oats, oil meal, clover, alfalfa and some roots. Has she had plenty of exercise? Keep her in a dry, comfortable place.

Bone Spavin.—I have a twelve-year-old mare which is getting a little lump on the inside of hock joint. I first noticed it last spring, it has gradually enlarged and is now causing lameness. I am told it is bone spavin. How shall I treat it? H. H., Waukegan, Mich.—Clip off hair and apply one part red iodide of mercury and four parts lard every two weeks. He should be given rest, but if not don't drive faster than a walk.

Don't Send a Cent

The biggest bargain you ever heard of. So sure are we that we will send these shoes without a cent in advance. Just send coupon stating in advance. Your shoes will be sent by return prepaid mail. Pay postman on arrival. Try them on. Examine them. Compare with higher priced models. Then decide. You take no risk. If this isn't the most remarkable offer ever made, return shoes at our expense.

Men's Durable Work Shoe

Made in dark brown on U.S. Army comfortable Munson Last, of solid leather, specially treated to stand hard wear. Blucher style. Duct-proof bellows tongue. Reinforced shank. No Krome elkskin uppers (not split leather). Will dry soft after being wet. Specially tanned, making them acid and moisture proof. Solid leather broad heels. Krome Elk Leather Soles, special tanning makes them twice as durable. (Will outwear two oak leather soles.) Widths: Medium, Wide and Extra Wide. Sizes 5 to 12. Pay Postman \$4.35 on arrival. Sizes 12 and 14 black only. Pay postman \$6.45 on arrival. Regularly \$6.50 a pair. If not satisfied on arrival return shoes and we will refund your money. You take no risk.

W. A. Owens, Fair Haven, Vt., writes: Shoes O. K. Send me another pair.

Rush Coupon

Sign and send coupon. Don't send a cent with it. We guarantee a saving of \$2 a pair or money back, including return postage.



Pay only \$4.35 on arrival

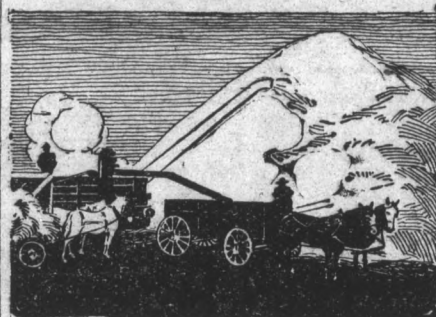
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Send shoes advertised at once. I will pay postman \$4.35 on arrival. If not satisfied I will return shoes and you will refund my money.

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"Save Your Thresh Bill" From the Stack

You will save enough of your time and grain from the straw stack to pay your thresh bill, when you hire the thresherman with a

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This is the thresher with the famous "Man Behind the Gun"—the device that beats out the grain instead of waiting for it to drop out. Saves the grain that others must let go through the machine. The result of years of study and experience in building threshing machinery exclusively.

I. S. Baker and 15 others of Holton, Ind., say: "The Red River Special is surely a friend of the farmers. It's the fastest and cleanest outfit that ever worked for us."

Wait for the man with the Red River Special and save your grain this year.

If you want a thresher for your own use, ask about "Junior" Red River Special.

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Builders Exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines.

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On trial, New, well made, easy running, easily cleaned, perfect skimming separator. Skims warm or cold milk. Different from picture which shows larger capacity machines. Our guarantee protects you. Get our plan of easy

MONTHLY PAYMENTS and handsome free catalog. Whether dairy is large or small, write today. Western orders from Western points.

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For Sale Cheap A quantity of first-class stanchions and stalls.
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Save 25% on Roofing

CENTURY Roll Roofing is sold direct from factory to you. Best and cheapest in America. Long guarantee. Freight paid. 14 shipping points. FREE. Send for samples, catalog and bargain prices. Write today.
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in colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today.
Electric Wheel Co., 35 Elm St., Quincy, Ill.

BINDER TWINE

Get our astonishingly low price to Granges, Equity Unions, Farm Bureaus, etc. Farmer agents wanted. Free samples.
THEO. BURT & SONS, Box 46, Melrose, Ohio

If you want a catch of Alfalfa, Clover, Timothy use a car of my hardwood ashes. George Stevens, Peterborough, Ont., Canada.

POULTRY

BABY CHICKS

Direct from the World's Largest Incubator THREE MILLION FOR 1920.

We have chicks hatching every day in the week and every hour in the day. Immediate delivery on the following breeds.

	100	500	1000
S. C. White Leghorns	17.00	82.50	160.00
S. C. Brown Leghorns	17.00	82.50	160.00
R. C. R. I. Reds	20.00	97.50	190.00
Barred Rocks	20.00	97.50	190.00

Other breeds delivered in one to three weeks.

Write today for catalog, free.

Mail your order now for prompt delivery.

THE SMITH STANDARD COMPANY,
1969 W. 74th St., Cleveland, Ohio.

LOOK! BBY CHICKS \$15 A 100 UP!

By insured parcel post, postage paid. 40 breeds chicks, 4 breeds ducks. Get May and June chicks for December layers. Catalog free, stamps appreciated.
NABOB HATCHERIES, GAMBIER, OHIO

AGAIN RHODE ISLAND WHITES

win at the eighth national egg laying contest, we have the world's best strain "Therwood" R. C. Rhode Island Whites eggs for sale from selected mating 15 eggs \$2.00 all over one setting, \$1.75. DEFOREST PEET, Alto, Mich.

R. C. Brown Leghorns eggs \$1.50 for 15, \$8 per 100. White Pekin duck eggs \$1.50 for 15, \$8 per 100. White Chinese goose eggs 40 cents each.
MRS. CLAUDIA BETTS, Hillsdale, Mich.

Rhode Island Reds for sale. Eggs for hatching at \$5 per fifty.
BURT Sisson, Imlay City, Mich.

Rhode Island Reds Eggs for hatching from vigorous birds \$1.50 per 15 or \$5 per 100.
MRS. R. S. EDDY, R. 2, Cassopolis, Mich.

Single Comb Rhode Island Red Eggs for hatching. Finest matings, well bred winter layers. \$3.00 per setting; \$8 per 100. Investigate.
Babcock and Son, R. D. 6, Battle Creek, Mich.

S. C. Brown Leghorns Excellent layers. Farm range. Eggs postpaid, 15, \$1.50; 30, \$3; 45, \$4; 100 \$8. Floyd Robertson R. 1, Lexington, Indiana.

S. C. B. Minorcas eggs from vigorous stock good layers. After May 1, \$3.15; \$6.30.
CHAS. SCHOOK, Allenton, Mich.

S. C. Black Minorcas exhibition stock Northrup strain. Eggs for hatching \$3.00 for 15—\$12.00 per 100. Cass Poultry Yard. C. J. Deedrick, Vassar, Mich.

Silver Laced Golden and White Wyandotte eggs from best quality only \$3.00 per 15, \$5.00 per 30 by prepaid parcels post. Q. W. Browning, R. 1, Portland, Mich.

Snowy White Rocks, dandy layers. Fishel strain. Eggs prepaid, \$1.50-15; \$2.75-30; \$4.50-70-100. MRS. EARL DEHNHOFF, Vanburen, Ohio.

S. C. Brown Leghorns Purebred. Farm range eggs 15 \$1.60 postpaid. 100 express \$8. HARLEY L. FRY, North Adams, Mich.

S. C. W. Orpington and white guinea eggs \$1.75 per 15 postpaid. O. ARNOLD, Coleman, Mich.

S. C. White Leghorn hens. Ferris 264 egg strain, \$4.00. Eggs \$2.00 per 15 prepaid. A. Stegenga, Portland, Mich.

White Leghorns, Brown Leghorns, Ancona chicks \$17 per 100. Live arrival guaranteed. Eggs of all varieties. Catalog free. Triangle, Clinton, Mo.

WHITE WYANDOTTES, free range farm flock improved by 16 years careful selection. 15 eggs 2.50, 30 4.50; 50 or more 10 each by mail prepaid. Cockerels 3.50, 2 for \$6. Vern A. Coore R. 1, Hartford, Mich.

White Wyandottes: Eggs for hatching from selected layers. \$2.00 per 15, prepaid, 1 male 10 females, \$40.00. Frank De Long R. 3 Three Rivers, Mich.

White Plymouth Rocks Choice breeding. Eggs 15, \$2.00; 100, \$10.00, prepaid. Day old chicks, 100, \$20. Richard M. Gretton, Mason, Mich.

Ten Eggs for \$3.75 from pure Toulouse geese Parcel post paid. MRS. AMY SOUTHWORTH, Allen, Mich.

HOGS

LOOK B. T. P. C. We are selling at a great sacrifice for the next 10 days extra good gilts to farrow in Apr. choice fall pigs to make room for our herd sows. W. BREWBAKER & SONS, Elsie, Mich.

MILLER Meadow's L. T. P. C. boars all sold. Gilts raised by General Jones and bred to our young boar Alaska, address CLYDE WEAVER, Ceresco, Mich.

BOARS! Oh Boys!

Sons and grandsons of the Mighty Giant Buster. The big boned useful kind. Priced for a quick sale. JNO. C. BUTLER, Bell Phone, Portland, Mich.

Big Bob Mastodon pig: takes the cake, book your order now. Fall boars and gilts sired by a grandson of Disher Giant, open or bred to Big Bob for Sept. 23 yearling sons. C. E. GARNANT, Eaton Rapids, Mich.

Big Type Poland Chinas with quality, at reasonable prices. Pigs of both sex, and bred sows and gilts. G. A. BAUMGARDNER, R. 2, Middleville, Mich.

For Sale Big Type Poland China Gilts bred for July, August and September farrow, weighing 225 lbs. for \$60, also spring pigs \$20 each, guarantee satisfaction. DORUS HOVER, Akron, Mich.

Big Type P. C. Bred gilts. Fall yearlings, prize winners, out 1100 lb. sire and mammoth sows from Iowa's greatest herds. E. J. Mathewson, Burr Oak, Mich.

Big Type Polands all sold out. Watch this ad for further announcements. Breeding stock for sale in season. L. L. CHAMBERLAIN, Marcellus, Mich.

LEONARD'S B. T. P. C. bred sows all sold. Order booked for boar pigs at weaning time from Mich. Champion Herd. E. R. Leonard, R. 2, St. Louis, Mich.

I am offering Large Type Poland China Sows, bred to F's Orange, at reasonable prices; also fall pigs. Write or call Clyde Fisher, St. Louis, Mich. R. R. 3.

6th ANNUAL P. C. Bred Sow Sale March 13, 1920. For particulars write W. J. HAGELSHAW, Augusta, Mich.

Large Type Poland China Stock Hogs and Bred gilts. E. H. EISELE, R. 2, Manchester, Mich.

"Lindhurst" Poland Chinas Mammoth Ben's Chief No. 352167 heads our herd. Sows by Mammoth Ben, Upsome Lad, Joe Mastodon, Gertsdale Jones, and Capt. Price. Pigs by Mammoth Ben's Chief, Mountain Jack, and Orange Model. For sale fall boars and gilts sired by a son of Bower's Mammoth Joe. A few herd sows priced to sell. Get in line for spring boars.

WM. H. LIND, City Phone, Alto, Mich.

B. T. P. C. All sold out except some Fall Gilts, Thanking my customers JOHN D. WILEY, Schoolcraft, Mich.

LARGE TYPE P. C. SWINE. One yearling boar, one fall yearling boar, fall pigs, a few more bred sows. R. W. Mills, Saline, Mich.

Poland China Brood Sows Bred for May and June farrow, \$50.00. Maplewood Stock Farm, Allegan, Mich.

FOR SALE A few L. T. P. C. gilts being bred for August and September farrow. A. A. Feldkamp, Manchester, Mich., R. F. D. 2

HAMPSHIRE Spring boar pigs, sired by Steuben's Perfection and Cherokee Jim, 1st prize Ind. State Fair. Other winners at other fairs. Tried sows bred. Satisfaction guaranteed. Will ship C. O. D. Address,

STEUBEN'S HAMPSHIRE FARM R. R. 3, Angola, Ind.

Edgewood Hampshires All bred gilts sold. Now booking orders for gilts bred for fall farrow, and pigs for pig club work only. Depew Head, Edgewood Farm, Marion, Ohio.

Bred Gilts all sold at present and more later. Spring pigs in season. JOHN W. SNYDER, St. Johns, Michigan.

SHEEP.

KIDS

I cannot sell you any more ewes until next fall. To some grown up, I can offer 10 very good young Shropshire ewes that will lamb in April for \$400.00. Their lambs contracted to me should not more than purchase price next fall. Also 10 mighty nice ewe lambs for \$350.00. Come and see them.
S. L. WING, KOPE-KON FARM, Coldwater, Mich.

Idle Wild Stock Farms Shropshire yearling rams from prize winning stock. Make your selection early. Cliff Middleton, Proprietor, Clayton, Mich. R. 3.

250 Reg. After Aug. 1st can supply anything needed. Registered Shropshire ewes and rams of same high quality. O. LEMEN, Dexter, Mich.

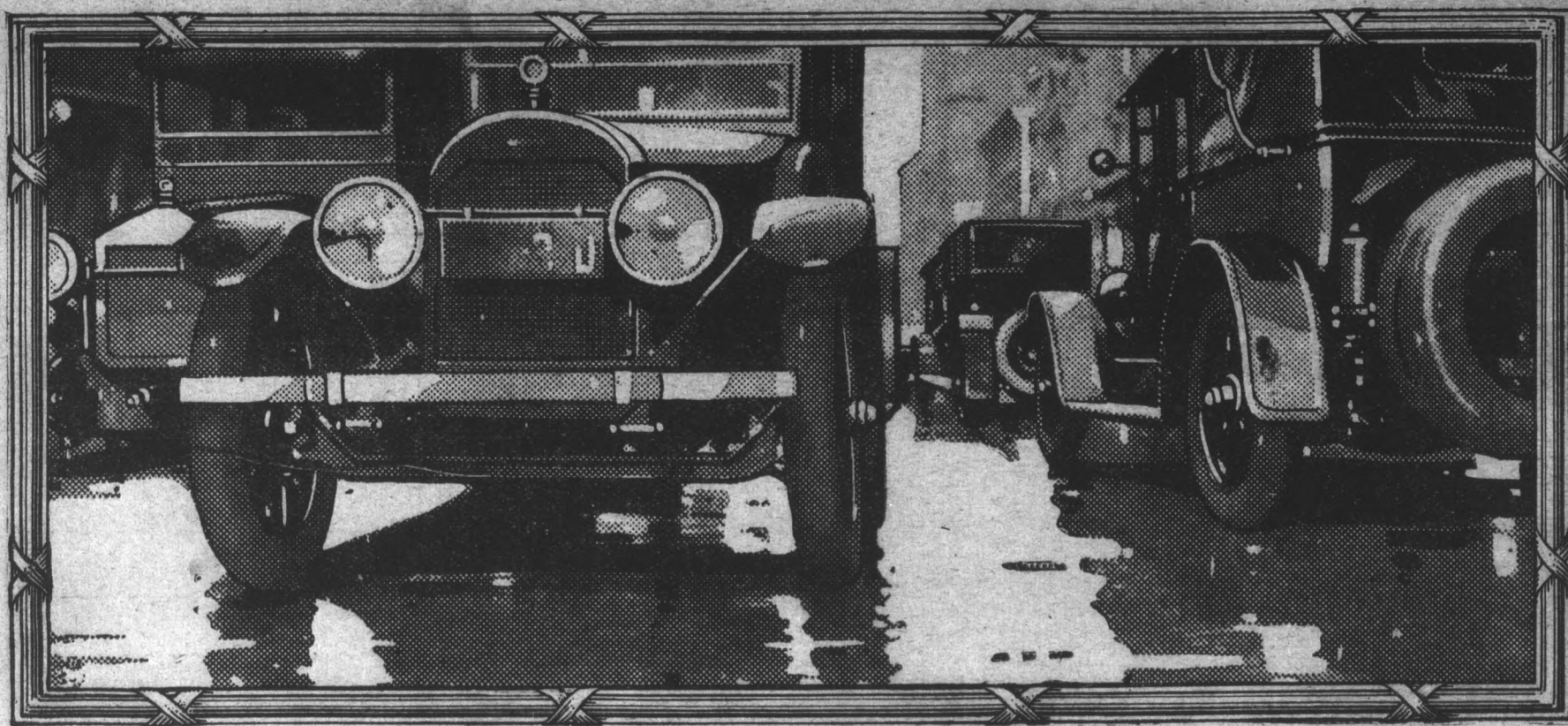
Want a Sheep? Let American Hampshire Sheep Association send you dandy booklet with list of breeders. Write COMFORT A. TYLER, 22 Woodland Ave., Detroit, Mich.

HORSES

For Sale or Trade Registered Percheron Stallions: Brown three year old. Gray yearling. Butler Stock Farms, Portland, Mich.

Percheron Stallions and mares at reasonable prices; inspection invited. F. L. KING & SON, Charlotte, Mich.

You never get more out of your Tire than the Maker put in



STAND on a street corner some day and watch the motor cars go by. Every now and then you will see a motorist with two or three tires strapped on the back of his car, each tire of a different make.

A man afraid of his tires.

* * *

No matter how many precautions a man may take he will never get out of a tire *more* than the maker put into it.

If a tire is built to go a *limited number of miles* there is no reason why it should be expected to go any farther.

When it breaks down before it has gone the limit, there is no reason why an allowance should

The car in the foreground has a wheel out of line.

Few motorists realize that a displacement of only one degree has the same effect on a tire as if it was dragged 92½ feet in every mile.

New tires have been known to be completely stripped of their treads in 100 miles of running under such conditions.

not be made to the buyer.

What intelligent buyers are looking for is *better tires*—not limited-mileage tires or conciliatory allowances.

And they are beginning to look behind tires to the *principles* on which they are built and sold.

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Here is the principle which governs the production and sale of U.S. Tires: Build a tire as good as human skill can build it, and

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Seek out the new kind of tire dealer—the man who believes in quality and square dealing, who is putting the tire business on as sound a basis as any other retail business in his town.

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U.S. Tires are built on a *quality* basis as fast as quality conditions will permit—and *no faster*.

And they are guaranteed free from defects in materials and workmanship for the life of the tire—with *no limitation of mileage*.

United States Tires

United States



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