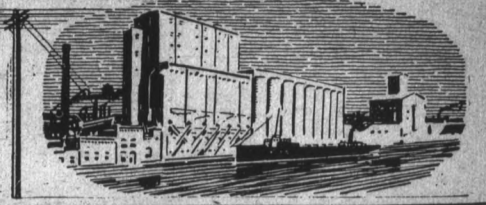


The Michigan BUSINESS FARMER



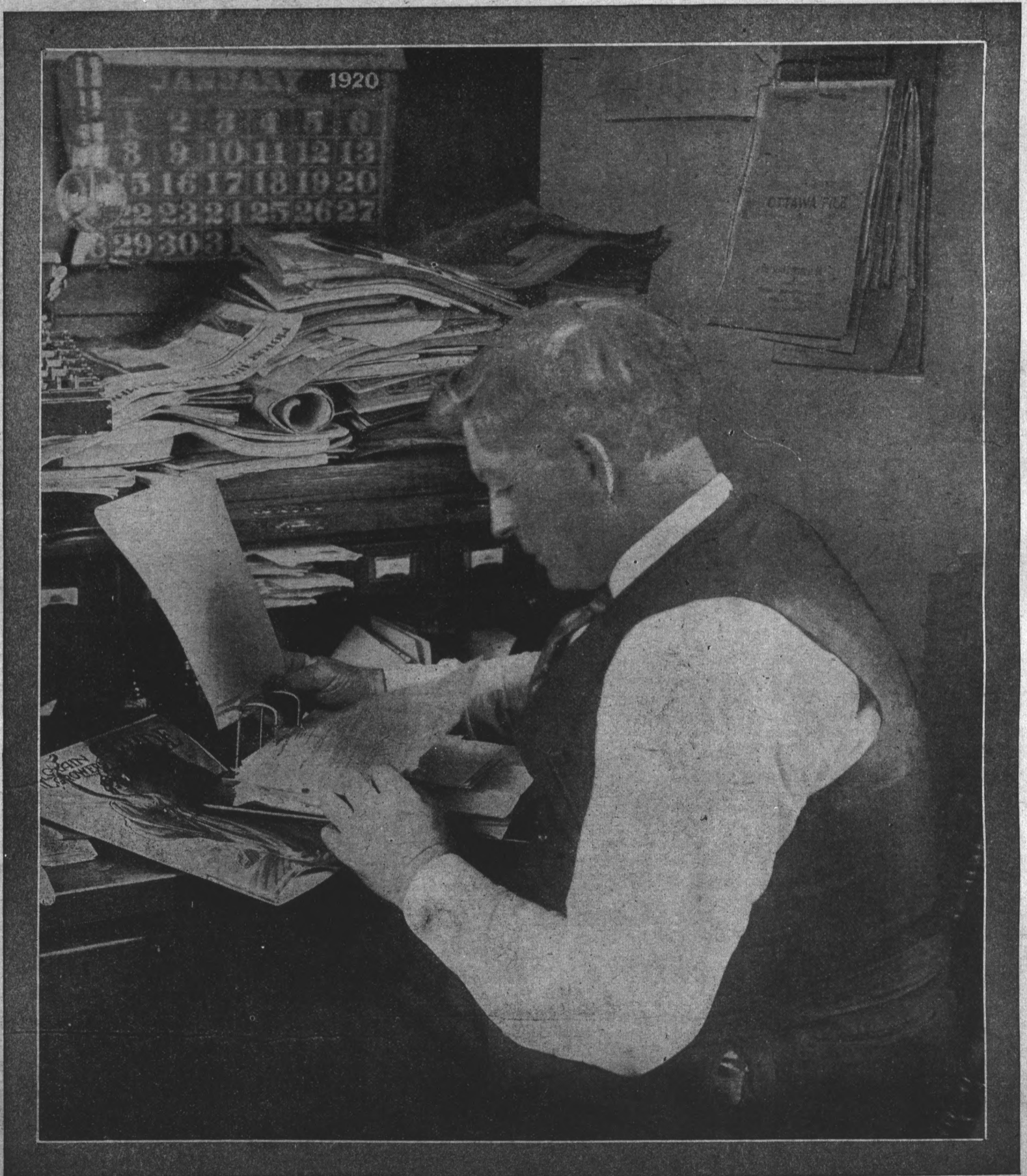
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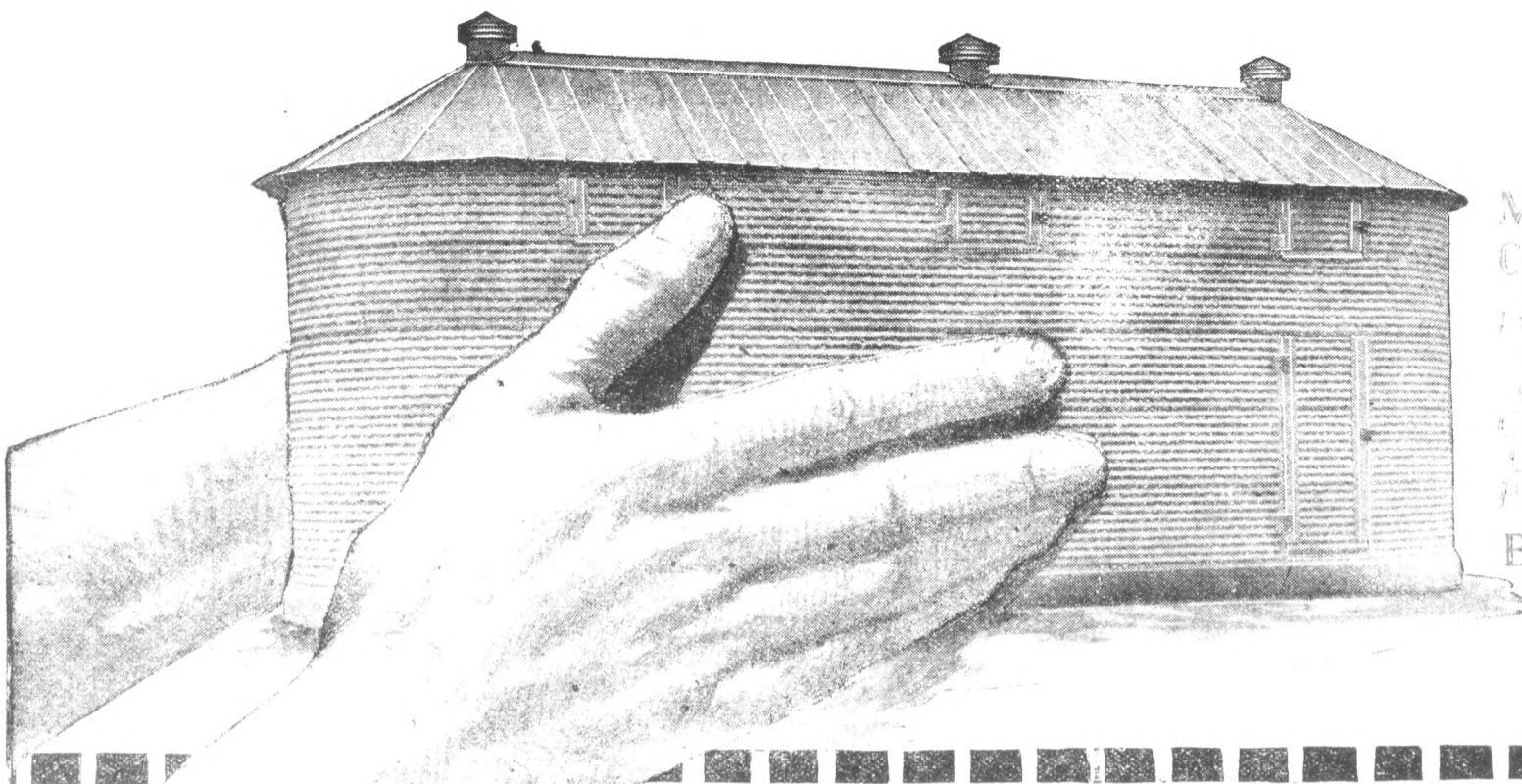
Vol. VII, No. 41.

MT. CLEMENS, SATURDAY, JUNE 19, 1920

\$1 PER YEAR



The Business Farmer in His Office



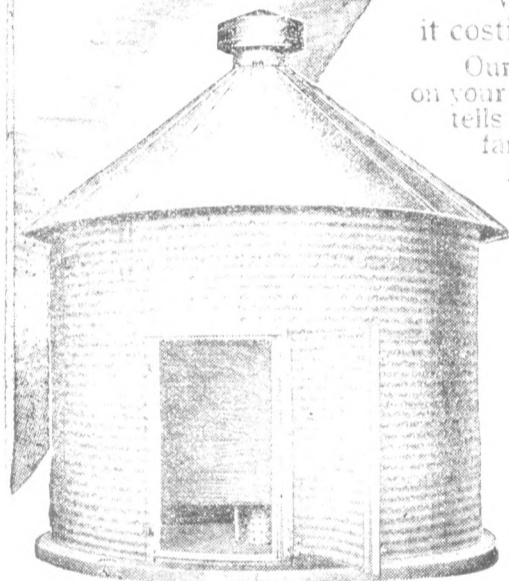
MARTIN
Crib & Bins
promise safe,
clean, dry
storage for
Corn, Grain,
Cloverseed,
Potatoes and
BEANS

Let Us Put This Corn-Crib on Your Farm

We will show you how you can put this modern, steel corn crib on your farm without it costing you a cent.

Our big, new Corn Crib Book explains how these indestructible cribs will save enough corn and grain on your farm to pay for themselves. We want to send every farmer a copy of this interesting book which tells all about Martin "Corn-Saver" Cribs — how they have driven the rats and mice off thousands of farms — how they are saving farmers thousands of dollars every year by stopping their corn and grain losses and giving them increased profits every year.

This book pictures and describes in detail these modern steel cribs and this up-to-date method of storing corn and grain. It gives the experiences of actual owners — farmers who are using Martin Cribs and know what they are talking about. Find out what Peter J. Lux the big "Indiana Seed Corn Grower" says — and read why many other farmers say that these "Corn-Saver" cribs have been the best investment they ever made. This valuable book will be sent FREE and postpaid. It tells how Martin owners obtain greater profits, absolute protection from rats, mice, fire, mould and thieves — and freedom from worry over any possible damage to the crops.



Martin "Corn-Saver" Cribs are Built in Circular and Oblong Styles — All Sizes to Fit Any Farm.

Martin STEEL "CORN-SAVER" Cribs

are substantially constructed of heavy corrugated steel, — built to stand up under severe conditions — no need or expense of repairs — will outlast wood cribs many times — pay for themselves in from one to three seasons through increased profits and stopping all losses. They are absolutely rat, mouse, fire and thief proof. They are built in styles and sizes to fit the needs of any farm — from 100 to 10,000 bushels capacity.

You Can Store Wheat, Oats and Other Grains in Martin Cribs

Because of the patented construction of the Martin Crib, you can store wheat, oats, rye or other small grains in it at harvest time and hold them until Fall for the higher prices, without losing a single bushel. Then you can refill it with corn, and in this way the Martin will yield you two big extra profits from your crops in one season.

In 1914, farmers who bought steel cribs and bins and held their wheat for

higher prices, received double the price obtained by those who sold at harvest time. This year you have the same opportunity. The 1920 wheat crop is short. Prices are almost sure to go "sky-high." The farmer who stores his wheat safely in Martin Cribs or bins will get the extra profits himself instead of allowing the grain speculators to take it. Corn, too, will bring record prices this year and you can't afford to take chances with your crops by storing them in unsafe cribs or bins.

Send for This Big FREE Book and Our Special Offer

We want you to know all about Martin Cribs. That's why we have published this big, finely illustrated Corn Crib Book. We will gladly mail you a copy of this valuable book, FREE, and postpaid. Better write for your copy today and find out all about these crop-saving, money-making Martin Cribs and Bins. Find out how you can put a Martin Crib on your farm without it costing you a cent. It takes only a postage stamp to get this book. Use the coupon at the left. We will send the book by return mail and also our Special Low Price Offer, which we are making now for early orders.

MARTIN STEEL PRODUCTS CO.
2609 Adams Street Mansfield, Ohio

ask-

The Man Who Owns One Here's What They All Say:

The Best Thing I Ever Bought

"The 1917 corn crop was the worst I ever saw, but my Martin Crib dried it out fine and not an ear was wasted. The Martin Crib is the best thing I ever bought."

PETER J. NICKLE, Rushville, Ind.

Martin Paid for Itself

"I would not exchange my Martin Crib for the finest crib of any other type. Considering the price of corn last year, without a doubt I have saved enough to pay for my crib. My advice to those in need of a crib is by all means to invest in a Martin Crib."

ROY B. GROVES, Batavia, Ohio.

Virginia Senator Endorses Martin Crib

"Speaking of farm assets, I surely have it in my Martin Crib. Truly, if I could not get another, \$1000 would not purchase my Martin Crib. I feel like kicking myself for not having bought one in 1907, when I first began farming. It sets my farm off — a building of beauty as well as service." DR. T. S. HERRING, Jefferson, Va. Member of Va. Senate, 16th District.

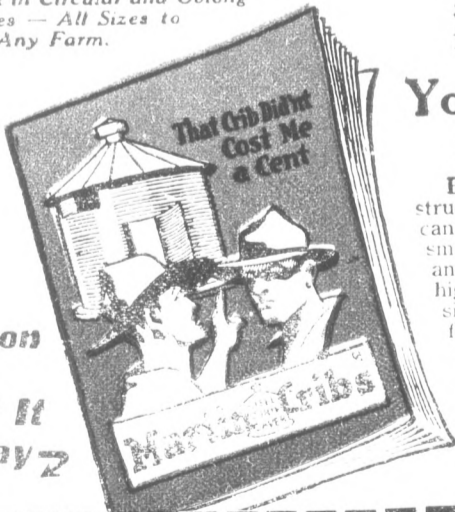
Starved Out the Rats

"The Martin Steel Corn Crib is a perfect preserver of corn. Formerly the rats ate and wasted about one-half my corn. None is lost now. My corn cures and is well preserved. And corn thus cured, unquestionably has a higher feeding value for all live stock."

W. H. CRECRAFT, Liberty, Ind.

Fill Out The Coupon

Mail It Today



FREE BOOK COUPON

MARTIN STEEL PRODUCTS CO.
2609 Adams St., Mansfield, Ohio

Gentlemen: Please send me your big free book on Martin Steel "Corn Saver" Cribs and Bins and your Special Low Price Offer. This does not obligate me in any way.

Name

Town

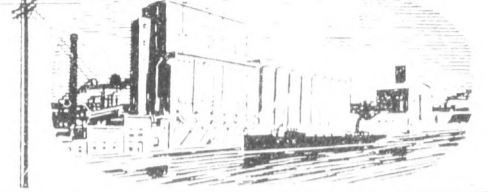
State R. F. D.

I am interested in a corn crib holding about bushels.
I am interested in a grain bin holding about bushels.

The Michigan **BUSINESS FARMER**



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at
Mt. Clemens, Mich.



Vol. VII, No. 41.

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The Business Farmer in His Office

CURRENT AGRICULTURAL NEWS OF THE WORLD

LAND BANKS FORCED TO HOLD UP LOANS

A number of readers who have recently applied for loans through the Federal farm loan system have written to inquire when they may expect to receive their loan. The matter has been referred to the Federal Land Bank of St. Paul, whose Secretary, Mr. H. K. Jennings advises as follows:

"We will not be able to receive new applications for loans until after the decision has been rendered in the suit now pending in the Supreme Court of the United States.

"As you are aware this case has been ordered for reargument which will not take place until sometime next fall, probably in October. Af-

ter the argument the court will take whatever time it deems necessary to consider the case before decision is rendered and the probabilities are that we will not, for these reasons, be able to take any applications for closing this season.

"A few days ago a joint resolution was introduced in congress authorizing the Secretary of the Treasury to purchase \$32,000,000 of farm loan bonds, proceeds of which were to be used by the banks in retiring their obligations for borrowed money and complete whatever pending loans they had on hand. This arrangement gives us \$4,500,000 which will enable us to clean our records entirely of all notes payable and also will clean up all actual com-

mitments on applications which were allowed before March 1st, 1920.

It is very unfortunate for the farming interest that the Federal Land Banks were interfered with at this time. It is a well established fact that the suit was instituted by the Farm Mortgage Bankers' Association of America and all members of the association are contributing liberally for the purpose of putting the system entirely out of business.

"The best information that we can get indicates that the reargument of the case was ordered, not because there was any question about the Federal Land Banks, but on account of the status of the Joint Stock Land Banks."

FARM BUREAU AFTER MORE WAREHOUSE SPACE

The Michigan State Farm Bureau has already outgrown its warehouse facilities which were acquired last April and has just completed arrangements for securing additional space in the city of Lansing. The amount of wool shipped to the Farm Bureau by members has far exceeded anticipations. To date there is more than one quarter of a million pounds in the warehouse, and as much again reported in the hands of assemblers. Total graded to date is 208,280 pounds, and it is graded as follows:

Delaine, 7,568; fine clothing, 6,649; 1-2 blood vombing, 16,019; 1-2 blood clothing, 1,146; 3-8 blood combing, 63,737; 3-8 blood clothing, 649; 1-2 blood combing, 16,019; 1-2 1-4 blood clothing, 50,339; 1-4 blood low, 6,103; braid, 2,216; discounts, 19,961; tag, 1,680; buck, 262. There are 145 wool assembling points now at work in the state. These are scattered over 47 different counties. Five carloads not included in the above total, are reported ready for shipment south from the upper peninsula.

The Farm Bureau is investigating the coal situation with the intention of acting as purchasing agent for local units which desire such assistance. As the Bureau points out the problem is not one of price but of getting the coal at all. Fears are expressed that unless the farmers make arrangements through some organized source they may have difficulty in getting their winter supply.

The completion of the arrangements for the organization of a State Co-operative Elevator Exchange will be made June 29th and 30th at East Lansing when delegates of twenty co-operative elevator associations will be called together by the State Farm Bureau.

UNIFORM WOOL GRADES SOUGHT

Tentative types representing various grades of wool have been prepared by the Bureau of Markets, United States Department of Agriculture, in connection with its investigational work looking toward the ultimate establishment of uniform wool standards. The types decided upon by the government experts have been prepared after careful examination of thousands of samples that represent the opinion of the trade generally as to what should comprise wool standards, and which now form the basis of commercial transactions.

It is proposed to demonstrate these types to wool growers for the purpose of determining the practicability of their application upon a commercial basis. These demonstrations will be conducted by wool experts sent out from Washington to assist the Bureau of Markets field agents.

There are now no fixed wool grades in universal application, with the result that the purchase of the producer's product is based upon arbitrary standards fixed by individual buyers. It is therefore obvious that to place the business upon a uniform basis would be decidedly advantageous to all concerned.

For several years the Bureau of Markets has been conducting investigations and making a study of wool samples collected from all states and foreign countries with regard to the possibility of establishing uniform wool standards, and the work has now reached the point where the wool experts in charge of it feel warranted in submitting their findings to wool growers for consideration. Of course, it must be understood that the work is still at an investigational stage. Those interested in the demonstrations may secure full information by writing the Bureau of Markets, United States Department of Agriculture, Washington, D. C.

Hudson Fineness Equals Its Matchless Performance

Aside From the Supremacy of the Exclusive Super-Six Motor, Its Beauty Gives Distinction in Any Field of Fine Cars

Hudson has unremittingly kept the issue of performance to the fore. Not simply because its mastery is indisputable.

Rather because this question is vital above all. It must always be so. It must always be the measure of any car's title to worth.

Hence undue emphasis has never been placed on Hudson's four years' leadership in fine car sales. Largest sales are not infallibly proof of greatest merit. Hudson has no need to offer them as such.

Yet their importance cannot be overlooked. Here is the massed opinion of far the greatest number of owners of any fine car in the world. Some are driving the earliest Super-Sixes built—now more than four years old. Some acquired Hudsons but recently. But how unanimously they hold no car can rival it.

What 90,000 Owners Know First Hand

Those who have had their Hudsons longest are perhaps its most emphatic champions. They know it best. They have seen it pitted with triumph against

every situation that can confront an automobile. Today their Super-Sixes are giving service, such as is literally beyond the performance capacity of many new cars that cost more.

Certainly no fine car is so highly regarded by such a large following.

See What It Has Done

Were its position less deserved could Hudson hold the loyalty of all these? Were its supremacy less decisive, surely five years must have discovered the rightful successor.

But time only brings fresh evidence of Hudson leadership.

In speed—in power—in acceleration—in hill-climbing, it has never been matched.

The most abusive tests to which a car was ever subjected have failed to find its endurance limit. Could other types adopt it, they might share Hudson's unmatched ability. But Hudson controls it. By right of invention Hudson alone can use it.

It will not be possible to supply all who want Hudsons. So even though you may not want your car for several months, now is not too early to place your order.

Hudson Motor Car Company, Detroit, Michigan

Michigan Crop Outlook Reported Excellent

Peninsular State Will Have Best Crops of Grain, Vegetables and Fruit in Years
Judging From Progress to Date

THE PESSIMIST will find no comfort in the most recent reports from the agricultural states of the condition of crops. Almost without exception the condition of grains, fruits and vegetables is reported as good to excellent. This is particularly true of the northern states where the majority of winter food products are raised. The season has been from two to five weeks late all over the United States, but while this was discouraging during the early spring, it can now be seen that the late season was a God-send to nearly all crops and fruits.

The acreage of all crops is slightly less this year than last, nearly every state reporting a decrease. All states report also lack of labor which will handicap the cultivating and harvesting of crops. Wages varying from \$70 to \$105 per month and board and rooms are reported, while the western grain growers have agreed upon a minimum wage scale for harvest hands of \$6 per day, and they are hard to get at that price. The Hessian fly has done considerable injury in some states, and army worms are reported at work in Missouri and adjoining states. Montana is combating an early crop of grasshoppers but does not expect serious losses from them. A few southern states report too much moisture and a few northern ones too little moisture. But these extremes are always present. So far as the general crop situation is concerned it was never better.

Corn Progress Fair

Corn is practically all in the ground. Michigan reports the early planted varieties as growing rapidly and in good healthy condition. Iowa reports growth slow, but Ohio, Indiana and Illinois claim excellent germination and rapid growth. The total acreage planted to corn is not yet known. Only one or two states show an increase; the majority a decrease. It is expected that acreage and consequent yield will show a slight increase over last year. This is to be expected because of the strength and high prices ruling in the corn market since the first of the year.

\$3 Per Bushel for New Wheat Crop

A few states report excellent progress of winter wheat, but the majority are not so optimistic. Indiana's report to the Bureau of Crop Estimates, under date of June 3, says: Reports of Hessian fly coming in. Some fields badly infested. Joint worm is also prevalent. California: Condition very spotted and decline indicated. Missouri: Some damage from excessive rainfall. Condition in general spotted. More encouraging reports are as follows: Kansas: Heading in practically all portions of the state. The volunteer acreage in the west still looks promising. Maryland: Reported grain heading low. Too cool for rapid growth, but grain dealers offer \$3 per bushel for new crop. Michigan: Condition improves northward and crop is good from Lansing northward in most sections. Some poor fields in southern counties. Nebraska: Condition generally splendid. Abandonment probably considerably smaller than reported.

Oats

Delaware: Outlook bright for a good crop. Florida: Shows good yields but rains interfere with harvesting. Indiana: Fields look good. Conditions favorable. Kansas: Strong and healthy but heading short. Maryland: Outlook good for a fair crop. Michigan: Germinated quickly, stand very good. Rain needed. Minnesota: Condition excellent. Missouri: Oats improving but slightly below normal. Acreage probably less

THE MAGAZINES of the country have been full of alarming reports over the alleged abandonment of farms in Michigan and the general decrease in the acreage planted to crops. But we have seen nothing in these magazines about the excellent progress which all crops are making in this state. Nor have we seen any mention made of this fact in the crop reports published by the U. S. Bureau of Crop Estimates. The condition of Michigan crops and fruits is such as to warrant widespread publicity by all interested in the agricultural situation in general and Michigan's reputation as an agricultural state in particular. Michigan has the best fruit prospects right now of any state in the union, bar none, and she will make no concession to any other state in the condition of winter wheat, oats, rye and other grains. Regardless of what the pessimists have to say about Michigan agriculture we know and everyone else versed in the situation knows that Michigan will hold firmly to her title as one of the nation's richest agricultural states and will take off her hat to no other state when the sum total of her crops is computed next fall.—Editor.

than expectations. Nebraska: Improving and condition quite favorable. New Jersey: Seeding completed. Stand and condition good although late. North Dakota: Planting 80 per cent completed. Growth starting favorably. Ohio: Making good growth. Condition fair to good. Oklahoma: Improving now but stands are thin due to heavy rains and freezes shortly after sowing. Pennsylvania: Seeding completed. A good stand and excellent condition reported in southern counties.

Rye

Delaware: Condition steadily improving and a good yield is expected. Indiana: Much rye is headed out and generally in good condition. Some poorer fields are being "hogged down." Maryland: Outlook indicates fair to good yield. Michigan: Crop heading; straw shorter than usual. Stand fair. Minnesota: Condition very good. A little abandonment reported. Montana: Condition excellent. Making good growth. New Jersey: Headed out. Condition somewhat better than wheat but crop below average. North Dakota: Some improvement shown but state condition below average. Ohio: Heading out rapidly. Condition good. Pennsylvania: Heading in southern counties. Condition poor to good. South Carolina: Condition good to excellent. Wisconsin: Now over 20 inches high and well headed out in southern and eastern districts. Wyoming: Condition extra good.

Potato Prospects Poor

Colorado: Planting progressing rapidly. Acreage limited by high price of seed. Prevailing price being from 8 to 12 cents a pound. Connecticut and all other New England

States: Planting about finished. Last half of May excellent for planting and growth in Aroostook County, Maine. Delaware: Condition fair to good but many fields "spotted" due to seed rotting. It is expected that a fair acreage will be planted to late potatoes. Indiana: High price of seed has materially reduced acreage. Kansas: Prospects particularly flattering in the Kaw Valley but stand reported thin in the Arkansas River section due to rotting of the seed. Louisiana: Early Irish potatoes now moving to market. Sweet potatoes doing well. Maryland: General condition fair to good. Prospects are good for a large crop of late potatoes. Michigan: Dealers report old stock exhausted except for an occasional car. Acreage a few per cent below last year due to labor shortage, abandonment of farms, the high cost of seed, etc. Minnesota: Planting progressing nicely. Slight increase in acreage indicated. Montana: High prices and limited supply will reduce the commercial acreage. Nebraska: Condition generally good. Reduced acreage expected. New Jersey: The crop is practically all in and is up and being cultivated in the central section. North Carolina: Irish potatoes promise very good yields. North Dakota: Planting becoming general. Increased acreage unlikely. Ohio: Acreage probably reduced. Early planted crop in. Condition good. Pennsylvania: Planting in progress in all sections. Seed scarce and high priced. Early varieties being cultivated. Wisconsin: Early potatoes showing in fields. Late being planted under favorable conditions.

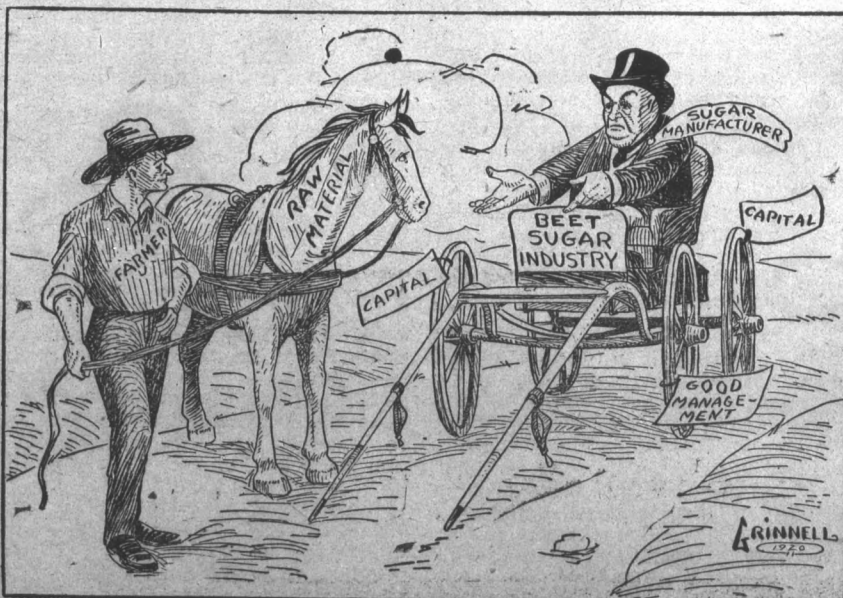
Hay Conditions Improve

Colorado: From ten days to two

weeks late but progressing rapidly. Connecticut and all other New England States: Coming on excellently. Indiana: General condition excellent. Clover heading in southern counties and cutting will commence in about ten days. Kansas: Hay and pastures improving. First cutting of alfalfa in progress all over south and east; crop only medium. Maryland: Too cool but outlook indicates good crop. Michigan: Prospects somewhat improved though the growth is backward. Minnesota: Making rapid growth. Alfalfa generally in splendid condition. Considerable sweet clover seeded in northern section. Missouri: Conditions promise fine crop on increased acreage. Alfalfa is being cut for first time. Clover conditions favorable. Montana: Supply very scarce and is not sufficient for work stock. No. 1 timothy is selling from \$45 to \$60. Outlook for hay crop is good. Considerable acreage of millet, oats and other crops being sown for hay. Considerable alfalfa has been winter-killed especially in Custer, Richland and Broadwater counties. Some of this acreage has been reseeded to alfalfa and the remainder to millet, corn and other crops. Nebraska: A bumper first crop of alfalfa assured.

Fruit in General

Arkansas: Present outlook is for 90 per cent of the apple crop of last year. Strawberry movement in White County will end this week. Prices from \$2.50 to \$3 a crate below those prevailing the first week due to freight congestion. California: Slight decline in condition of apricots. Car shortage for shipment of deciduous fruits more pronounced. Sugar situation and can shortage also causing apprehension among canners. Colorado: All fruit from ten days to two weeks late. Peaches greatly damaged except around Palisade and Mesa County. Connecticut and all other New England States: Apples nearly in full blossom in southern New England. Indiana: All fruit crops in fine condition. Iowa Fruit prospects continue to be good. Kansas: Apple crop apparently good in the Missouri River section and most of the Arkansas River Valley. Kaw River orchards from Kansas City to Manhattan show a very light crop. Cherries show from a light crop to nothing at all. Berry crop is good and strawberry harvest is commencing. Louisiana: Peach and pear outlook is very unsatisfactory. Maryland: Late apple crop promising. Peach trees show leaf curl but fair crop is expected. Keiffer pears indicate good crop in some sections. Blackberries and raspberries promise heavy crop. Early strawberries but slightly injured by frost, late crop promising. Michigan: Present prospects for practically a full crop of all kinds. Montana: Outlook for apples is good in Flathead, Missoula and Ravalli counties. Sweet cherries and pears in Ravalli County were damaged by frost. New Jersey: Apples in bloom in northern counties; a good set is reported from the southern and central districts. Brown rot continues in the peach crop. Ohio: Prospects generally good, although a heavy drop reported from some localities. Pennsylvania: Apples, peaches and pears have set well in southern counties and are blooming in northern. No damage reported from May frosts. Washington: Some winter injury to apples reported in Yakima and Spokane district. Heavier injury in Walla Walla. In Wenatchee prospects same as in 1919.



How Can he Go Without the Horse?

How Farmers May Relieve Sugar Shortage

Sorghum and Sugar Beets Provide Source of Syrups and Crude Sugar for Cooking Purposes

FARM FAMILIES are suffering from the acute shortage and high price of sugar. They are wondering where they are going to get sugar for their canning this summer and fall, and how much they will have to pay for it if it is available at all. These questions the BUSINESS FARMER has sought to find an answer to with but little success. Although Michigan will produce a good many million pounds of sugar this year it is not likely that the people of the state, except for the farmers who grow the beets and those who have stock in the sugar factories, will receive any more benefit from this supply than they ever have.

The average individual is likely to get the idea that there is some way in which the individual farmer may extract and refine sugar from beets, sorghum, etc., but we are assured by the United States Department of Agriculture that this cannot be done except at a prohibitive cost. One of the recent inquiries received along this line is as follows:

"I would like to know if there is any way possible that a farmer could raise his own sugar beets and do his own refining. If so will you please inform me. Enclosed you will find \$1 for another year's subscription to the M. B. F. We appreciate your paper very much."—C. Y., Mason Co.

How to Extract Sugar

This inquiry being referred to the Department of Agriculture brought forth some interesting information, the principal part of which was that farmers could produce syrups from beets and sorghum which would take the place of refined sugar for certain cooking and table purposes. We were advised that the extracting of the crude sugar was a tedious, impractical task, and that moreover, the syrups would serve equally as well as the sugar. The letter containing this information is reproduced below. It is somewhat technical as most contributions from governmental departments are apt to be, but its conclusions are perfectly understandable:

"It is, of course, out of the question for the individual to attempt to produce refined or white sugar, tho it is possible to produce certain sugars by direct evaporation and crystallization. In the manufacture of such syrups, they are ordinarily evaporated to a density of seventy, to, say, seventy-three per cent solids. Where the character of the syrup is favorable, sugar (sucrose) will frequently crystallize out from such syrups after they have been stored for some length of time. Under the same favorable conditions, a syrup that has been evaporated to a greater density, say, eighty to eighty-five per cent solids, will crystallize more readily and will afford a larger quantity of sugar crystals. However, it does not always follow that a syrup will crystallize even when it has been evaporated to a density of eighty-five per cent solids: In the case of sorghum syrup, crystallization is more liable to occur in the product made from fully ripe sorghum than in that made from under or over-ripe sorghum, as such cane always contains greater or less amounts of the sugar known as invert sugar which has a tendency to retard the crystallization of sucrose, and, when present in sufficient amount, to prevent it altogether. This sugar also occurs in ripe sorghum, though usually in comparatively small amounts. Solids other than sugars in syrup also retard crystallization of sucrose. Syrup made from sugar beets (or from sugar cane) will usually contain a relatively small proportion of invert sugar and for this reason the average beet (or cane) syrup is more liable to crystallize than the average sorghum syrup.

"The following methods are suggested in case it is desired to attempt to produce sugar from these syrups: "Crystallized Sugar.—The evaporation of the syrup is continued until a density of say eighty-five per cent solids has been reached, and the syrup stored, preferably in a cold place, until it is considered that a satisfactory yield of sugar has been obtained; this will require several weeks to several months. Crystallization may be hastened by stirring in about one ounce of granulated sugar as soon as the syrup has cooled to about atmospheric temperature. The stored syrup should be stirred frequently in same manner in order to avoid the formation of a solid, concrete-like mass of sugar. The crystals may be freed from syrup by placing the mass in a barrel or other container, the bottom of which is provided with many small holes or fine meshed screen and allowing the syrup to drain out. The excess syrup remaining in the mass may then be removed by carefully adding a very small quantity of water on top of the mass and allowing it to drain thru. After thorough draining, the sugar should be dried.

"Concrete.—The evaporation is continued until test of a small quantity shows that it will form a solid mass upon cooling. It is then poured into containers, preferably comparatively small ones, and allowed to

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Meat and Livestock Situation During May '20

(This Statement Issued by Institute of American Meat Packers)

WHOLESALE prices of beef, continuing their decline during May, decreased from three to five cents a pound and at the end of the month were not far from the level prevailing when the United States entered the war, three years ago. Livestock producers are losing money on their cattle and many packers report losses on beef.

At the beginning of May the prospect indicated that the conditions arising from the railroad strike would be restored to normal, with a fair trade and satisfactory prices. But accumulations occurring during the strike exerted a depressing influence on prices practically throughout May. Other depressing factors were importations of New Zealand lamb shipped here by the British government, the existence in "second hands" of beef bought from the government and an oversupply of dressed beef in Eastern markets.

These circumstances, coupled with declining values for hides and fats, were reflected in lower prices for cattle. Receipts were fairly large and the cattle were unusually heavy, with the result that the supply of beef has been quite large relative to demand. Wholesale beef prices furnish an interesting contrast to the price trend in many other commodities.

Popular demand for the choice cuts of beef still results in an unusually large differential between the price of meat from fore-quarters (less expensive) and meat from the hindquarters. This "spread" has narrowed slightly but nevertheless remains abnormal.

Pork

An improvement in the foreign exchange situation at many continental points resulted in more export trade to the continent than has been the case for several months. Inquiries ran more to meats than to lard.

There were no very large orders, and the improvement is slight; but the outlook for export trade to the continent is certainly better. For example, prices in francs which seem ridiculous to the foreign buyer when francs are exchangeable on the basis of seventeen and one-half francs to

the dollar, seem more nearly reasonable when francs are quoted, say, at twelve and one-half.

Opinions concerning the prospect of exports to the United Kingdom are not wholly in agreement. It is asserted in some quarters that the British will be out of the market throughout the summer, except for occasional odd lots. Those holding this view believe that British stocks will be adequate until fall. Others assert that British stocks are sufficient for only a short period, but that replenishment will be made from stocks already bought and stored here, and that the British will contract for no important deliveries before September.

The British were practically out of the trade during May, with the consequence that the premium on light hogs—the kind sought by the British—was gradually wiped out.

The present high price of corn may result in free marketing of hogs by the farmers. Present hog prices, some farmers feel, do not justify the payment of the high prices demanded for corn. Furthermore, the high price of labor, corn and other feed also has resulted in a noticeable reduction in the quality of hogs, many farmers being unable to feed corn as freely as normally. A decline in quality is to be expected at this time of year, but the loss in grade is greater than is usually the case. The credit situation may have played a part in the decline of quality.

Mutton and Lamb

Frozen New Zealand lambs shipped here by the British government have depressed both beef and lamb prices. Since the domestic trade is not accustomed to handling frozen lambs the imported lambs have sold at lower values. This reacted sharply on the price of California lambs. The first California spring lambs of this season's crop sold around \$19.50 per hundredweight, and speedily increased in price until within a few days they were selling as high as \$20.75. Then, on account of importations of the New Zealand product, they declined until they have been selling as low as \$17 to \$17.50 wholesale.

(Editor's note: The above statements make no reference to the enormous quantities of New Zealand lambs imported by Armour & Co.)

the final sugar is very liable to be a more or less sticky mass. The crystallized product is very liable to consist of large, irregular sized, hard, crystals while the concrete is liable to be a dense, tough, mass; either of these products will dissolve ordinarily at a slower rate than will the sugar usually offered for sale. It is also considered doubtful whether such sugars will be found useful for any purposes than those in which the syrups themselves would be as satisfactory. Further, it is suggested that the time and labor involved will result in the net cost of the sugar being greater than that at which sugar may ordinarily be obtained.

"It is trusted that this information will be of assistance to you. If you desire further information, we will be glad to furnish you any that we may have available.—Sidney F. Sherwood, Assistant Chemist.

Plants That Yield Syrups

The Michigan Agricultural College has already issued a suggestion that farmers plant sorghum this year as a source of syrup, but the Department of Agriculture gives us a little more information along that line, as follows:

"As a simple, practical means of helping relieve the acute sugar and syrup shortage, the United States Department of Agriculture recommends the increased production of sorghum syrup which, it is pointed out, requires neither unusual skill nor expensive equipment to make. Furthermore, the methods of growing sorghum are similar to those of corn and in that respect involve little that is new to many farmers. Syrup manufacture is so simple that it can be carried on with profit by individuals utilizing small sized outfits of a daily capacity of 100 gallons or less. Where operations on a larger scale are feasible, community plants having a daily capacity of several hundred gallons are suggested by the department.

"Sorghum syrup is palatable and pleasant flavored, and is an excellent table syrup. It can also be used as a substitute for other syrups or for sugar in making certain breads, cakes, etc., and as a substitute for a part of the sugar used in making preserves and the like. The cost of producing it at home is relatively low and usually an individual manufacturing it can readily sell any excess over his home needs to good advantage. Sorghum syrup produced during the 1919 season brought the producers from 90 cents to \$1.50 a gallon, depending on the quality, marketing conditions, etc. Thus far the supply has fallen far short of the market demand.

Sweet Sorghum a Productive Source of Syrup

"The sorghum plant is similar in appearance to corn, growing about the same height and possessing about the same color. It may be grown throughout the United States in practically all regions where corn is grown, though parts of the extreme northern tier of states have a growing season usually too short for sweet sorghum to mature. In growing sorghum for syrup care should be taken to secure seeds of a sweet sorghum variety, and for planting in the north, one which matures quickly.

Sweet sorghum is grown from seed and is planted in rows about 3 1-2 feet apart. The plants should stand from four to six inches apart in the row. Approximately from five to eight pounds of seed is needed to the acre. Ordinarily planting time falls soon after corn planting, when the soil has become thoroughly warm. The stalks of the plants are ready for syrup making when the seeds which form heads at the top of the stalk are in the late dough stage, that is, just before they become dry and hard.

The machinery necessary for making syrup consists of a mill for extracting the juice from the cane and an evaporator for reducing the juice to syrup. The mill contains three iron rollers between which the sor-

(Continued on page 19)

Napoleon School Director Answers Critics of the Consolidated School

By L. G. PALMER Director Napoleon Consolidated School

Kent County Agitates Consolidated School System

IN THE month of June, 1919, all the school districts, whose school house was situated in the township, voted upon the proposition to unite and form a consolidated rural agricultural school; with the result that one district rejected the proposition, two others carried by only one majority each, while the other three voted in favor of consolidation almost unanimously. Only July 14, 1919 the district was formally organized and a district board elected. As it was necessary to provide more room for pupils, a bond issue was asked of the district, which upon first election was defeated, but at a second election the district authorized an issue of \$27,500 in bonds which were accordingly sold by the district board. Plans for a new building were drawn, but upon the advice of the architect and the department at Lansing, bids were not asked for until March 6, 1920 and then the bids being over \$55,000 we were unable to let contract and called and advisory meeting of the district.

About this time opposition began to develop and take form toward a vote to disband the district and return to the condition as we were before the vote for consolidation.

All concede that a better school can be held under consolidation than by the separate districts but the increased cost and the transportation of the pupils seem to be the greatest objections. It is admitted by all that the entire cost of the school has been more than previous years, so has the cost in all lines, so without consoli-

"THERE is now a drive on in this vicinity to consolidate the schools. Of course only the bright side is given by those who favor it, including the school commissioner of Kent county and State Superintendent of Public Instruction. Now, I see by the letter of G. S., in the county crop report from Jackson County, that the people of Napoleon and other townships of Jackson county are not finding it so nice after once trying it out. As this question is being agitated all over Michigan and we here in southern Kent county are quite interested on one side or the other, couldn't you get us a little data on the question from places like Napoleon where it has been tried. I really think it is your duty to do this for your subscribers."—A. A. W., Byron Center, Mich.

The above letter moved us to make an investigation of the consolidated school at Napoleon, with the following results: We found that only one district out of the six had voted against the proposition; that the people of this district lived so far away from the school that it was necessary to get their children ready at 6:30 in the morning; and that this was the district which was making the most determined fight for the return of the old system. We found that the board was using an old school building of about one-half the necessary capacity pending the erection of a modern building; that the school was over-crowded, lacked modern equipment, and suffered from other handicaps which would be overcome when the new school building was erected. Our representative talked with Mr. L. G. Palmer, director of the consolidated school, who is very much in favor of the new system, but admitted that they were having their troubles. In the accompanying article Mr. Palmer sets forth his reasons why he believes the taxpayers of the consolidated districts should not return to the old system.—Editor.

tion the cost would have been greater. So the question arises, will not the better school be worth the increased cost? In the district which rejected consolidation, their taxes were only three dollars less per thousand than the consolidated district.

In looking up statistics as to the cost of transportation we find that

Napoleon pays the highest price of any district in the state for this purpose being \$9, \$8, \$6.50 and \$5 per day respectively. It being a new venture, nearly all were afraid to take the job, but present indications are that this cost next year will be much lower. The routes were long and a mistake was made of commencing school at 8.30 a. m. instead

of 9 a. m., so that some pupils had to leave home at 6:30 a. m. which made it very hard for the small pupils. Drivers have been changed on one route, which has caused some trouble, but in general parents have been generally satisfied with the transportation and it has had the effect of more steady attendance and less tardiness.

One part of the district, and that part voted almost solidly against consolidation and bonds is 6 to 7 miles from the school house, their interest lie nearer another town and they wish to get away from this school. Could this be accomplished more harmony might be secured in the district.

Another adverse argument is the location of the school, it not being in the center of the district. This site was selected because the graded school had a good building to accommodate one half the pupils so very few would change the site but think the district should be enlarged by taking in territory of other townships to the south and east where the districts are nearer than one already in. As there was not sufficient room for all pupils without crowding this is used as an objection. Some object to the teaching of agriculture, manual training and domestic science, but in time these will more than prove their value and finally some object to the school on account of the teachers, saying some of them should not be allowed to teach anywhere, but this very often occurs in the district school and also in our best city schools.

Beet Growers' Ass'n Starts Campaign for 1921 Conference and Contract

ANY NOTION that the beet growers of Michigan have lost heart because of their failure to secure a fair deal from the manufacturers this year, will be dispelled when it is learned that plans have already been laid for a more vigorous campaign the coming season. This was disclosed at a meeting of the board of directors of the Association which was held at Owosso on June 3rd.

While it is generally felt that the responsibility for losing the fight this year rests upon the shoulders of those farmers who lost their nerve at the last minute and took contracts it is not desired that there should be any bitterness over the matter, which would only cause hard feelings between neighbors and delay victory for many years to come. The Association feels that such farmers who are growing beets are making a mistake and injuring the cause of organization, but the loyal members are willing to forgive and to forget and accept these into the ranks for the next campaign, believing that with

the foundation already laid, and with a better understanding of what their rights are in the matter, that the farmers will be one hundred per cent loyal another year. An intensive membership campaign will be put on at once, and no stone will be left unturned to enlist every sugar beet grower in Michigan. A little investigation will disclose to every grower of beets that it will be to his financial advantage to align himself with the Association and never again to grow beets except under a contract approved by the Association.

Nine out of the ten directors of the Association were present at the Owosso meeting, in addition to delegates invited from the largest local in each county. These directors made the following report upon the percentage of members remaining loyal to their vows not to grow beets:

Shiawassee 75
Genesee 75
Clinton 80
Gratiot 75

Isabella 70
Ingham 75
Midland 85
Saginaw 95
Bay 90
Tuscola 75
Huron 75
Sanilac 80

Directors reported that companies had around 50 per cent of a normal acreage in all counties except Saginaw and Bay where practically no beets will be raised this year. Many beets are being cultivated up and planted to other crops every day.

According to reports from directors and men from the different counties the damage done as reported in the Detroit papers is just a frame-up. Only one shack has been burned in Saginaw county and the captain of the state police stated himself that in his opinion the man that lived there burned it himself. It is claimed some farmers are dragging their own beets up and reporting it done by night raiders so that they

will not have to pay for seed. No houses have been destroyed by dynamite, a couple of window lights were broken in one shack and it was reported that it was blown up (false) the sheriff of Saginaw county found a picture of the Kaiser on the wall and requested that that be removed as perhaps that was why the windows were broken.

The Farm Bureau requested that we turn the fight over to them and they would build sugar factories (we wish they would) but our directors were of the opinion that the farmers would not want to burden themselves by investing 30 to 50 million dollars in duplicate plants so decided to stay to the mat and commence at once and put on the campaign for 1921. The western associations associating. A committee of three was appointed to confer with a committee of the Farm Bureau to look up the factory building proposition and report. The manager was instructed to establish offices at Durand and buy equipment suitable.

Farm Bureau Assumes Charge of Campaign Against Grasshopper Pest

ACCORDING to J. P. Powers, assistant secretary of the Michigan State Farm Bureau, the grasshopper pest which has been unusually active in Northern Michigan for a number of seasons past, are already at work in some counties and have wrought considerable damage with more to follow unless immediate and vigorous steps are taken to combat the menace.

"The insects killing seedlings and young growths already have ruined crops of hundreds of acres," says Mr. Powers. "In Leelanau, Benzie, Kalkaska, Wexford, Mason and Grand Traverse counties, scores of farmers are quitting their farms or contemplating doing so. As it is comparatively early in the season a strong fight against them will save hundreds of acres from ruination, and with this idea in mind, the Farm Bureau is arranging to take the leadership in the battle. One carload of poison, 30,000 pounds, was shipped today to Benzie county, and other counties will be assisted as soon as they are in position to co-operate.

"The particular difficulty in fighting these insects is, that the sandy

cut-over lands of that section of the state are particularly appropriate for the breeding of them. Last year there were 13 county boards of supervisors who appropriated money to fight these insects. I understand that these appropriations were re-

duced this year and combatting efforts in 1918 and 1919 curbed the scourge extensively. It was very bad in 1917.

"Efforts will be made at the next session of the legislature to secure enactment of a measure providing

for grasshopper control with adequate appropriations for the efforts. This measure is to be somewhat similar to the noxious weed law we now have in the state.

"Arrangements were made last week to provide for financial assistance to the Michigan Live Stock Shippers Exchange, which is engaged in the perfecting of community live stock shipping associations over the state. Mr. C. E. Compson, of Lansing, is manager of this exchange, which now has about 70 of the 200 associations in the state co-operating with it.

"Arrangements were made also last week for the leasing of another large three-story warehouse in Lansing, owned by the Bird estate and opposite the Michigan Central station, for use in pooling wool. This building will accommodate one million pounds and its acquisition was forced by the fact that receipts of wool are so large that the present big buildings at 221 N. Cedar street is proving inadequate. This building is practically filled now. The lease on the Bird warehouse carries with it an option to buy, which will probably follow."

Acreage Condition and Estimated Yield of Important U. S. Crops

CROP	ACRES, 1920		CONDITION			
	Per Cent of 1919	Acres	June 1 1920	June 1 1919	June 1 10 yrs. average	May 1 1920
Winter wheat	68.5	34,165,000	78.2	94.9	82.0	
Spring wheat	83.5	19,487,000	91.2	91.2	93.3	79.1
All wheat	73.3	53,652,000	81.7	93.8	86.1	
Oats	96.8	41,032,000	87.8	93.2	89.9	
Barley	100.2	7,437,000	87.6	91.7	90.6	
Rye	77.4	5,470,000	84.4	93.5	89.2	85.1
Hay, all	99.6	71,752,000	88.9	94.1	87.9	89.4
Pastures			88.8	97.4	90.1	79.8
Apples			70.3	87.8	89.2	
Peaches			64.0	73.1	61.2	

CROP	TOTAL PRODUCTION IN MILLIONS OF BUSHELS			YIELD PER ACRE			PRICE PER BU., JUNE 1	
	1920 (Est.)	1919 (Est.)	1914-1915 Av.	1920	1919 (Est.)	1914-1915 Av.	1920	1919
Winter wheat	504	732	563	14.8	14.7	15.9		
Spring wheat	277	200	259	14.2	9.0	13.5		
All wheat	781	941	822	14.5	12.8	15.1	258.3	228.4
Oats	1,315	1,248	1,415	22.1	20.4	23.8	102.9	71.2
Barley	185	166	215	24.9	22.3	26.3	148.3	109.2
Rye	80	88.5	59.9	14.6	12.5	15.6	133.9	143.7
Hay, all tons	112	109	99.3	1.56	1.51	1.42	24.85	23.30
Apples, total	199	147	203				297.0	287.3
Peaches	45	50.4	47.5					

When Will the Farmer Come Into His Own?

Eaton County Farmer Talks Straight From the Shoulder on Needs of Agriculture

By BERT TOWE, in Charlotte Republican

ONE OF the greatest needs of the farmer at the present time is co-operation in distribution and marketing. The accomplishment of this purpose will be made possible, only through the introduction of methods resulting in careful, general farming and crop cost accounting. The last quarter century has witnessed an attempt to apply a universal and powerful stimulus to production only. The next quarter century must be to the farmer a business era, in which he himself must be the active participant in an individual farm and crop accounting campaign as well as an active participant for methods looking to co-operating in marketing.

The financial status of the farmer has been misunderstood. Glowing press accounts of large gross receipts from special crop or enterprise, without a complete financial statement of the running expense of the farm as a whole, has misled the public and the farmer has not been in a position to defend himself on account of the lack of data on the cost of production.

While the price of farm products has risen to a high level they have not kept pace with the increased cost of production. It takes more bushels of grain, tons of hay, pounds of wool, cattle, hogs or sheep to buy any of the standard tools or necessary equipment to run a farm than it did five, ten or fifteen years ago; and the same will apply to labor.

Let us take the average price of the eight leading products of the farm of the northern states during 1919 as given by Illinois Agricultural Association, U. S. Agricultural Investigation and the Trade and Drovers' Journal of Chicago. Giving the following figures as an average in the United States, a farmer produces this food stuff, clothing and foot-wearing material. He takes to market:

Meat worth to consumer, \$100; farmer receives \$44, distributor, \$56.

Butter and eggs, worth to consumer, \$100; farmer receives, \$63; distributor, \$37.

Fruit and vegetables worth to the consumer, \$100; farmer receives, \$45; distributor \$55.

Cereals, worth to the consumer, \$100; farmer receives \$60; distributor \$40.

Wheat, worth to the consumer \$100; farmer receives \$49; distributor \$51.

Wool, worth to the consumer, \$100 farmer receives \$11; distributor \$89.

Hides, worth to the consumer, \$100; farmer receives 10; distributor \$90.

Sugar beets worth to the consumer \$100; farmer receives \$33; distributor \$67.

The totals represent these figures: Articles worth to the consumer \$800; farmer receives \$315; distribution \$485.

Hence the farmers get \$315 out of the \$800 that the consumer pays. "Oh, but hold on," says the Big Five Packing Houses, which control most of the farm products of the United States, "the farmer is making money; just look at the great wealth in the farming industry." Farming is the largest single industry in our country. Take a peek into our country banks and note who holds a large per cent of the assets of those banks, the farmer. Again it is whispered into the ear of the city dweller that the farmer has no overhead expenses like other lines of industry.

Then the Big Five goes on to show Mr. Ultimate Consumer through the big city papers and magazines, that they are running their business on a small fraction of one per cent profit. This they claim is largely due to their tremendous overhead expense.

We do not doubt their statement, but we cannot help but wonder how they have accumulated hundreds of millions in less than a quarter of a century and paid salaries to some of their managers several times larger than the salary of our president; and at the same time are able to spend the major part of the summer months in the finest resorts in the world. That they who want to inform the public know how to get the other fellows money I see two pictures: one

The Iowa Wool Growers' Ass'n., a co-operative enterprise, has a membership of 3,600, and last year marketed 1,250,000 pounds of wool, on which it saved \$340,000 for farmers because of the better markets it was able to find. This is enough money to pay the salaries of all county agents in Iowa for a year.—Organized Farmer.

of a man rising with the sun during the spring and summer months, sleeves rolled up to his elbows toiling from 12 to 16 hours per day except time enough to eat his meals and all members of his family doing the same thing. This man is an actual producer of wealth. The other picture is a man who rises two of three hours later, takes a shower bath in an elegant equipped room for that purpose, takes a short walk for exercise, eats breakfast around 8 or 8:30 or 9 a. m., touches a button and drives to his office in as fine a limousine as modern skill can produce, with a private chauffeur to open and shut the door. This chap takes lunch at a fashionable club at noon, at about three or four p. m. he touches another button, his car drives up and he returns to his family and spends the rest of the day playing golf at his summer home. The latter gent is the fellow who fixes the prices of the products that the first fellow works, works to raise.

To illustrate during July and August and September, last year, corn was worth around \$2.50 per bushel. The fellow who rode in the limousine owned the bulk of the corn at that time. When the chap with the tanned face and arms came to sell in November and December, corn dropped 100 per cent and stayed quite steadily until the major part of that crop had gone into the hands of the fellow who rode in the limousine. Then corn began to rise in price and will continue to do so until the man who wears patched overalls and a last year straw hat has another crop ready to sell. Oh, but some one says "the law of supply and demand always controls." If that be true then we are entitled to an explanation of why corn products continued to remain on a high level and many kinds of products going higher while corn had dropped 100 per cent below the high point.

Up jumps another chap who does not raise corn nor speculate in farm products, his name is Mr. Ultimate Consumer and he says "Why don't you farmers know the fellow who rides in the limousine owns or controls most all of the cereal, glucose and syrup factories in the United States?" Another thing this fellow tells us that he eats more corn products in cold weather than in warm, however the law of supply and demand appears to be in the hands of the fellow who rides in the limousine who never put a callous on his hand or sweat on his brow unless from playing golf or tennis. Now, if it is a settled fact that the farmer is the single largest wealth producer why should the other fellow be putting a cost mark upon his products. Let us take a look at the overhead expense of the farm. If the reader will pardon the personal allusion I will take my own farm of 120 acres for an example, believing I can make it more clear by doing so. Money is worth from five to six per cent in good sized loans.

Investment on land and equipment \$30,000 at 5 1-2 per cent, \$1,650; taxes \$541.60; insurance, \$100; depreciation on fence, \$150; depreciation on building, \$700; incidental upkeep, \$200; total, \$3,241.60.

A farm is no different from a factory. If you allow your equipment to run down the earning capacity is reduced accordingly. Every farm faces the above overhead expense that must be met. Everything he buys from a paper to a tractor or an automobile, the overhead is the first item on the cost mark.

If any of the above statements are incorrect or out of balance with horse sense I would like to have them intelligently disputed.

Then why should the farmer stand in his own light and continue to work twelve to sixteen hours a day and turn over a goodly portion of the proceeds of several of those hours each day, gratis, to the fellow in the limousine or on a private yacht?

Let us take one example to illustrate: A few years ago a few energetic beet growers got together and organized what is known as the Michigan Sugar Beet Growers' Association. Its object was to get a fair portion of the profits derived from that industry and the sugar beet growers of Michigan, whether members or not, have received hundreds of thousands of dollars that the sugar kings of New York City would have had in their coffers had it not been for the activity of this little bunch of men. In spite of this fact several hundred farmers in central Michigan of which there are forty or more in the vicinity of Charlotte, have signed up and "gotten in bed" with the New York sugar kings who recently under the income tax law declared a dividend of ten million, eight hundred and fifty-two thousand dollars. In spite of the increased cost of production this year's contract is not as good as last.

Apparently this giant (the farmer) who is the corner stone of all America's great wealth and industry has gone into a state of lethargy or is stalking around like a giant without bones. As the writer sees it, the first move of the farmer is to know what the cost of production is. The next move is for the farmer to put a cost price plus a fair profit on his products the same as all other producers do. But some fellow says "you will get Uncle Sam after you for violating the anti-trust law." If that be true when we are entitled to an explanation why the price of our products should automatically or systematically go up and down; down, when in the hand of the farmers and up when in the hands of the speculators. And people keep right on eating three times a day the whole year round and produce is always the lowest when they eat the most in cold weather.

In conclusion I urge it is the duty of every farmer to support all worthy farm organizations with his time, knowledge and money for none of us know it all, but most of us know a little in our time.

Acres, Condition and Estimated Yield of Winter Wheat, Oats, Rye

WINTER WHEAT										
STATE	CONDITION	FORECAST, 1920	DECEMBER	ESTIMATE	PRICE PER BU.					
	June 1, 1920	June 1, 1920	From June 1, condition	From May 1, condition	1919	5-year average 1914-18	June 1, 1920	June 1, 1919		
	Per Cent	Per Cent	Per Cent	Per Cent	Bushels	Bushels	Cents	Cents		
Ohio	66	82	28,417	28,995	53,480	36,539	272	241		
Indiana	61	78	21,009	21,611	45,792	38,183	266	230		
Illinois	64	75	27,752	27,880	57,800	40,345	263	230		
Michigan	77	78	14,518	14,603	19,235	15,253	233	248		
Iowa	83	84	8,765	8,792	16,530	8,594	236	213		
Missouri	70	77	29,585	29,937	57,699	35,181	243	231		
California	66	80	9,092	10,863	16,335	6,891	240	213		
U. S.	78.2	82.0	503,996	484,647	731,636	563,498				

OATS										
STATE	ACRES, 1920	CONDITION	FORECAST	DECEMBER	EST.	PRICE PER BU.				
		JUNE 1	JUNE 1	JUNE 1	JUNE 1		1920	1919		
	Per Cent of 1919	Per Cent	Per Cent	Per Cent	Per Cent		Cents	Cents		
New York	103	1,195	90	89	39,794	29,560	43,890	135	82	
Pennsylvania	97	1,195	90	89	37,136	36,859	39,596	123	81	
Ohio	98	1,517	82	90	52,245	51,853	64,261	105	70	
Indiana	102	1,862	84	88	60,999	60,225	66,676	101	68	
Illinois	83	3,815	84	88	137,798	123,060	186,214	97	66	
Michigan	98	1,446	87	88	48,434	36,875	55,964	111	71	
U. S.	98.8	41,032	87.8	89.9	1,315,476	1,248,310	1,414,558	102.9	71.2	

RYE										
STATE	ACRES, 1920	CONDITION	FORECAST	DECEMBER	EST.	PRICE PER BU.				
		JUNE 1	JUNE 1	JUNE 1	JUNE 1		1920	1919		
	Per Cent of 1919	Per Cent	Per Cent	Per Cent	Per Cent		Cents	Cents		
Indiana	90	342	85	88	5,000	5,320	3,623	185	142	
Michigan	90	810	86	88	11,773	13,500	5,629	187	147	
Wisconsin	91	478	89	90	8,338	8,295	7,358	187	143	
Minnesota	92	480	83	99	8,287	7,830	6,547	176	135	
No. Dakota	48	944	70	88	9,912	15,560	8,451	180	134	
So. Dakota	85	425	83	92	6,632	6,500	5,268	174	134	
Nebraska	89	363	95	92	5,862	6,650	3,377	169	139	
U. S.	77.4	5,470	84.4	89.2	80,066	88,478	59,963	183.9	143.7	

Clare Farmers Put Candidate in Field

FOLLOWING OUT the plans adopted some time ago and which were described in a recent issue of THE BUSINESS FARMER, the delegates selected by the farmers of Clare, Gladwin and Roscommon counties, met at Gladwin on June 5th and endorsed Mr. Richard Emerson, a well known farmer of Clare county, for state representative. The committee consisted of the following men: John Fitzpatrick, chairman, and George Staley, representing Clare county; Elmer Gedney and Levi Pfennig, representing Gladwin county; and Edward Coan, representing Roscommon county.

It was proposed at this meeting to hold another meeting at Gladwin on the following Saturday and have the candidate present with the committee. The committee will secure the names of prominent farmers as endorsing the selection of the committee and will use this for advertising purposes. It is believed that by this plan 75 to 70 per cent of the farmers of the district can be induced to support the candidate and insure his nomination and election.

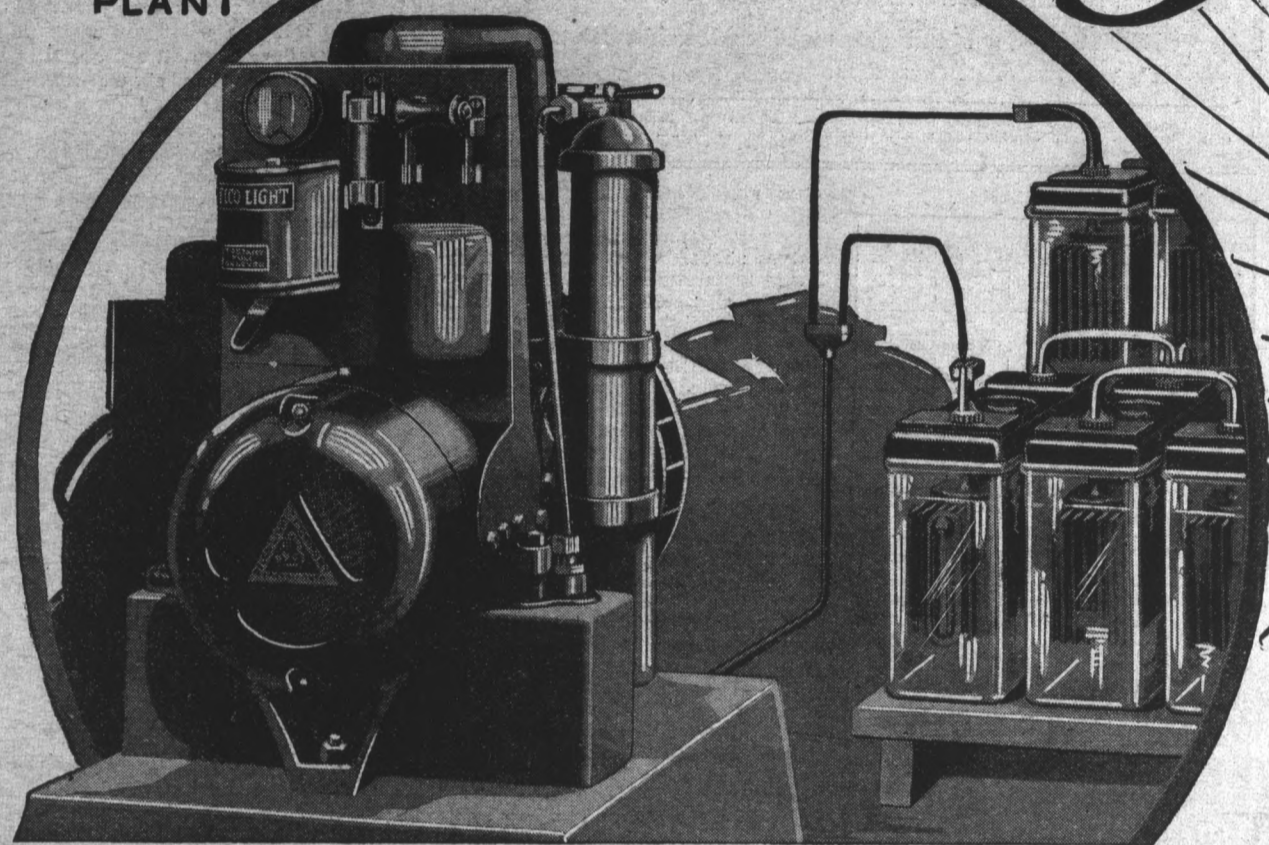
The committee will also take up the matter of endorsing a candidate for the senatorship, this position having been held the past two years by Duncan McRae of Harrisville. It is probable that if Sen. McRae can be induced to run again he will receive the support of the farmers. Of him and his record, Sen. Herbert F. Baker writes as follows:

"I am glad to say of Sen. McRae that he is the salt of the earth. He has the courage of his convictions and no man in the legislature of 1919 has a better record for faithful service along the line of equal rights for all and special privileges for none.

"I think he is not disposed to be a candidate and it is my judgment that he should be encouraged to get into the race for in case he does not, the senator from that district is almost certain to be some two spot of a lawyer anxious to get into the good graces of the special interests. If you can do anything to get McRae back to the senate you will be performing a special service to the plain honest people of the state."

**1/2 KILOWATT
2 DELCO-LIGHT
PLANT**

\$395



DELCO-LIGHT

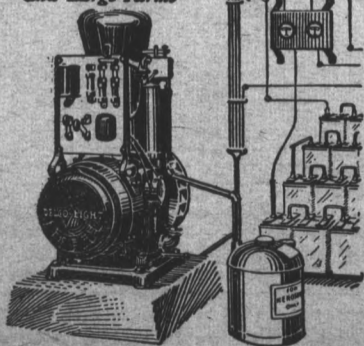
A new model—the 1/2 Kilowatt is now added to the family of Delco-Light products—making a line of farm light and power plants that meets varied needs, large or small.

And the price is \$395, f. o. b. Dayton, Ohio

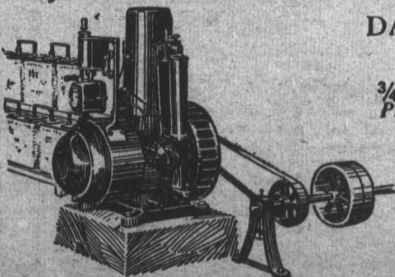
The 1/2 Kilowatt is a smaller size Delco-Light plant, designed for installation where the use of electric light and power is not too heavy, such as in farm homes, summer camps and motor boats. The 1/2 Kilowatt plant with a large battery can be used for pumping water, ironing clothes and operating

churns, separators and other power devices. Like the 3/4, 1 and 3 Kilowatt Delco Light plants—the 1/2 Kilowatt has the famous valve-in-the-head engine. It is air cooled, runs on kerosene, and is furnished with a thick plate long-lived Delco-Light battery.

*Three Kilowatt Plant
For Small Towns
and Large Farms*

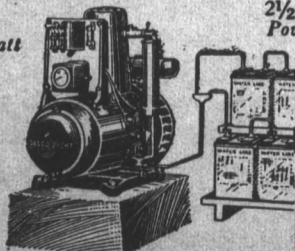


*One Kilowatt
Pulley Plant*

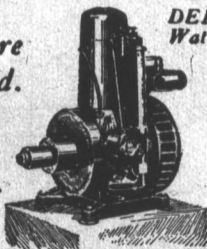


DELCO-LIGHT COMPANY
DAYTON, OHIO

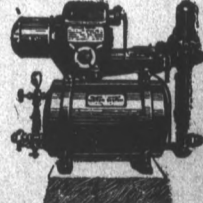
*3/4 Kilowatt
Plant*



*DELCO-LIGHT
2 1/2 Horse
Power Engine*



*DELCO-LIGHT
Water System*



There is a trained Delco-Light man near you who can figure your requirements and advise you as to the size plant you need.

Over 100,000 Satisfied Users

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DAYTON, OHIO

Dept. Z

Please send me your catalog and further details about Delco-Light for installation in

State whether for farm, camp or other property

Name _____

Town _____ State _____

R. F. D. or _____

Street Address _____

MARKET FLASHES

TRADE AND MARKET REVIEW

From the news which found its way to Wall Street during the last few days from various parts of the country it is evident that the liquidation in merchandise and commodities which began the first of May causing lower prices has reached a point where it is due for a recovery and higher prices. Prices are expected to make a steady decline with occasional small advances. A healthy decline or advance invariably follows along these lines.

In fact, what is now going on in the markets for general merchandise and commodities is exactly what has been going on in the stock market. On the sensational advance from the low prices of 1915 the stock market did not move upward on a straight line. There was an advance followed by a drop; then another advance to a new high record followed by another decline and then another advance to new high ground. And likewise the decline from the high war or subsequent peace time records will not be made by one perpendicular drop, but by series of declines followed by temporary recoveries.

The pressure on banks for loans continues in spite of the 7 per cent rediscount rate at the Federal Reserve Banks. That borrowers are going to get the money some way is shown by the declines in Liberty bonds, caused by heavy selling.

Most of the grain markets are feeling shaky. Dealers are sure markets will be flooded with grain within the next few days, while railroad officials say they haven't cars enough available to send many to the grain sections of the country. Harvesting is expected to start in some sections of the country inside of the next week which will enable a closer estimate to be made of the 1920 crop.

WHEAT LOWER

WHEAT PRICES PER BU., JUNE 15, 1920				
Grade	Detroit	Chicago	N. Y.	
No. 2 Red	2.97		3.05	
No. 2 White	2.95		3.05	
No. 2 Mixed	2.95		2.95	

PRICES ONE YEAR AGO				
Grade	Detroit	Chicago	N. Y.	
No. 2 Red	2.45		2.60	
No. 2 White	2.43			
No. 2 Mixed	2.43			

Wheat continues to decline in the face of the facts that Australia is sure of a light crop owing to shortage of rainfall early in the season and Argentina's export tax on her wheat, which amounts to \$50 a ton or about 46c a bushel. It has been believed that all of the surplus of Argentine wheat had been sold. Reports received during the past week direct from that country show that they have 2,500,000 tons or 83,100,000 bushels on hand yet but they admit that considerable of it is already owned by exporters, which leads us to believe that it is only a question of days when North America will stand alone as an offerer of wheat. Whether prices will continue downward it is hard to predict. Of course the price is above the government guaranty which ran out the first of June but as to whether they go to that level or below, most grain market experts appear to be unable to solve the problem. We are of the opinion that dealers and speculators are feeling around to find what the farmer is willing to take for his grain. One grain trade paper says, "Higher prices will prevail later in the season." The export demand remains fairly good. Great Britain is out of the market at present. Italy has removed the ban against hard wheat and Italian macaroni manufacturers will soon be in the market for foreign hard wheat. Cars are not coming very fast. One Western railroad was supposed to get 65 cars a day from the East. In 11 days it got just 25 cars all told and in the meantime had an order to send 40 cars per day to Minneapolis. Another railroad has been receiving 75 cars daily of which about 25 are fit for grain. Such a condition will continue until more cars can be built.

LAST MINUTE WIRES

DETROIT—Oats in good demand. Corn and wheat easy. Hay firm. Beans inactive.

CHICAGO—Corn and oats make small gains. Potatoes lower. Hogs advance. Beans firm.

(Note: The above summarized wires are received AFTER the balance of the market page is set in type. They contain last minute information up to within one-half hour of going to press.—Editor.)

CORN WEAK

CORN PRICES PER BU., JUNE 15, 1920				
Grade	Detroit	Chicago	N. Y.	
No. 2 Yellow	2.05	1.84 1/2	2.04	
No. 3 Yellow	2.00			
No. 4 Yellow				

PRICES ONE YEAR AGO				
Grade	Detroit	Chicago	N. Y.	
No. 2 Yellow	1.52	1.76 1/2	1.93 1/2	
No. 3 Yellow	1.52			
No. 4 Yellow	1.50			

There has been an advance in corn prices during the past week but many commission houses say the market is in a weak condition. Most all dealers are predicting lower prices in the near future due to the larger quantities appearing on the market during the last few days and to the fact that consumers are reluctant about buying, believing prices will be more to their liking soon. Reports from the country show farmers eager to sell and all cars available are being loaded with corn. Cash dealers at Chicago think the markets will soon be swamped with corn. But will it be? We cannot see it that way because how can they swamp the market if cars cannot be secured to ship it in? Of course farmers want to sell and get their money so to be ready for the coming harvest but until more cars are released for shipping grains we cannot see an overloaded market. Planting is practically all done but it is too early in the season for the condition of the crop to have much effect on the market.

OATS ADVANCE

OAT PRICES PER BU., JUNE 15, 1920				
Grade	Detroit	Chicago	N. Y.	
No. 2 White	1.30	1.16 1/2	1.33	
No. 3 White	1.29			
No. 4 White	1.28			

PRICES ONE YEAR AGO				
Grade	Detroit	Chicago	N. Y.	
Standard	.72 1/4	.71	.81	
No. 3 White	.71 1/4	.70		
No. 4 White	.70 1/4			

Receipts of oats are very small at nearly all points and the market is firm. Dealers are anxious to secure more but, with the exception of Iowa, no state seems to have any material amount of oats to offer. For a time Canadian oats were coming to this

country. Now it has changed and some of our badly needed oats are going to Canada, as they sold themselves short. New York is receiving some from Argentine. This helps to relieve the shortage there but they would be mighty pleased to get more and if the West had any, Eastern dealers would be willing to pay nearly any price to secure them as the situation has been very acute there for several months. It is said this year's crop is suffering at present from drouth and the cut worm.

RYE HIGHER

Rye has advanced again this last week and is inactive at \$2.25 for No. 2 on the Detroit market with offerings very small.

"Rye visible is shrinking rapidly," says the *Rosenbaum Review*. "Seemingly this grain manages to get out of the country much faster than other grains. In fact, as compared with total stocks the exports of rye are much larger than anyone would have reason to suspect. Prices have not been much affected of late by a lack of export demand. The new rye crop will be moving before the old rye is cleaned up. Some of the former may be shipped on old contracts. Germany has been the best buyer of late, but the big premiums prevailing as compared with the July tends to restrict business. Condition of the rye crop has improved recently, due to rains and favorable weather."

BEANS INACTIVE

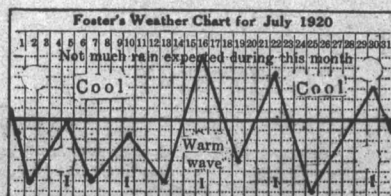
BEAN PRICES PER CWT., JUNE 15, 1920				
Grade	Detroit	Chicago	N. Y.	
C. H. P.	7.65	8.50	8.25	
Red Kidneys		15.00	16.00	

PRICES ONE YEAR AGO				
Grade	Detroit	Chicago	N. Y.	
C. H. P.				
Prime				
Red Kidneys				

Beans are holding their own it appears and are easy with little buying or selling going on at present. The planting as now indicated for 1920 will be about 800,000 acres and with a yield equal to the average of the last five years will produce a crop of 8,250,000 bushels.

THE WEATHER FOR THE WEEK

As Forecasted by W. T. Foster for The Michigan Business Farmer



WASHINGTON, D. C., June 19, 1920.—The heavy horizontal line represents the normal of temperature. The zig zag line is the predicted movement of temperatures up and down. Dates at the top are for their time at meridian 90. If you are east of that line these weather features should reach you one or two days later; if west of it one to three days earlier. The I makes date of warm wave's arrival at meridian 90.

Warm waves will reach Vancouver, B. C. about June 21, 26, July 2, 7 and temperatures will rise on all the Pacific slope. They will cross crest of Rockies by coast of 23, 27 and July 3, 8; plains sections 23, 28 and July 4, 9; meridian 90, upper great lakes, Ohio-Tennessee and lower Mississippi valleys 24, 29 and July 5, 10; lower great lakes and eastern sections 25, 30 and July 6, 11, reaching vicinity of Newfoundland about June 26 and July 1, 7, 12. Storm waves will follow about one day behind

warm waves, cool waves about one day behind storm waves.

These disturbances will control the cropweather from near June 21 to near July 12. Temperatures are expected to average as much above normal as they have averaged below during the earlier parts of the crop season. Rainfall will average less than for some time past but it will be more evenly distributed. Sections where too much rain has fallen will get less and where a deficiency has occurred will get more.

Most severe storms and most rain is expected during the week centering on June 24 and that is expected to be a mild storm; not much rain but well distributed. These indications lead to expectations, that, as a general average, cropweather and crop prospects will be favorable up to near July 12. Indications for cropweather of July are that temperatures will average from about to above normal in Canada and in the northern tier of states. The crop outlook for this continent is encouraging. Recently too much rain fell along a line extending from New Orleans to New York. July will bring better cropweather for that extensive and important section.

W. T. Foster

I have been a reader of your paper for some time and have been quite interested in your reports for some time and in particular the bean market. I have about 275 bushel and thought I would write to you for your personal advice whether to sell at the present prices or not, or do you think that they will go higher? Thanking you in advance for the favor.—G. R. D., Flushing, Mich.

It is neither wise nor practical for us to tell you what you want us to. Our readers have all noticed that the bean market has shown more life during the past sixty days than it has for many months. They have probably also noticed that the market is off just now, with prices about 20 cents per hundred lower. The former strength in the market may have been caused by manipulation, but it is our opinion that it was caused by a scarcity of supplies. The increase of better than \$1 per cwt. in the price naturally encouraged some selling and it looks as if the market had about all the supplies it can conveniently absorb in the near future. We need not be surprised if there is a still further decline, but we anticipate as we have many times before stated that this market will be much better before another crop is harvested. Farmers who need the money tied up in their beans might do well to sell a portion of their holdings now before the price goes any lower. Those who can afford to hold the balance, will, we believe, realize higher prices.

NEW POTATOES DECLINE

SPUDS PER CWT., JUNE 15, 1920				
	Sacked	Bulk		
Detroit	8.33			
Chicago	8.35			
Pittsburg	6.13			
New York	8.35			

PRICES ONE YEAR AGO				
	Sacked	Bulk		
Detroit	2.40	2.33		
Chicago	2.05	2.00		
Pittsburg				
New York				

There was a small decline in new potato prices the past week but there is little consolation in the news as quotations are still high enough to hold up consumption. The demand is inactive, and there is nothing doing in old potatoes owing to the inferior supply on the market. Dealers here in the States have been caught profiteering on potatoes but we don't think dealers in England will have any such charges made against them as England has established a maximum legal price of \$2.38 per 100 pounds. This is the price the farmers receive from the wholesaler, who in turn is allowed to add a profit of \$3.65 per ton to the purchasing price when he sells to consumers or retailers. This looks like the profits were being distributed so that the farmer got his share.

HAY IN DEMAND

[No. 1 Tim.] Stan. Tim. [No. 2 Tim.]				
Detroit	37.50 @ 38.50	37.50 @ 38.50	37.50 @ 38.50	38.50 @ 39.50
Chicago	45.00 @ 46.00	45.00 @ 46.00	45.00 @ 46.00	46.00 @ 47.00
New York	43.00 @ 44.00	43.00 @ 44.00	43.00 @ 44.00	44.00 @ 45.00
Pittsburg	40.50 @ 41.50	40.50 @ 41.50	40.50 @ 41.50	41.50 @ 42.50

[No. 1 Light Mix.] Clover Mix. [No. 1 Clover]				
Detroit	36.50 @ 37.50	36.50 @ 37.50	36.50 @ 37.50	37.50 @ 38.50
Chicago	47.00 @ 48.00	47.00 @ 48.00	47.00 @ 48.00	48.00 @ 49.00
New York	38.00 @ 39.00	38.00 @ 39.00	38.00 @ 39.00	39.00 @ 40.00
Pittsburg	40.50 @ 41.50	40.50 @ 41.50	40.50 @ 41.50	41.50 @ 42.50

[No. 1 Tim.] Stan. Tim. [No. 2 Tim.]				
Detroit	38.50 @ 39.50	38.50 @ 39.50	38.50 @ 39.50	39.50 @ 40.50
Chicago	46.00 @ 47.00	46.00 @ 47.00	46.00 @ 47.00	47.00 @ 48.00
New York	44.00 @ 45.00	44.00 @ 45.00	44.00 @ 45.00	45.00 @ 46.00
Pittsburg	42.50 @ 43.50	42.50 @ 43.50	42.50 @ 43.50	43.50 @ 44.50

[No. 1 Light Mix.] Clover Mix. [No. 1 Clover]				
Detroit	37.50 @ 38.50	37.50 @ 38.50	37.50 @ 38.50	38.50 @ 39.50
Chicago	45.00 @ 46.00	45.00 @ 46.00	45.00 @ 46.00	46.00 @ 47.00
New York	43.00 @ 44.00	43.00 @ 44.00	43.00 @ 44.00	44.00 @ 45.00
Pittsburg	40.00 @ 41.00	40.00 @ 41.00	40.00 @ 41.00	41.00 @ 42.00

BOSTON WOOL MARKET

The Commercial Bulletin says: "The wool market has passed through another week of deadly dullness, with the trade drifting uncertainly. The prices are merely nominal for all classes of wool. The government sale Thursday did not help to fix values.

"Buying in the West is practically at a standstill while at the other end of the trade the manufacturers are quite at sea as regards the future and curtailing the present schedule

of operations to three or four days, as a general thing."

Quotations more or less nominal: Ohio and Pennsylvania fleeces.—Delaine, unwashed, 70@75c; fine unwashed, 62@65c; 1-2 blood combing 70@72c; 3-8 blood combing, 60c.

Michigan and New York fleeces.—Fine unwashed, A, 60c; delaine, unwashed, 70@73c; 1-2 blood, unwashed, 68@70c; 3-8 blood, unwashed, 59@60c.

Wisconsin, Missouri and average New England, 1-2 blood, 60@65c; 3-8 blood, 53@55c; 1-4 blood, 50@52c.

Virginia, Kentuck and similar.—1-2 blood unwashed 75c; 1-4 blood, unwashed, 58@60c.

Scoured basis: Texas—Fine, 12 months \$1.65@1.70; fine 8 months \$1.45@1.50.

California, Northern, \$1.65 @ 1.70; middle counties, \$1.55@1.60; southern, \$1.30@1.35.

Oregon, Eastern No. 1 staple, \$1.75; eastern clothing, \$1.50@1.55 valley No. 1, \$1.60.

Territory—Fine staple, \$1.75@1.80; 1-2 blood combing, \$1.60@1.65; 3-8 blood combing, \$1.15@1.20; fine combing, \$1.20; fine medium clothing, \$1.45@1.50.

Pulled delaine, \$1.75@1.80; AA, \$1.65; A supers, \$1.45@1.50.

LONDON WOOL AUCTION

The wool auction sales at London closed June 11 with merinos 25 to 30 per cent lower and medium cross breeds 10 per cent down. Other grades showed declines ranging from 10 to 20 per cent. During the series the home trade bought 45,000 bales and the continent 13,000 while 42,000 were withdrawn.

DETROIT PRODUCE MARKET

The general supply of green stuff is small, but offerings of lettuce and spinach have increased and lower prices are quoted. Receipts of poultry are ample and lower prices are quoted for broilers. Demand is slow. Dressed hogs are steady and in fair demand, but there is a great deal of trouble in the dressed calf market owing to damaged supplies. The shipments that are packed in ice are arriving in good shape, but all other receipts are more or less injured by the hot weather and a great deal of condemning is being done. The market is weak. Apples are not moving. Offerings of strawberries are small and the market remains too high for activity. Eggs are in liberal supply and steady, but there is an easier tone in the butter deal.

Apples—Western, \$5.50@6 box.

Butter—Extra creamery, 51c bid, 53c asked; creamery prints, 52c bid, 53c asked per lb.

Celery—Florida, \$6@6.56 per case, \$1.35@1.65 per dozen bunches.

Dressed hogs—Choice country dressed under 150 lbs., 19@20c; over 150 lbs. 17@18c per lb.

Dressed calves—Best, 18@20c; No. 2, 16@17c per lb.

Eggs—No. 1 fresh, 40 1-2c bid, 41 1-2c asked; storage packed, 42@42 1-4 c per doz.

Lettuce—Imperial Valley Iceberg, \$4.50@5 per crate; hot house, 10@20c per lb.

Live poultry—Broilers, 45@50c; best hens, 33@34c; No. 2 hens, 32@33c; roosters, 20@22c; geese, 25c; ducks, 38@40c; turkeys, 44@45c per lb.

Maple sugar—45@48c per lb.; syrup \$3.50@3.75 per gal.

Popcorn—Shelled, 10c per lb.

Strawberries—Kentucky, \$8.50@9 per 24-quart case.

LIVESTOCK MARKETS

EAST BUFFALO—Cattle; strong. Calves—50c lower; \$6@17.50. Hogs—25@35c higher. Heavy, \$15@16.25; mixed and yorkers, \$16.25@16.35; light do \$14.50@16.25; pigs, \$13.50@14; roughs, \$12.50@12.75; stags, \$7@9. Sheep and lambs—slow; lambs, \$14@19; yearlings, \$8@17; wethers, \$10@10.50; ewes, \$3@9; mixed sheep, \$9@9.50.

CHICAGO—Cattle; compared with a week ago, common and medium and warmed up steers and stock 50c to \$1.25 higher; others \$1.25 to \$2 higher. Hogs—10c to 35c higher; bulk light and lightweight, \$15@15.25; bulk 250 lbs. and over, \$14.30@14.95. Sheep—bulk direct to packers. Sales mostly steady.

Lower Your Milk Production Cost

Right now, more than ever before, you are forced to hold down the cost of milk production, or work without profit.

A quality feed, Unicorn Dairy Ration, will help you do this.

Quality in Unicorn means two things:

1. Using only the best feeds obtainable.
2. Putting them together the right way.

Everywhere, the "high men" in cow testing associations, who make the largest net profit, are Unicorn feeders.

Dairymen have cut their grain bills ten per cent and more by feeding Unicorn.

You cannot say that your production cost has touched bottom until you have fed Unicorn.

CHAPIN & COMPANY, Chicago



Our booklets show you how to feed Unicorn the right way—how to cut the cost by feeding less.

-- 62 --

Registered Holsteins

1st Macomb County Consignment Sale

June 30th, 1920

Sale at 1:00 p. m.

11:16 A. M. Limited from Port Huron and
12:10 Limited from Detroit will stop at the door.

Also hourly local service both ways.

COL. R. E. HAEGER,
HARRY ROBINSON,
B. V. KELLY,
AUCTIONEERS.

Fairchild Farms,
Chesterfield, Mich.

(25 miles from Detroit on Gratiot Ave.)

R. AUSTIN BACKUS,
In the Box

WHEREAT Torres bestowed upon Francis a look of malignant anger.

"Stand on your haughty pride," Francis instructed him. "Decline the drink. Show them the inside of your helmet."

"I will not drink!" Torres cried, half in panic as the priest turned to him.

"You shall drink. If you are Da Vasco, the divine capitan from the sun, we will then know it and we will fall down and worship you."

Torres looked appeal at Francis, which the priest's narrow eyes did not fail to catch.

"Looks as though you'll have to drink it," Francis said dryly. "Anyway, do it for the lady's sake and die like a hero."

With a sudden violent strain at the cords that bound him, Torres jerked one hand free, pulled off his helmet, and held it so that the priest could gaze inside.

"Behold what is graven therein," Torres commanded.

Such was the priest's startlement at sight of the inscription DA VASCO, that the pitcher fell from his hand. The molten gold, spilling forth, set the dry debris on the earth afire, while one of the spearmen, spattered on the foot, danced away with wild yells of pain. But the Sun Priest quickly recovered himself. Seizing the fire pot, he was about to set fire to the faggots heaped about his three victims, when the little maid intervened.

"The Sun God would not let the great captain drink the drink," she said. "The Sun God spilled it from your hand."

And while all the Lost Souls began to murmur that there was more in the matter than appeared to their priest, the latter was compelled to hold his hand. Nevertheless was he resolved on the destruction of the three intruders. So, craftily, he addressed his people.

"We shall wait for a sign—bring oil. We will give the Sun God time for a sign—bring a candle."

Pouring the jar of oil over the faggots to make them more inflammable, he set the lighted stub of a candle in the midst of the saturated fuel, and said:

"The life of the candle will be the duration of the time for the sign. Is it well, O People?"

And all the Lost Souls murmured, "It is well."

Torres looked appeal to Francis, who replied:

"The old brute certainly pinched on the length of the candle. It won't last five minutes at best, and, maybe, inside three minutes we'll be going up in smoke."

"What can we do?" Torres demanded frantically, while Leoncia looked bravely, with a sad brave smile of love, into Francis' eyes.

"Pray for rain," Francis answered. "And the sky is as clear as a bell. After that, die game. Don't squeal too loud."

And his eyes turned to Leoncia's and expressed what he had never dared express to her before—his full heart of love. Apart, by virtue of the posts to which they were tied and which separated them, they had never been so close together, and the bond that drew them and united them was their eyes.

First of all, the little maid, gazing into the sky for the sign, saw it. Torres, who had eyes only for the candle stub, nearly burned to its base, heard the maid's cry and looked up. And at the same time he heard, as all of them heard, the droning flight as of some monstrous insect in the sky.

"An aeroplane," Francis muttered. "Torres, claim it for the sign."

But no need to claim was necessary. Above them not more than a hundred feet, it swooped and circled, the first aeroplane the Lost Souls had ever seen, while from it like a benediction from heaven, descended the familiar:

"Back to back against the mainmast. Held at bay the entire crew."

Completing the circle and rising to an elevation of nearly a thousand feet, they saw an object detach itself directly overhead, fall like a plummet for three hundred feet, then expand into a spread parachute, with beneath it, like a spider suspended on a web, the form of a man, which

"Hearts of Three"

By JACK LONDON

Author of the "Valley of the Moon," and other stories.

last, as it neared the ground, again began to sing:

"Back to back against the mainmast. Held at bay the entire crew."

And then event crowded on event with supremest rapidity. The stub of the candle fell apart, the flaming wick fell into the tiny lake of molten fat, the lake flamed, and the oil-saturated faggots about it flamed. And Henry, landing in the thick of the Lost Souls, blanketing a goodly portion of them under his parachute. In a couple of leaps was beside his friends and kicking the blazing faggots right and left. Only for a second did he desist. This was when the Sun Priest interfered. A right hook to the jaw put that aged confidant of God down on his back, and, while he slowly recuperated and crawled to his feet, Henry slashed clear the lashing that bound Leoncia, Francis and Torres. His arms were out to embrace Leoncia, when she thrust him away with:

"Quick!" There is no time for explanation. Down on your knees to Torres and pretend you are his slave—and don't talk Spanish, talk English."

Henry could not comprehend, and, while Leoncia reassured him with her eyes, he saw Francis prostrate himself at the feet of their common enemy.

"Gee!" muttered Henry, as he joined Francis. "Here goes. But it's worse than rat poison."

Leoncia followed him, and all the Lost Souls went down prone before the Capitan Da Vasco who received in their midst celestial messengers direct from the sun. All went down except the priest, who, mightily shaken, was meditating doing it, when the mocking devil of melodrama in Torres' soul prompted him to overdo his part.

As haughtily as Francis had coached him, he lifted his right foot and placed it down on Henry's neck, incidentally covering and pinching most of his ear.

And Henry literally went up in the air.

"You can't step on my ear Torres!" he shouted, at the same time dropping him, as he had dropped the priest with his right hook.

"And now the beans are spilled," Francis commented in dry and spiritless disgust. "The Sun God stuff is finished right here and now."

The Sun Priest, exultantly signaling his spearmen grasped the situation. But Henry dropped the muzzle of his automatic pistol to the old priest's midriff; and the priest, remembering the legends of deadly missiles propelled by the mysterious substance called "gunpowder" smiled appeasingly and waved back his spearmen.

"This is beyond my powers of wisdom and judgment," he addressed his tribespeople, while ever his wavering glance returned to the muzzle of Henry's pistol. "I shall appeal to the last resort. Let the messenger be sent to wake the Lady Who Dreams. Tell her that strangers from the sky and mayhap the sun, are here in our valley. And that only the wisdom of her far dreams will make clear to us what we do not understand, and what even I do not understand."

CHAPTER XVIII.

CONVOYED by the spearmen, the party of Leoncia, the two Morgans and Torres, was led through the pleasant fields, all under a high state of primitive cultivation, and on across running streams and through woodland stretches and knee-deep pastures where grazed cows of so miniature a breed that, full grown, they were no larger than young calves.

"They're milch cows without mistake," Henry commented. "And they're perfect beauties. But did you ever see such dwarfs. A strong man could lift up the biggest specimen and walk off with it."

"Don't you fool yourself," Francis spoke up. "Take that one over there the black one, I'll wager it's not an ounce under three hundredweight."

"How much will you wager?" Henry challenged.

"Name the bet," was the reply.

"Then a hundred even," Henry stated, "that I can lift it up and walk away with it."

"Done." But the bet was never to be decided, for the instant Henry left the path he was poked back by the spearmen, who scowled and made signs that they were to proceed straight ahead.

Where the way came to lead past the foot of a very rugged cliff they saw above them many goats.

"Domesticated," said Francis. "Look at the herd boys."

"I was sure it was goat-meat in that stew," Henry nodded. "I al-

ways did like goats. If the Lady Who Dreams, whoever she may be, vetoes the priest and lets us live, and if we have to stay with the Lost Souls for the rest of our days, I'm going to petition to be made master goat-herd of the realm, and I'll build you a nice little cottage. Leoncia, and you can become the Exalted Cheese-maker to the Queen."

But he did not whimsically wander farther, for, at that moment, they emerged upon a lake so beautiful as to bring a long whistle from Francis, a hand-clap from Leoncia, and a muttered ejaculation of appreciation from Torres. Fully a mile in length it stretched, with more than half the same in width, and was a perfect oval. With one exception, no habitation broke the fringe of trees, bamboo thickets, and rushes that circled its shore, even along the foot of the cliff where the bamboo was exceptionally luxuriant. On the placid surface was so vividly mirrored the surrounding mountains that the eye could scarcely discern where reality ended and reflection began.

In the midst of her rapture over the perfect reflection, Leoncia broke off to exclaim her disappointment in that the water was not crystal clear:

"What a pity it is so muddy!"

"That's because of the wash of the rich soil of the valley floor," Henry elucidated. "It's hundreds of feet deep, that soil."

"The whole valley must have been a lake at some time," Francis concurred. "Run your eye along the cliff and see the old water lines. I wonder what made it shrink."

"Earthquake most likely, opened up some subterranean exit and drained it off to its present level—and keeps on draining it, too. Its rich chocolate color shows the amount of water that flows in all the time, and that it doesn't have much chance to settle. It's the catch basin for the entire circling of the valley."

"Well, there's one house at least," Leoncia was saying five minutes later, as they rounded an angle of the cliff and saw, tucked against the cliff and extending out over the water, a low-roofed bungalow-like dwelling.

The piles were massive tree-trunks, but the walls of the house were of bamboo, and the roof was thatched with grass straw. So isolated was it, that the only access, except by boat, was a twenty-foot bridge so narrow that two could not walk on it abreast. At either end of the bridge, evidently armed guards or sentries, stood two young men of the tribe. They moved aside, at a gesture of command from the Sun Priest, and let the party pass, although the two Morgans did not fail to notice that the spearmen who had accompanied them from the Long House remained beyond the bridge.

Across the bridge and entered into the bungalow-like dwelling on stilts, they found themselves in a large room better furnished, crude as the furnishings were, than they would have expected in the Valley of Lost Souls. The grass mats on the floor were of fine and careful weave, and the shades of split bamboo that covered the window openings were of patient workmanship. At the far end against the wall, was a huge golden emblem of the rising sun similar to the one before the altar by the Long House. But by far most striking, were the two living creatures who strangely inhabited the place and who scarcely moved. Beneath the rising sun, raised above the floor on a sort of dais, was a many-pillowed divan that was half-throne. And on the divan, among the pillows, clad in a softly-shimmering robe of some material no one of them had seen before, reclined a sleeping woman. Only her breast softly rose and softly fell to her breathing. No Lost Soul was she, of the inbred and degenerate mixture of Carib and Spaniard. On her head was a tiara of beaten gold and sparkling gems so large that almost it seemed a crown.

Before her, on the floor, were two tripods of gold—the one containing smouldering fire, the other, vastly larger, a golden bowl fully a fathom in diameter. Between the tripods, resting with outstretched paws like the Sphinx, with unblinking eyes and without a quiver, a great dog, snow white of coat and resembling a Russian wolf-hound, steadfastly regarded the intruders.

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"She looks like a lady, and seems like a queen and certainly dreams to the queen's taste." Henry whispered, and earned a scowl from the Sun Priest.

Leoncia was breathless, but Torres shuddered and crossed himself and said:

"This I have never heard of the Valley of Lost Souls. This woman who sleeps is a Spanish lady. She is of the pure Spanish blood. She is Castilian. I am as certain as that I stand here, that her eyes are blue. And yet that pallor!" Again he shuddered. "It is an unearthly sleep. It is as if she tampered with drugs, and had long tampered with drugs."

"The very thing!" Francis broke in with excited whispers. "The Lady Who Dreams drug dreams. They must keep her here doped up as a sort of super-priestess or super-oracle.—That's all right old priest," he broke off to say in Spanish. "If we wake her up, what of it? We have been brought here to meet her, and, I hope, awake."

The Lady stirred, as if the whispering had penetrated her profound of sleep, and, for the first time, the dog moved, turning his head toward her so that her down-dropping hand rested on his neck caressingly. The priest was imperative, now, in his scowls and gestured commands for silence. And in absolute silence they stood and watched the awakening of the oracle.

Slowly she drew herself half upright, paused, and recaressed the happy wolf hound, whose cruel fangs were exposed in a formidable, long-jawed laugh of joy. Awesome the situation was to them, yet more awesome it became to them when she turned her eyes full upon them for the first time. Never had they seen such eyes, in which smoldered the world and all the worlds. Half way did Leoncia cross herself, while Torres swept away by his own moving lips of silence enunciated his favorite prayer to the Virgin. Even Francis and Henry looked, and could not take their gaze away from the twin wells of blue that seemed almost dark in the shade of the long black eyelashes.

"A blue-eyed brunette," Francis managed to whisper.

But such eyes! Round they were, rather than long. And yet they were not round. Square they might have been, had they not been more round than square. Such shape had they that they were as if blocked off in the artist's swift and sketchy way of establishing circles out of the sums of angles. The long, dark lashes veiled them and perpetuated the illusion of their darkness. Yet was there no surprise or startlement in them at first sight of her visitors. Dreamily incurious were they, yet were they languidly certain of comprehension of what they beheld. Still further, to awe those who so beheld, her eyes betrayed a complicated totality of paradoxical aliveness. Pain trembled its quivering anguish perpetually impending. Sensitiveness moistly hinted of itself like a spring rain shower on the distant sea horizon or a dew fall of a mountain morning. Pain—ever pain—resided in the midst of langorous slumberousness. The fire of immeasurable courage threatened to glint into the electric spark of action and fortitude. Deep slumber, like a palpitant tapestried background, seemed ever ready to obliterate all in sleep. And over all, through all, permeating all, brooded ageless wisdom. This was accentuated by cheeks slightly hollowed, hinting of asceticism. Upon them wits a flush, either hectic or of the paint box.

When she stood up she showed herself to be slender and fragile as a fairy. Tiny were her bones, not too generously flesh covered; yet the lines of her were not thin. Had either Henry or Francis registered his impression, he would have proclaimed her the roundest thin woman he had ever seen.

The Sun Priest prostrated his aged frame till he lay stretched flat out on the floor, his old forehead burrowing into the grass mat. The rest remained upright, although Torres evidenced by a crumpling at the knees that he would have followed the priest's action had his companions shown signs of accompanying him. As it was, his knees did partly crumple (but straightened again and

stiffened under the controlled example of Leoncia and the Morgans.

At first the Lady who had no eyes for aught but Leoncia; and, after a careful looking over of her, with a curt upward lift of head she commanded her to approach. Too imperative by far was it, in Leoncia's thought, to proceed from so ethereal-ly beautiful a creature, and she sensed with immediacy an antagonism that must exist between them. So she did not move, until the Sun Priest muttered harshly that she must obey. She approached, regardless of the huge, long-haired hound, threading between the tripods and past the beast, nor would stop until commanded by a second nod as curt as the first. For a long minute the two women gazed steadily into each other's eyes, at the end of which, with a flicker of triumph, Leoncia observed the other's eyes droop. But the flicker was temporary for Leoncia saw that the Lady was studying her dress with haughty curiosity. She even reached out her slender, pallid hand and felt the texture of the cloth and caressed it as only a woman can.

"Priest!" she summoned sharply. "This is the third day of the Sun in the House of Manco. Long ago, I told you something concerning this day. Speak."

Writhing in excess of servility, the Sun Priest quavered: "That on this day strange events were to occur. They have occurred, O Queen."

Already had the Queen forgotten. Still caressing the cloth of Leoncia's dress, her eyes were bent upon it in curious examination.

"You are very fortunate," the Queen said, at the same time motioning her back to rejoin the others. "You are well loved of men. All is not clear, yet does it seem that you are too well loved of men."

Her voice, mellow and low, tranquil as silver, modulated in exquisite rhythms of sound, was almost as a distant temple bell calling believers to worship or sad souls to quiet judgment. But to Leoncia it was not given to appreciate the wonderful voice. Instead, only was she aware of anger flaming up to her cheeks and burning in her pulse.

"I have seen you before, and often," the Queen went on.

"Never!" Leoncia cried out.

"Hush!" the Sun Priest hissed at her.

"There," the Queen said, pointing at the great golden bowl. "Before, and often have I seen you there."

"You—also, there," she addressed Henry.

"And you," she confirmed to Francis, although her great blue eyes opened wider and she gazed at him long—too long to suit Leoncia, who knew the stab of jealousy that only a woman can thrust into a woman's heart.

The Queen's eyes glinted when they had moved on to rest on Torres.

"And who are you, stranger, so strangely appareled, the helmet of a knight upon your head, upon your feet the sandals of a slave?"

"I am Da Vasco," he answered stoutly.

"The name has an ancient ring," she smiled.

"I am the ancient Da Vasco," he pursued, advancing unsummoned. She smiled at his temerity but did not stay him. "This is the helmet I wore four hundred years ago when I led the ancestors of the Lost Souls into this valley."

The Queen smiled quiet unbelief, as she quietly asked:

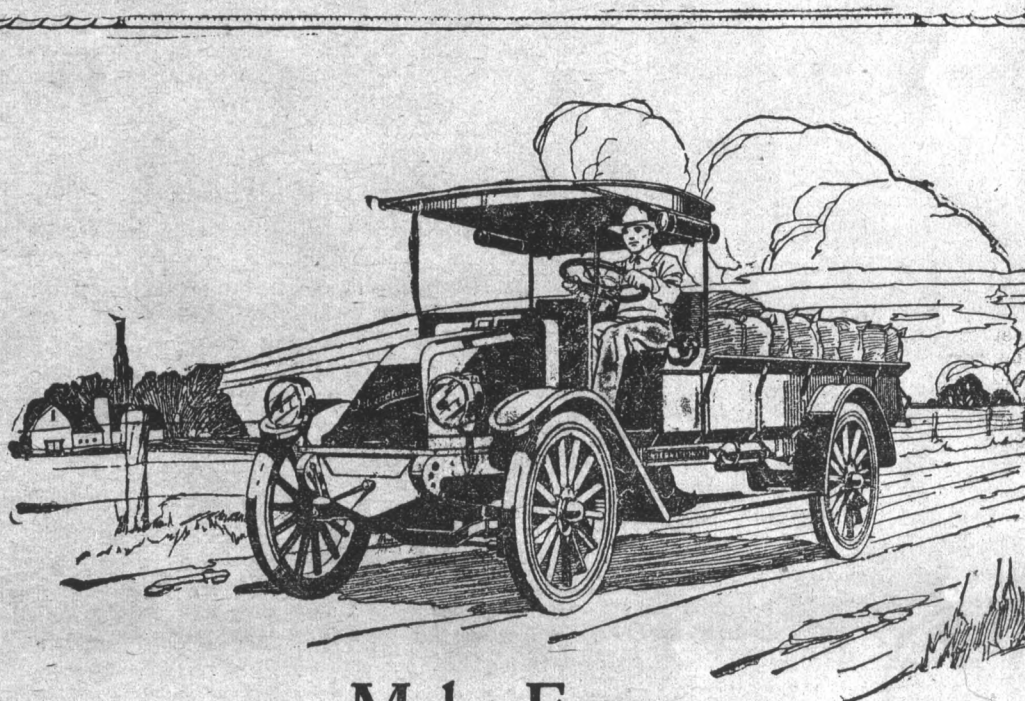
"Then you were born four hundred years ago?"

"Yes and never. I was never born. I am Da Vasco. I have always been. My home is in the sun."

Her delicately stenciled brows drew quizzically to interrogation, though she said nothing. From a gold-wrought box beside her on the divan she pinched what seemed a powder between a fragile and almost transparent thumb and forefinger, and her thin beautiful lips curved to gentle mockery as she casually tossed the powder into the great tripod. A sheen of smoke arose and in a moment was lost to sight.

"Look!" she commanded.

And Torres, approaching the great bowl, gazed into it. What he saw, the rest of his party never learned. (Continued on page 15)



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The Business Farmer

THE ILLUSTRATION on our front cover this week is the Canadian Grain Growers' Guide's conception of what the business farmer looks like. We'll have to admit that it's a fair depiction of the average successful farmer as he sits at his desk, going over his accounts, figuring up his costs and his profits and losses on his several crops.

The character of the men who farm and the motive for farming has been changing in recent years. It wasn't many years ago that men farmed solely as a means of livelihood. In these days virtually all the food consumed and all the clothing worn by the farm family was produced on the farm. There were few great industrial plants which paid wages high enough to attract the men from the soil and enable him to buy his food outright. Men tilled the soil through necessity rather than choice. No books were kept. No cost systems were in vogue. No information on the markets was sought or desired. Those who were fortunate enough to raise more than their own requirements bartered it with their neighbors or the people in town for products not of the soil.

But today it is different. The majority of farmers till the soil now as a business. The mere making of a living is no longer the great incentive. A greater incentive is the producing of surplus of goods which can be sold at a profit which may be spent for other necessities and luxuries that will make farm life easier, more enjoyable and efficient. Indeed, this changing motive for farming which has put the farmer in a position to buy improved machinery and conveniences for the household, has been one of the big factors in the unparalleled industrial stimulation of our modern times. The world in general has been better off because farmers are striving to earn profits and invest them in goods produced in the towns and cities.

The right name for the farmer of the twentieth century is the "business" farmer, and he is referred to as much in nearly all modern literature. For the farmer who succeeds must apply acknowledged business methods in the conduct of his farm. He must keep records. He must know on what field or what crop he makes a profit or suffers a loss and why. He must follow his methods of farming closely, scrapping the inefficient and taking on the efficient. If his neighbor can produce crops at less cost he must find out why this is so, and if possible adopt his neighbor's methods. He must keep books, and ascertain at the end of each year by a trial balance whether he has lost or made money for the year. Some farmers will refer to their bank book for this information, but it is not there, for the bank-book tells nothing about the binder that was bought, the fertility that was added to a certain field or the balance of crops on hand. Nor will it tell anything about the shed that blew down, the horse that was killed, or any of the

other losses of the year which have not been replaced. It requires a carefully kept inventory of every article on the farm to tell the farmer whether he is making or losing money. Some farmers lose money for years and don't know it. Their bank book may tell them that they are a few dollars ahead over the previous year, and yet they may actually be many dollars poorer, as they may discover when they come to paint their buildings, buy new fencing or replace their worn-out tools.

The successful farmer who is the business farmer must have a desk and a simple set of books. He must keep his correspondence on file. He must have one or more good market and farm papers. He must be acquainted with the world's production and the world's needs of the crops which he produces. He must watch the business barometer. Good business in industrial centers generally means good business to him. Poor business conditions usually though not always work to his disadvantage. He must belong to a good farm organization, for all that farmers have gained in recent years has come through organization, and organization will continue to be the leaven which will work out the problems of agriculture.

The farmers of today have only scratched the surface of the possibilities of farming. Too many are still farming "by guess and by gosh." Too many are still working too much with their hands and too little with their brains. For some there is no help for this. But the average farmer who has got the upper hand of his mortgage and a little money in the bank can revise his whole system of farming and profit by it.

Government by Bosses

LINCOLN once told us that this was a government, "of, for and by the people," and because Lincoln said so the great majority of people have come to believe it notwithstanding a good deal of evidence to the contrary. But the beautiful theory of government by the people has been so often crucified in recent years by the ugly reality of government by bosses that we ought not to cherish any longer the delusion that pure self-government still lives. For it does not.

Consider the National Republican Convention. Chairmanships, appointments to important committees, resolutions, nominations,—the whole show from soup to nuts,—were bossed by the bosses. The news dispatches told us that Boise Penrose, the notorious political boss of Pennsylvania and a dominant and sinister figure in many congresses, was ill in bed in his home city but was nevertheless in constant communication with the convention by telephone and telegraph and that his influence upon the convention was great.

The delegates to the convention were elected by the people but upon their arrival in the political arena at Chicago they were promptly taken in tow by the Republican bosses and led around by their noses during the entire convention. The people ruled up to the time when their delegates got off the train at Chicago. Then they abdicated in favor of the bosses who ruled the convention, who will rule the election, and if a Republican president is elected, will rule the government of the United States for the next four years. The same thing will happen when the Democratic convention takes place, so no matter which party wins the election, the boss politicians will be in the saddle.

The Republican National Convention has shown us again that the presidency of the United States is not within the gift of the people but of the politicians. No matter what the people may desire, nor how strongly they may express their desire, the political bosses all will do as they please, while the people sit back and watch the show. To aspire to the presidency of the United States with some hope of securing it one must be parboiled in politics. His fitness may be entirely satisfactory to the electorate but if he has not played in the game of politics and become favorably known to the political bosses who also play the game, and learned how to stack the cards in his favor, he is dead sure to lose the pot.

Liberty Bonds

THE GOVERNMENT has come in for some criticism for its failure to stabilize the value of Liberty bonds at par. People who purchased these bonds in response to pressure or for patriotic reasons feel that the government should now protect them when necessity forces them to dispose of their bonds. The suggestion that the government guarantee the face value of the bonds prior to their maturity is natural but hardly practical.

This the government could not do. The only reason there is any sale for Liberty bonds is because the holder is willing to sell them for less than par. If the government ordered that no bonds be sold for less than par there would be no demand for them. Therefore, the holder of bonds who actually needed the money tied up in them would be in a worse position than before. And the government certainly could not redeem at face value all the bonds which are or may be for sale prior to the date of maturity. Any such proposal would bring out several billion dollars worth of bonds, to redeem which would break the U. S. Treasury and then some.

The government has, we believe, lived up to its full responsibilities toward the investor in its bonds. The date on which the bonds will be redeemed by the Treasury is clearly printed on each bond, and there is no guaranty, expressed or implied, that the bonds can be sold for their face value or any sum whatever for that matter before the date of maturity. But the government guarantees that no matter what the market value of a bond may be today or up to within one day of the date of redemption, upon the day of maturity it will be worth one hundred cents on its face value payable in coin of the United States realm.

That is enough. The Liberty bond is a good investment. It is absolutely safe. It pays a fair rate of interest. It is saleable today for nearly ninety per cent of its face value, and considering the enormous quantity of the bonds issued its current commercial value is surprisingly high. It will be a wise investor who not only holds on to his present bonds, but purchases as many more as he can at current quotations.

Sugar Prices

ANY MAN who believes the statement that the sugar companies of Michigan sold all their interest in the 1919 crop of sugar during the winter months at less than 12 1-2 cents a pound needs to have his head examined. The sugar companies don't do business that way. The consumer who pays 30 cents a pound for sugar today will probably not be far out of the way to figure that at least two-thirds of it goes to the manufacturers.

Seems funny, doesn't it, that there should be a sugar shortage and 30-cent sugar in a state which last year produced millions of pounds in excess of its own requirements. Looks like there was something wrong, somewhere, doesn't it? But it is kind of hard to put your finger on the trouble. Just the same it seems as if there ought to be a way provided so that the people of a state which produces such an enormous crop of sugar as Michigan should be able to buy what they need at reasonable prices. Of course, come to think of it, it would be socialism for the state to protect its people like that, so please excuse us for the thought.

Following immediately upon an announcement that Michigan crops were doing fine came another declaration that they were suffering greatly from the drought which has been prevalent in some sections for over a month. Reports of crop damage are likely to be exaggerated, especially in cases of early droughts. We do not believe there is any cause for alarm. We have had no exceptional hot weather or high winds up to the last ten days to dry out the soil. No doubt the crops could have stood a good deal more moisture, but considering the nice start they have made they should be able to withstand quite a severe drought.



What the Neighbors Say



COUNTY PAPERS THAT CO-OPERATE WITH FARMERS

I have just read your editorial entitled "The Farmer and the County Newspaper," appearing in your last issue and regret to say that what you state is in some instances true. But we cannot believe that the majority of country newspapers are so blind to their own and the community's welfare to take the narrow stand which we must admit that some take. We are personally interested in the *Independent* at Standish, Mich., the *Herald-Times* at West Branch and the *Lapeer Press* at Lapeer and all of these three papers have at every opportunity done everything they could to co-operate with the farmers.

Well indeed do we realize that 80 per cent of the subscribers to each of these papers are farmers and our interests are naturally with them. Not by this do we mean that we would take an unfair stand just to be with them but we always try and size the situation up on its merits and act accordingly. In each town we work in hearty co-operation with the county farm agent and give the activities of the various farm organizations much free publicity. True, we charge for meeting notices of their lodges such as the Gleaners, Grange, etc., but so do we charge for notices of meetings of all lodges. We believe this to be fair. Only as our papers, of course, always giving strong enough to wield an influence that will bring strength to the farmers in the manner in which we serve them.

We oft times feel that the farmer and the country newspaper are about in the same boat in these times of high cost of living and operation. Neither the farmer or the country newspaper has been able to pass the high cost of manufacture on to the ultimate consumer the same as the merchant or manufacturer.

Frequently we presume upon your good nature to re-produce articles in *THE MICHIGAN BUSINESS FARMER* in our papers, of course, always giving your paper due credit.

We feel that your statement that the average country newspaper was not being published in the interests of the farmer is too broad. At least most assuredly we do not wish to be included in that class. In fairness to us and many other country papers in Michigan we believe you should modify the statement made in your recent editorial.—H. W. Myers, Publisher.

We are pleased to have this denial from one country publisher that he is fair to the farmers and realizes his dependence upon them. We are acquainted with Mr. Myers' paper and can vouch for what he says in that connection. Unfortunately no distinguishing line can be drawn between the papers which help the farmer and those which hinder him. But it is not necessary. Most of our readers are also readers of their local weekly and they know well enough whether their local editor is for them or against them. Every farmer ought to subscribe for a good county paper as well as a good farm paper, for all can be of mutual help to each other.—Editor.

COST OF RAISING BEETS

Just a few words in regards to sugar beet question. If you remember me I shook hands with Mr. Lord at Ithaca at the last sugar beet meeting and was the man that joined that night and fired his contract in Here is a column that came in the *Alma Record* today so am sending it to you. It would look as though either he or the Sugar Co. had a lot of money to throw away if they charged him according to what they charged the association for that little notice they put in a while back.

I would like Mr. Ackerman to read this. There are not many beets being planted around here. Here is what one man said it would cost him if he grew beets this year. He has no team or tools so would have to hire it all done. He rented 13 acres of land one half mile from here but it is so wet I guess he will not get it in at all. He paid \$15.00 an acre for 13 acres, \$195; \$4 an acre for plowing 13 acres, \$52; \$3 an acre for dragging, fitting and plowing 13 acres, \$39; 1300 lbs. fertiliz-

er at \$2.50 cwt., \$32.50; counting labor \$35 an acres, for 13 acres, \$455. Drawing beets to town, \$2 a ton and we counted 6 1-2 tons to an acres, that what this land produced last year 85 tons at \$2 per tons, \$170; total, \$943.50. 85 tons of beets at \$10.50, \$892.00. In the hole, \$51. I have left out seed, 15 pounds and acre, for 13 acres, 195 pounds seed.

I would like to have Mr. W. E. Bartley look at these figures and see what he thinks of course if he had good clay sugar beet land he would get more tons but that would not help us on this sandy land. Beets on this farm last year made about 6 1-2 tons to the acre. But we plant no beets this year.—F. E. N., Gratiot County.

The opponents of the organized sugar beet growers claim that beets can be raised on heavier soils at a profit under the old contract, and they advance this argument as a reason why the demands of the growers should not be granted. But we challenge the sugar factories of Michigan to advocate the growing of beets only on heavier soils. They dare not do it for there are not enough heavy soils in the beet growing section to produce but a fraction of the total tonnage required. Factories must take contracts for beets on lighter ground if they are to run their plants. Consequently, the interests of the sand-land grower must be taken into consideration.—Editor.

ANOTHER SPIKE IN OUR COFFIN

My time is up and I wish you to stop the paper. I do not care to take a paper which interferes with the freedom of this country and pulls with the prohibition gang. Otherwise your paper is O. K. You can publish this letter or throw it in the waste basket as that is where I think it will go. I am in the same boat with August Baerwolf.—Joseph Trojanek, East Jordan, Mich.

Joseph, you remind me of the man who was hungry and went into a restaurant to get something to eat. They placed before him many choice foods. Some of them he liked; some of them he did not like, but instead of eating the things that appealed to his palate he pushed it all aside and went outside and starved to death. And it didn't put the restaurant out of business either.—Editor.

SUGAR FOR THE FARMERS

I have always read your editorials. They are interesting but that doesn't help us much, does it? Farmers must get together or we will starve on the farms. But we can only do one thing at a time and now we are working 15 hours a day putting the crops in. I have a family of five and we all work that many hours. I wouldn't grumble about the work, but not having enough to eat makes work twice as hard. Farmers cannot raise enough pork for their own use and no sugar for the fruit we have canned. We were told two years ago to can a lot of fruit and that they would get sugar for us. Why not help the farmers to get sugar so we can use our fruit. We are worse off than before the war. Why cannot something be done now.

Why wait two years longer. We are alive now but may not be then. Our government can help the people across, why cannot it help us. We need sugar now.—A. Farmer's Wife, Kingsley, Mich.

My dear Madam, as a consumer, I join in your eloquent appeal. Do you suppose that if we knew how to get sugar for ourselves and the farmers who read our paper that we would need any prompting from you to get it? The entire world is suffering a sugar shortage. There are many places in Europe where people cannot get sugar for love nor money. The people of the United States are on sugar rations. Everywhere you go, it's the same old story, "two pounds at a time," and often none at all. I will be in Washington when you read this and I will not leave there until I learn something more about the sugar situation. But I do not see what the *Business Farmer* can do to increase the present supply of sugar or help its readers to fill their wants. This can only be done by increased production, which may or may not take place this year.—Editor.

RE—MR. FORDNEY

Please allow me a few lines to express my most hearty approval of your stand in regards to Mr. Fordney and the bean tariff. What the people of the eighth congressional district should do is to have a union or independent candidate as long as one power has a big majority. They have little to fear and the people may expect very little from these men. The same would work very well in North Star Township.—Independent Voter, Gratiot County.

Your name sounds good to me, Mr. Independent Voter. The tendency of the hour is toward political independence and non-partisanship. If we will but act independently as we think independently, then some good may come out of our independence. But otherwise not.—Editor.

WALLACE DENIES STATEMENT

The following letter has been received from Mr. W. H. Wallace, general manager of the Michigan Sugar Co., by the editor of *THE BUSINESS FARMER*:

"I noticed in this week's issue that the statement had been made somewhere by me, and you quote the *Detroit Journal*, that if the suggested growers contract was complied with, sugar would sell at 60 cents per pound. I notice in the *Journal* of March 26th an article under the heading of "Wallace Refutes Charge by Editor of Farm Journal, etc." It would appear from this that the *Journal* had in mind that the article came from you. Be this as it may, I never made any such damn-fool statement to anybody on the face of the earth or I never made any statement which could be misconstrued as covering this particular matter. It is just a case of somebody lying."

We don't believe we have seen a newspaper article of recent months containing alleged statements by men interested in sugar factories which was not a mess of lies. In the majority of cases these misleading statements go uncorrected. We are therefore glad to have Mr. Wallace's letter advising us that he did not make the statement credited to him in the *Detroit Journal* and copied in the May 29th issue of *The Business Farmer*.—Editor.

The Week's Editorial

MARKET MANIPULATION

If in business you are in a position to keep your selling price constant and at a point to guarantee profits over the highest possible buying price, you have eliminated the element of uncertainty. Henceforth you can let the other fellow do your worrying. The farmers have not been able to achieve that peace of mind. Many of them are seeking it by going out of business. The professional uplifters of mankind who are perpetually publishing what they are going to do to improve the condition of the farming population will do well to give attention to this little detail.

An incident illustrating this need is found in the recent live stock market in Chicago. "Hogs suffered a relapse, values dropping off 15@25 cents at the opening. The major packers slowly filled orders but they forced values off another notch before they took the bulk of their

droves," said a market report.

What depressed this market? The fact that by chance or deliberate manipulation, an unusually large supply of animals was brought to this one market one day. The fact bore no relation to the supply of live stock in the country. It could possibly have no influence on the amount which will be received by the packers and wholesalers and retailers for the meat which those animals will furnish. But it constitutes a loss of great magnitude to the men who have reared those animals and have incurred the expense and trouble of placing them upon this glutted market.

It is this ability to buy or not to buy, to "force values off a notch" at will and to maintain the selling prices of products, that is bringing the methods of the packers under criticism, and is discouraging the farmers and tending to curtail production.—*Detroit News*.

"GET FAIR PROFIT OR QUIT," SAYS DAIRYMAN

"I am a reader of your paper, and notice an article in regard to the milk question.

Now I would like to ask you this. If the fellows in the Detroit area are not receiving enough money for their milk what do you think of us poor devils over here in Allegan County. Do not think for one minute that we have not got just as much money invested as they have. Don't our feed cost just as much and isn't the hired help question just as bad here as there. If it costs the M. A. C. \$8.40 to produce 100 quarts of milk do you think I can do it for less? I am selling my milk today for the huge sum of \$2.65 per 100 lbs., 3.5 per cent test less 29c 10 gallon can express charges.

"What I am trying to get at is this. I am a member of the Michigan Milk Producers' Association and have been for one year and I would be very much pleased to have you or some one show me where I or anyone in this county has derived any benefit from same. It may be that I am narrow minded and selfish. Will leave that for you to decide. I also notice in your article that you think the commission ought to go to some of the biggest creamery companies and make them an offer. Now tell me why they should. Can't the Milk Producers furnish as much money as would be necessary to build their own plant and it is a cinch they could furnish the produce to keep it running. I am not so much interested in the Detroit affairs as I am in my own. What I would like to have some one figure out for me and the rest of the producers in this locality is some way that we can get a fair price, fair test, and fair weight for our milk. It is a positive fact that it is the farmer that produces this milk, not the distributor, and why shouldn't the farmer have some voice in regard to the price he shall receive.

"Take for instance the grocery man. If he had said to you one year ago that you must pay 22c per lb. for sugar you would have died of a broken heart. But he was cute, he merely informed you that you could only buy 2 pounds. Then when you had got used to paying 9c you could get a hundred pounds. Then he started in again on the 2 pound stuff at 15c and so on until now you are paying 22c. Now do you think that any of our merchants are so generous that they are selling below cost. If it is fair for them to sell on a 50 to 75 per cent basis why shouldn't we, the farmers and producers of all foodstuff have the right to get cost of production at least.

"Two or three years ago when the average laboring man received from \$2.50 to \$3.00 per day he did not complain about paying 12c per quart, but now if the same man cannot get \$5 or \$6 for same work he strikes, and he sobs like he was going to his own funeral if he is asked to pay 65 cents for butter and 15 or 16 cents for milk. And the same fellow will swell up like a warty toad and tell us farmers that we have got a soft snap; we must be getting rich; that never in the history of the world did the farmer get such awful prices for everything they raise for instance just look at the price of potatoes and look at the price of wheat and in fact everything. They don't stop to think that 95 per cent of all products except milk are in the hands of jobbers, poor fellows, and they must have a profit or quit business.

"I think it would be just and fair to the farmer to let a commission fix the price of milk and this commission be composed of such able-minded men as come out in the country at chore time and stand around in the way with their mouths wide open and ask such fool questions as how do you stop it when you get the pail full.

"Now brother farmer and dairyman, for the love of all that is great and good and holy, why don't we get together and get our just rights (Continued on page 19)



The Farm Home

A Department for the Women



MORE DOMESTIC SCIENCE

OF THE total number who enter school, only a very small percentage are able or have the desire to go to college, which means that only a few need the courses in foreign languages, and the higher sciences, while every girl who enters school does need to know something of sewing—enough at least so that she may do her own plain sewing if necessary. She also should know how to choose and cook meats and vegetables and prepare an appetizing meal.

This is a vital question which should receive attention with the coming of the consolidated schools—for they surely are coming, and it is the tax payers who should take the stand that these very useful and necessary sciences should be taught in the schools.

One of the biggest factors in solving the question of Americanization of the foreign born, which is a question receiving so much attention right now is that of teaching the children how to live as Americans live. We cannot reach their homes to any extent except through the children. But if the children are taught how to cook and sew they will in turn insist upon these up-to-date methods being installed in their homes as far as possible and certainly they will bring them to their own homes. Never again will a child be satisfied to live in unsanitary quarters after he or she has learned in school the value of sanitation.

And right along this line is the subject of home nursing. If every child as soon as he was big enough to understand could be taught more physiology—the care of the human body—the law of compensation which nature meets out for us when we treat this human house as it should be treated, it could not help but have an effect upon the health of the human race. And then every girl should be taught at least as much of home nursing as is incorporated in the Red Cross First Aid Course. Which simply means that unaided, she could treat all the minor accidents. The boys are taught this in their Boy Scout course—but every boy is not a Scout, and if this course were installed in the curriculum of every school, the number of accidents would be reduced to a considerable extent, and the results from those accidents which do occur would be less fatal.

Right now there is an agitation on foot to interest more young men in taking a course in medicine, for it has been brought to light that every year less numbers take this course in college. The course is necessarily longer than that needed to qualify for other professions, and when they have finished, the hours of work are longer for the general practitioner and the number of physicians who have attained any degree of wealth is very small indeed, so that the inducements to an ambitious young man are not what they once were. However perhaps this is not altogether to be regretted as there will be less numbers of people who will "enjoy poor health" in the future, and more will learn how to care for all except the more serious illnesses and accidents right at home without the aid of a physician.

A good education is what is most to be desired for every child, but it hardly seems fair to call an education a good one unless it is a well-rounded education embracing the home-making arts and sciences. There are those children who will receive instruction in these arts at home but what of our duty to our fellow citizen—the foreigner.

HOW TO TREAT CASES OF IVY AND SUMAC POISONING

THE BEST ways to avoid ivy and sumac poisoning, the most practical means of eradicating these noxious plants, and the most approved method of treating cases of such

Edited by CLARE NORRIS



HARVEST TIME

On the farm of Mr. and Mrs. John L. Stark, of Fountain, Mich.

poisoning have been the subjects of an investigation conducted jointly by the United States Department of Agriculture and the Public Health Service of the United States Treasury Department. Despite general belief there is good reason for believing that absolute immunity from ivy and sumac poisoning does not exist, investigators state. They also found that many common methods of treatment are not to be commended. Poison ivy is sometimes called poison oak. Poison sumac is also known in various localities as poison dogwood, poison elder, poison ash, thunderwood, and poisonwood. These poisonous plants are widely distributed. While no accurate estimates can be made as to the economic losses resulting from poisoning, the total is very great, and there is urgent need for widespread campaigns to eradicate the very noxious plants.

If one must handle these poisonous plants, gloves, preferably of rubber, should be worn. After the gloves have been removed they should be thoroughly washed with soap and water and rinsed several times. Inasmuch as the clothing which comes in contact with the leaves may be a source of infection for a considerable period, care should be taken in changing the garments, and also the shoes. Many cases of poisoning have resulted merely from contact with exposed clothing.

One of the surest and best methods of minimizing or preventing infection after the hands, face or other parts of the body have been exposed, is to wash and rinse them repeatedly with an abundance of good kitchen soap and hot water. The poison after being deposited on the skin, requires some time to penetrate, and if this penetration can be prevented by thorough washing, eruption and irritation will not result. While exposed parts should be cleansed in this manner as soon after exposure as possible, it is worth while to make the attempt even 12 or 20 hours afterwards in the hope that at least a portion of the poison may be removed. A heavy lather should be produced and the washing should be continued several minutes. Severe scrubbing with a brush is not advisable, but several swabs or small compresses of gauze may be used, discarding each in turn, so that the poison may not be distributed by the cloth.

Bathing with alcohol diluted with an equal amount of water is also an effective preventive. Where exposure has been general, a bath for the entire body, followed by change of clothing is a preventive measure. The hair should not be neglected. Bathing, if not accompanied by sufficient changing of water or rinsing, may result in spreading the rash to skin that had not been infected. In cases that are at all serious a physician should be consulted. Sugar of Lead Not Recommended

The investigators call attention to the fact that scores of remedies and prescriptions are more or less in popular favor, but in spite of the claims they assert that no specific treatment for poisoning from ivy and sumac is yet available. Ointments should not be used in the acute stage of the disease. In the later stages, however, soothing and astringent

Weekly Cheer

There's a better day a-coming;
help it on!
And you'll never do it with a sigh
or frown;
Strip your heart of gloomy things,
Build yourself a pair of wings
And rise up if heaven's slow in
coming down.

His Real Picture

By Edgar A. Guest

We've had his picture taken a dozen times or more
We've got him as a baby in the dresses that he wore;
We've got him with his mother, and we've pictured him with me,
But the camera's only seen him in the way he ought to be,
And I'd like to have his photo as he really is today.
With the glorious dirt upon him that he's gathered in his play.

We've had his pictures taken when his garments all were trim,
And his face was fixed and solemn, but they don't resemble him,
For they do not show the twinkle in those roguish eyes of his
And they don't portray the rascal as he mostly always is.
He is slick and solemn sometimes in his white and starched shirt
But his natural condition is to grin through grime and dirt.

I wish I were a painter, I would canvas him today
In those soiled and tattered garments which he wears when he's at play.
I would paint him in the knickers which have sagged unto his shins,
And the shirt waist clinging to them by the grace of safety pins
And I'd try to catch the glory of that smile from ear to ear
When the dirt is thick upon him and his face is just a smear.

His mother says we mustn't but I still insist and say
That we ought to have him pictured as he really is today,
For I know no sight that's finer for a man to look upon
Than a happy grinning youngster when his two front teeth are gone,
And when I come home at evening and he answers to my call
I just grab him up and kiss him, for I love him—dirt and all.

ointments may be of value in allaying irritation and hastening cure. The extent to which it is desirable to use solutions of permanganate of potash, hyposulphite of soda, sulphate of magnesium (epsom salts) and other remedies, is also discussed. Sugar of lead, formerly much used, often proves disappointing if applied after inflammation has developed, and the user runs the risk of lead poisoning if this substance is applied extensively.

The names "poison oak" and "poison ivy" are used interchangeably in many localities. The plant generally known as poison oak throughout the Pacific Coast occurs as a bush and is sometimes four or five feet high, and has leaflets resembling the leaves of the western oak, but it is also found as a vine, and is sometimes called poison ivy.

How to Recognize Poison Sumac

Poison sumac grows in moist ground, usually in swamps or along low, miry banks of streams and ponds. It occurs from New England to Florida, and westward to Minnesota, Arkansas and Louisiana. The poison sumac leaves are readily distinguished from the harmless sumac and species of ash, elder, and other shrubs and trees having a somewhat similar foliage, and the character, appearance, and color of the fruits furnishes other simple means of identifications. Furthermore, the poison sumac occurs on moist or swampy land, and in drier locations is found only along the borders of swamps or bogs. The number of leaflets into which the leaves of the harmless sumac are divided range from 9 to 21 and 31, while the poison sumac leaves divide into 7 to 13 leaflets.

While many persons are of the opinion that contact with these plants is not necessary to produce poisoning, it is probable that many cases supposed to have originated in this way have actually been due to direct or indirect contact. There are cases on record showing that the smoke from burning plants will give rise to irritation, and in some cases severe poisoning has resulted from this form of exposure. Regarding the popular belief that some persons are wholly immune, the investigators state that there is good reason to believe absolute immunity does not exist, although it is recognized that some persons are much less susceptible than others.

How to Eradicate Poisonous Plants

Eradication of these plants should be widely undertaken and followed up systematically. Every landowner should feel a measure of responsibility in this matter. The simplest method is by grubbing, in which care should be taken to cover the hands properly, and also to prevent infection by means of the clothing. The plants in fields may be destroyed by plowing them up and putting in cultivated crops. Often repeated mowing is also effective. The use of kerosene is recommended where injury to other plants or trees is not to be feared. It may be applied with a sprinkler or a spraying pump, and in many cases one application is sufficient. Arsenate of soda has been used very successfully to kill poison ivy on trees six to ten inches in diameter without injury to the trees, as well as on stone walls, buildings, and along fences.

SEEN IN CITY SHOPS

DON'T AGAIN say "There's nothing new under the sun," for just about as soon as you have said it, some one evolves something distinctly new. First came hats of straw, then hats of felt. Silk lace and similar materials followed to offer variety. Then came that novelty, horse hair braid which has had such a fad because of its wearing qualities. Now comes the latest from Paris—the hat of wood—yes it really is here and pretty too, for it is made of the thinnest of shavings,

which are dipped to the desired color, and the ends extend out at one side and are curled, so they are jaunty as a feather. Of course being a fad and entirely new, they are expensive, none having been displayed so far at less than \$18.00.

The best bargain I have seen in the shops this season was in the "House Dress" section and it was a white dotted mull dress, made with a round neck but not very low and with three quarter sleeves, and finished at the waist line with the ever popular ties. And what is nicer for the house than white. Any light color will show the soil almost as soon as the pure white and certainly won't look nice as long. It was a dress one could slip into afternoons and be cool, look fresh and would not be unsuited for picnics or almost any occasion, while the price was only \$10.

The favorite purse for summer is the silk bag, and the shops are showing a full line of moire with handles of silk or metal and with or without the tassel as a finish. They can be bought at almost any price depending of course on the quality and workmanship. Many of the shops have been having sales on the medium priced bags and a very good one can be secured for \$5.

A new name for an umbrella is "rain-shine." It's simply a silk umbrella which is good enough looking to use for a sun shade and still will withstand the rain should a shower catch you. They are made with short handles so that they can be packed in a suit case and are especially desirable for a vacation trip as they will serve the double purpose. And they are priced from \$5 up and come in the different colors.

"HEARTS OF THREE"

(Continued from page 11)

But the Queen herself leaned forward and gazing down from above, saw with him, her face a beautiful advertisement of gentle and pitying mockery. And what Torres himself saw was a bedroom and a birth in the second story of the Bocas del Toro house he had inherited. Pitiful it was, with its last secrecy exposed, as was the gently smiling pity in the Queen's face. And, in that flashing glimpse of magic vision, Torres saw confirmed about himself what he had always guessed and suspected.

"Would you see more," the Queen softly mocked. "I have shown you the beginning of you. Look now, and behold your ending."

But Torres, too deeply impressed by what he had already seen, shuddered away in recoil.

"Forgive me, Beautiful Woman," he pleaded. "And let me pass. Forget, as I shall hope ever to forget."

"It is gone," she said, with a careless wave of her hand over the bowl. "But I cannot forget. The record will persist always in my mind. But you, O Man, so young of life, so ancient of helmet, have I beheld before this day, there in my Mirror of the World. You have vexed me much of late with your portending. Yet not with the helmet." She smiled with quiet wisdom. "Always it seems to me, I saw a chamber of the dead, of the long dead, upright on their unmoving legs and guarding through eternity mysteries alien to their faith and race. And in that dolorous company did it seem that I saw one who wore your ancient helmet. . . . Shall I speak further?"

"No, no," Torres implored.

She bowed and nodded him back. Next, her scrutiny centered on Francis, whom she nodded forward. She stood up upon the dais as if to greet him, and if troubled by the fact that she must gaze down on him, stepped from the dais to the floor so that she might gaze up into his face as she extended her hand. Hesitatingly he took her hand in his, then knew not what to do next. Almost did it appear that she read his thought, for she said:

"Do it. I have never had it done to me before. I have never seen it done, save in my dreams and in the visions shown me in my Mirror of the World."

And Francis bent and kissed her hand. And, because she did not signify to withdraw it, he continued to hold it, while, against his palm he felt the faint but steady pulse of her pink finger tips. And so they stood in pose, neither speaking. Francis

embarrassed, the Queen sighing faintly, while the sex anger of woman tore at Leoncia's heart, until Henry blurted out in gleeful English:

"Do it again, Francis! She likes it!"

The Sun Pries hissed silencing command at him. But the Queen, half redrawing her hand with a startle like a maiden's returned it as deeply as before into Francis' clasp, and addressed herself to Henry.

"I, too, know the language you speak," she admonished. "Yet am I ashamed, I, who have never known a man, do admit that I like it. It is the first kiss that I have ever had. Francis—for such your friend calls you—obey your friend. I like it. I do like it. Once again kiss my hand."

Francis obeyed, waited while her hand still lingered in his, and while she, oblivious to all else, as if toying with some beautiful thought, gazed lingeringly up into his eyes. By a visible effort she pulled herself together, released his hand abruptly, gestured him back to the others, and addressed the Sun Priest.

"Well, priest," she said, with a return of the sharpness in her voice. "You have brought these captives here for a reason which I already know. Yet would I hear you state it yourself."

"O Lady Who Dreams, shall we not kill these intruders as has ever been our custom? The people are mystified and in doubt of my judgment, and demand decision from you."

"And you would kill?"

"Such is my judgment. I seek now your judgment that yours and mine may be one."

She glanced over the faces of the four captives. For Torres, her brooding expression portrayed only pity. To Leoncia she extended a frown; to Henry, doubt. And upon Francis she gazed a full minute, her face growing tender, at least to Leoncia's angry observation.

"Are any of you unmarried?" the Queen asked suddenly. "Nay," she anticipated them. "It is given me to know that you are all unmarried." She turned quickly to Leoncia. "Is it well," she demanded, "that a woman should have two husbands?"

Both Henry and Francis could not refrain from smiling their amusement at so absurdly irrelevant a question. But to Leoncia it was neither absurd nor irrelevant, and in her cheeks arose the flush of anger again. This was a woman, she knew with whom she had to deal, and who was dealing with her like a woman.

"It is not well," Leoncia answered with clear, ringing voice.

"It is very strange," the Queen pondered aloud. "It is very strange. Yet is it not fair. Since there are equal numbers of men and women in the world, it cannot be fair for one woman to have two husbands, for, if so, it means that another woman shall have no husband."

Another pinch of dust she tossed into the great bowl of gold. The sheen of smoke arose and vanished as before.

"The Mirror of the World will tell me, priest, what disposition shall be made of our captives."

Just ere she leaned over to gaze into the bowl, a fresh thought deflected her. With an embracing wave of arm she invited them all up to the bowl.

"We may all look," she said. "I do not promise you we will see the same vision of our dreams. Nor shall I know what you will have seen. Each for himself will see and know.—You, too, priest."

They found the bowl, six feet in diameter that it was, half-full of some unknown metal liquid.

"It might be quicksilver, but it isn't," Henry whispered to Francis. "I have never seen the like of any similar metal. It strikes me as hatly molten."

"It is very cold," the Queen corrected him in English. "Yet it is fire—You, Francis, feel the bowl outside."

He obeyed, laying his full palm unhesitatingly to the yellow outside surface.

"Colder than the atmosphere of the room," he adjudged.

"But look!" the Queen cried, tossing more powder upon the contents. "It is fire that remains cold."

(Continued next week)

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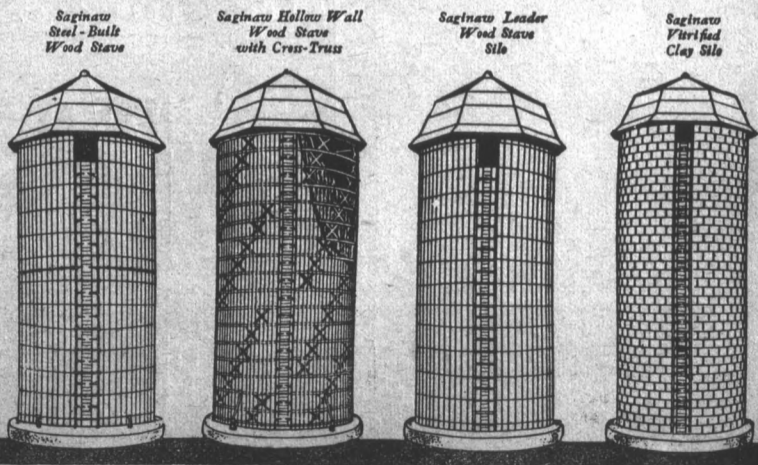
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The Children's Hour

DEAR CHILDREN: I want to tell you about a boy I met last night who is working his way through the University of Michigan. A great big chap he is, strong and clean-cut. His mother and I are great friends, so of course I was very anxious to learn how he expected to earn his money this summer, and last night he told me, and because I think it may do you good, I am going to repeat it for your benefit.

Said he, "Last summer I came into Detroit and worked in an automobile factory, but all the people with whom I had gone to school with were there—there were boat rides to be taken at night—the drug store and its soda fountain were so temptingly near on a hot summer night—car fare ate up a few dollars every week, and when college opened last fall I found I hadn't nearly enough to pay my expenses so I resolved that this coming summer I would get right out into the country, where I didn't need to wear good clothes, and where the moving picture shows and ice cream parlors weren't quite so handy. And the opportunity came when I learned through my roommate of an opportunity to go way up beyond Duluth and clear some jack pines from some land which they are going to convert into a sheep ranch. There are six of us boys going and we are to have a cook—live in tents and as it isn't far from a river we will be able to find our pleasure there mostly and it will be just a regular camp—of course there are to be others, but do you know I think I can work my way on a boat, and if so, the summer's money will be just clear gain and this fall I won't be so much in debt as I was last year.

Here's the idea—the girls and boys from the country yearn to come to the city, while the children who are in the cities long for the country air during the stifling hot days of summer. But if you will just get a few facts and figures, if you wish to make your way in the world later in life you will find that you will build a better physique and will also save more money right in the country than you can possibly do if you enter the city—for it isn't what you earn that counts, you know, it's what you save. And I do hope that all of my little friends are planning even as early as this for something definite in their lives when school days shall be over. Affectionately yours,
—AUNT CLARE.

OUR BOYS AND GIRLS

Dear Aunt Clare—This is the first time I have written to you. I am a girl 11 years old. My father takes the M. B. F. and likes it fine. I live on a farm of 40 acres. We have 3 horses, 5 cows, 8 calves and 44 head of sheep. My school was out the 12th of May. My teacher's name was Miss Gertrude Neuman. I am in the sixth grade next year. For pets I have a cat and a lamb and a colt. I have a mile and a half to go to school. There were 40 pupils in our school. I am going to write a story about going flowerling.

One nice day I and my friend went flowerling down by a large creek. When we got there it was noon and we took out a tablecloth and spread it for a table. Then we took our lunch out of the basket and laid it on the table cloth. Then we got some water and put it in a glass. On the way to our table we got some large violets and put them in a glass. After we ate we packed the rest of our lunch in a basket. Then we started hunting flowers. We got a bunch of lady slippers and hearts and violets. After we got all the flowers we could carry we started for home. When we got home it was pitch dark. I will close. Norma Palmater, Alger, Mich.

Dear Aunt Clare—I read the letters in the Michigan Business Farmer and I think they are all very interesting. I live on a 80 acre farm and we have a 60 acre farm of our own. We rent the 80 acres because there is no house on the 60 acre farm. We have 13 milk cows and 25 head in all. I milk two cows and my sister milks three every night and morning. We have three little calves. I have one and my sister Hazel has one. The other is my father's. I raised four chickens last year. My sister raised 13 ducks she sold them and received \$26 for them. For pets I have a dog and 5 big cats and 3 little ones. We have 13 pigs. We get four cans of milk every day. I am a girl 10 years of age and will be 11 in July. I am in the fifth grade. My teacher's name is Miss Irving and I like her very much. There

A Man Hunt—By Francis Rolt-Wheeler

IF HUNTING a bear or a deer is exciting, how about hunting a man? Fellows, with good wind, lots of grit and a love of sport will find the Man-Hunt a great improvement on the old paper chase, or hare and hounds, as it is sometimes called.

As in the regular paper chase, let the two fellows who are to be hunted start out a quarter of an hour before the hunters. Each can carry a bag of confetti, or if that is hard to get, pieces of paper cut small. A five cent pad (not roll) of toilet paper is enough. Maybe a local printer will let you use his cutting machine for five minutes, and the job's done.

Now, instead of strewing paper all along, to show a trail, drop the paper once every hundred yards or hundred paces. That gives a chance to drop some "sign" and shoot off through the woods or fields to right and left. The hunters will have to run scattered, like hounds, to pick up the trail. If the hunters are bunched, the hunted could drop a bunch of

paper and hide for the hunters to go by, then take the back track. It is forbidden to drop a second lot of paper at the same spot as the first, for the hunters must have a chance to quest back.

Let the hunted carry a watch. At the end of two hours if not caught, they are "safe." One of the big advantages of this is that the hunted need not be the fastest runners. The fun lies in the dodging rather than the running. Often a small boy can outwit a gang of big fellows.

In thick woods, the dropping paper space should be reduced to 20 paces. There is nothing to stop the hunters from posting sentinels to prevent the back-track movement. Every chap who acts hunted will have a different idea; some will take the straight away, like a deer; others will dodge like a fox. Therefore, every hunt is different. If the hunted is quickly caught, another boy takes the paper-bags, is given a start, and the hunt is on again.



are 50 pupils in my school. I have four sisters and one brother, their names are Hazel, Dorothy, Belle, Gertrude and Fred. Fred is 4 years old. My oldest sister's name is Hazel, she is 12 years old and in the seventh grade. Laura Wagar, Trenton, Mich., R. I.

Dear Aunt Clare—May another farmer girl join your merry circle? I have read the letters and enjoyed them very much, so I thought I would write. My father takes the M. B. F. and likes it fine. I live on a 120 acre farm. I have 2 miles to go to school. I go to the Lee school. My teacher's name is Mrs. Mylo Flynn. I am in the eighth grade and will write on final exam, on the 13th and 14th of May. I have 7 sisters and brothers. We have a car. I also have an organ. I love to tat and crochet and I also like to read very much. I like the farm best to live on but I like to visit in the city for a while but I would not like to live there. I would like to hear from boys and girls of my age and would answer all the letters I could. Hoping to see this in print I will close, wishing everybody goodby. Pauline Sevinski, Blanchard, Mich. R. 2.

Dear Aunt Clare—This is the first I have written to you. My father takes the M. B. F. and likes it very well. I like to read the letters from the other

boys and girls. I am a girl 13 years old and in the seventh grade. Our school was out the fifth of May. The teacher's name is Lillian Gotham. I liked her very well. I live on a farm of 84 acres. We have 6 cows and 4 horses, 4 pigs and 70 chickens. I have 4 sisters and 2 brothers. I am the youngest in the family. I have light hair, blue eyes and am 5 feet and 3 inches high. Two of my sisters are visiting in Cumberland, Maryland and won't come back until the end of this month and my other two sisters are married. One of my brothers is at home helping my father and the other one is married. Well my letter is getting long I will close for this time, hoping to see my letter in print. Alice Draves, R 6, Midland, Mich.

Dear Aunt Clare—My father takes the M. B. F. and likes it very much. We live on an 80 acre farm. We have 16 head of cattle, 3 horses, 4 large hogs and 10 little ones. About 35 chickens. We have no little chicks yet, but are expecting some in a few days. I have 3 pets. I am 10 years of age my birthday is the 26th of this month. I am in the 5th grade at school. I think that I will pass as I have never failed a term and hope I will not this term. I am sending a picture of a little fawn and I hope I will see it in the M. B. F. the next time.—Maxine Thomas, Ewart, Mich.

Dear Aunt Clare—My father takes the M. B. F. and we like it very much, especially we children because we like the Children's Hour. I am fourteen years old. You wanted us to write about what flowers we found to the wood. Our school went one day and we took our dinner and ate it at the woods and stayed the noon hour. The flowers we found were the lily, spring beauty, violets, adertongues, hepatica and the dutchman's breeches. We have gone three or four times to the woods this spring. We children are not going to school now because we have the measles. Had them first and was in bed four days and a half. My letter is getting long. I will close, hoping to see my letter in print. This is a riddle: Why does a cat sleep longer in summer than in winter? Answer: Because the summer brings the cat-a-pillar. Isabel Stevens, Kalamazoo, R 11, Mich.

Dear Aunt Clare—As this is the first time I have written to you. I am a girl 14 years old and in the 7th grade at school. Our school is out the 21st of May and I'll be glad then. My father takes the M. B. F. and likes it very much. I enjoy reading the Children's Hour and stories. I live on a farm of 40 acres. We have 6 cows, 6 calves and 7 sheep and one of them is mine, her name is Fannie and she is a great pet. Well I will close, hope my letter escapes the waste basket and I will send you a riddle: A frog and a duck and a skunk all went to a show and they let the frog and duck in and why didn't they let the skunk in? Answer: Well the duck had a bill and he got in all right and the frog had a green back and he was all right, but the skunk only had a cent and it was a bad one and they wouldn't let him in. Mary Middleton, Yale, Mich., R. 6.

Dear Aunt Clare—I am a farmer girl 11 years old. I have light hair, brown eyes, am 4 feet 10 1/2 inches tall and weigh 80 lbs. Our school closed today. My teacher was Miss Sherburn. I will be in the 7th grade next year. I have one brother, Harold, and one sister, Lois. We live on a farm of 160 acres. Papa and my uncle run the place. Together we have 5 horses, 4 cows, 2 calves, pigs and chickens. For pets we have one cat. Both papa and my uncle take the M. B. F. I saw a letter from a girl I know, so thought I would write. I will close now, hoping to see my letter in print. Leona Hill, Scottville, Mich.

Dear Aunt Clare—I will write you a letter as I have never written before. I am a girl 12 years old and in the 8th grade. My teacher's name is Miss Mary M. Campbell. I like her very much. We live on a 120 acre farm. We have 4 working horses and 1 colt, 6 cows, 8 calves and over 100 chickens and 4 ducks. We also have 40 chickens. My father takes the M. B. F. and we all enjoy it very much. I love to read the Children's Hour. Hoping to see my letter in print, I will close as ever, Ada Boesch, Sebawaing, Mich.

Dear Aunt Clare—This is the first time I have ever written to you so I thought I would join your merry hour. I like to read the letters from the boys and girls. Papa takes the M. B. F. and likes to read the stories too. I have two brothers, Floyd and Arthur. I am nine years old and will be ten the 25th of October. For pets I have two cats. School is out at last and the 22nd we had a picnic. Oh, dear me, we had so much I could not begin to tell all we had. My letter is getting so long. So will close, hoping to see my letter in print. Alice Hawks, Watervliet, Mich.

Dear Aunt Clare—I am writing you to find out how many subscribers it takes to get a camera as I would like one. My father takes the M. B. F. and likes it very well. I go to the Duncan school. I have not noticed any letters from Millington yet. There is a woods on our place where we go flowerling. We have twenty-seven little chicks and four hens setting. I will close, hoping to see this in print. Myrtle Silver, Millington, Mich.

We will be glad to send you a camera for ten new subscribers at \$1.00 each.

Dear Aunt Clare—I have not written you in a long time. I like to go to school very well. I like to be out doors now that the grass is so green and everything is so pretty. Our schools lets out the 4th of June. I like the M. B. F. very much in fact I like most everything that belongs to nature. My age is between 11 and 14 and my middle name begins with G and ends with E if any of you can guess then I will send them a stick of candy. Ila Dezree, Greenville, Michigan.

Dear Aunt Clare—This is the first I have written to you. I am a girl seven years old and in the 3rd grade at school. My father takes the M. B. F. and likes it very much. I live on a 230 acre farm. My teacher's name is Miss Minnie Healy. We have seven horses. I have four sisters, Vera, Ila, Ruth and Mary. I have a brother William. We have a Ford car. I like the complete story best. I hope to see my letter in print.—Ida Carter, Harrisville, Mich.

Dear Aunt Clare—I am a girl ten years old. I live on a farm of 110 acres. We have about 50 chickens and ten little chickens. For pets I have a cat; his name is Tommy. We have four horses and two cows. I have found a ground sparrow's nest with four little eggs in it.—Eva Hall Midland, Mich.

PROVERB JUMBLE

BY WALTER WELLMAN

IF THAT'S A PROVERB,
I'M A PELICAN.

D·TO·BE·EARL·HE·W·
AN·SAM·Y·AND·THY·
AL·AN·DEAR·DAN·TO·
L·IS·Y·AL·E·IS·R·WE·
MAKE·THY·E.

Each letter or group of letters is separated, as you will see. Rearrange the words and letters by writing them down in proper sequence to form a well known proverb in verse.

County Crop Reports

SANILAC (C)—Have had some dry and cool weather. The oats and grass has not made much growth up to this time of year. There was a local rain on Tuesday, and quite a lot of water fell for the time it rained. It made the crops look better in the locality that it rained in. There is a general rain needed all over the country. We are having it rather cool at this time. The farmers have got their corn all in and are getting their bean ground ready at the present time. Some have their beans sowed. There are some sugar beets being sowed and quite a lot of chicory put in. The price of chicory is good. There looks as if there might be quite a lot of fruit. Everything seems to be moving along as usual. The following prices were offered at Sandusky: Wheat, \$2.75; oats, \$1.04; rye, \$2; barley, \$3; beans, C. H. P. Pea, \$7.25; potatoes, \$4; butterfat, 54c; eggs, 36c.—A. B.

ST. CLAIR—Farmers cultivating corn and planting potatoes. The weather is very dry, have had no rain since May 15th, that would wet the ground one inch deep. There has been some local showers but no general rain. The soil is dry and in some places it is cracked to a great depth. Hay will be short and a light crop. Oats are in need of moisture and will soon be in the same condition as the hay crop. Wheat is heading but the straw will be short. Rye is thin and not very promising. As a whole the hay and grain crops do not look very good for St. Clair county. The following prices were offered at Smiths Creek: Wheat, \$2.68@2.70; corn, \$1.85; oats, \$1.15; rye, \$2.10; No. 1 timothy, \$28@30; No. 1 light mixed, \$27@29; beans, C. H. P. \$7; potatoes, \$4 bu.; butter, 50@60c; butterfat, 50c; eggs, 40c; sheep, 8@9; lambs, 10@14; beef steers 8@12; beef cows, 6@9; veal calves, 20;—I. J.

JACKSON (S)—A good heavy rain is needed to boom hay and wheat. Some localities were blessed with a downpour Saturday afternoon, but a light shower in this vicinity and south was the extent of the much needed rain. Farmers have finished corn planting. Rye is

looking good, wheat fair, hay in need of rain and a small crop predicted. Early plums and cherries damaged by the frost. Strawberries looking good. Apples have a good crop of fruit set. Butter is on the downward grade also eggs, butterfat 54c, eggs 38c. It looks as if the farmer would pay \$5 a day and board for extra help in haying and harvest if he got any.—G. S.

CALHOUN—Farmers are very busy with their corn and there is some to plant yet. The weather has been very dry here of late and the crops are beginning to feel the drouth. The ground is so dry it is hard work to plow unless we get a rain soon there will not be many late potatoes put in. The following prices were offered at Battle Creek: Wheat, \$2.83@2.90; oats, \$1.20; rye, \$2; No. 1 timothy, \$30; hens, 35c; butter, 55c; eggs, 40c; lambs, \$10.17; hogs, \$13.50; beef steers, \$8.10; veal calves \$10.13.—C. E. B.

CHEBOYGAN (W)—Weather very dry. Not much rain all spring. Prospect of poor hay crop this year. Corn nearly planted with larger acreage than usual. A good crop of oats planted but not many potatoes or beans. Winter wheat and rye looking good but needs rain. Looks like we would have an average fruit crop this year. Spring pigs very scarce. Wheat, \$2.50; oats, \$1.25; potatoes, \$5 to \$8 per bushel; butter, 50c; butterfat, 53c; eggs, 33c.—D. P.

MONTCALM (N. W.)—Most of the farmers are finishing up planting for the season. Corn is up. It has been rather hot and dry. Ground is very dry for the need of rain. Several tractors are being used around this community. The following prices were offered at Lakeview on June 10: Potatoes, none sold. Beans, \$7 per cwt.; onions, 8c a lb.; cabbage, 10c lb.; cucumbers, \$3 per cwt.; butter, 55c; butterfat, 54c; eggs, 32c.—G. B. W.

MIDLAND—The following prices were offered at Midland: Wheat, \$2.80; corn, \$1.80; oats, \$1.05; rye, \$1.80; buckwheat, \$3; beans (C. H. P.) \$6.75; barley, \$3.15; peas, \$3.25.—O. B. G. C.

Gov't Securities for Youthful Investors

An interesting story of 100 per cent efforts on the part of a large number of Virginia boys and girls for financial betterment is told in the May issue of the Journal of the American Bankers' Association. The story concerns the Registered Holstein Calf Club inaugurated by the Richmond Chamber of Commerce and financed by the American National Bank of Richmond.

Through this club, boys and girls were enabled not only to finance the purchase of a valuable pure bred calf destined to the ultimate improvement of the state's livestock, but were also in line for cash prizes offered from various sources. Says the Journal:

"Every member was loaned enough money to purchase his calf, at a very low rate of interest; the notes ran for a year with the privilege of renewing this obligation provided the boy or girl did not make enough money to meet this obligation. What makes the story more interesting is that every member of the club paid his note in full when it was due.

"Forest Hedrick, the winner of the blue ribbon, grew an acre of corn and paid for his calf from the proceeds. Claude Beck had been a Pig Club member and sold enough pigs to pay his debt. Earl Axsell worked for his father in the dairy and paid his."

Prizes including an aggregate of \$189 cash and two bull calves were won by the contestants.

While the several score members of the Calf Club, however, have been giving this remarkable exhibition of thrift, hundreds of thousands of other boys and girls have been equally active and successful in money saving and capital accumulation endeavors.

These are the members of the War Savings Societies of school rooms throughout the country, many of them located in cities and not able to save to take advantage of agricultural profits, while still others, in rural districts, have combined the two methods, saving money through the purchase of War Savings Stamps to be used later in the financing of the purchase of a pig or a calf or the planting of corn or other produce.

This latter process has been pronounced of particular value by educators and economists, since it ac-

quaints the rising generation with the certainty and safety which accompanies investment in government savings securities, and encourages savings by the ease with which purchases are made. Holdings of War Savings Stamps by school children amount to many millions of dollars, and not a few boys and girls in every state have converted a \$100 worth or more into the more convenient form of Treasury Savings Certificates.

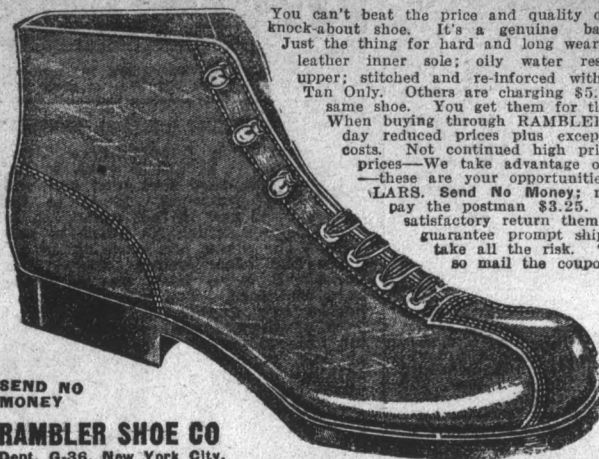
The government savings securities, always worth more than was paid for them, have no market fluctuations to concern the holders, and may be converted into cash to take advantage of opportunity. The custom of investment in so sound and conservative securities as those of the government will train the young men and women of tomorrow to be wary of the offerings of the fake stock salesman, and thus accomplish another great national good.

HINTS ON SOYBEAN CULTURE

The depth of planting soybeans is an important point, says W. C. Etheridge of the University of Missouri College of Agriculture. The seed must be planted shallow or poor stands will result, for the soybean seedling has not the power to push itself through a deep covering of soil. Experiments have proved that two inches is the most favorable depth. Planting much deeper than this will greatly reduce the stand. If a hard crust forms on the surface before the seed has come through, it should be broken with a smoothing harrow or a weeder, otherwise the crust will tend to reduce the stand.

A crop planted in rows three feet apart will require fifteen to twenty pounds of seed to the acre, while a broadcasted or drilled crop will require sixty to ninety pounds to the acre. Soybean seed weighs sixty pounds to the bushel, but they vary greatly in size. Thus, 2,100 seed of the Mammoth variety and 8,400 of the Peking variety are contained in a pound. For economy in the use of seed an adjustment of the rate of planting according to the size of the seed is therefore necessary; the larger quantities, just mentioned, should be used of large seed, and the smaller quantities of small seed.

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FOR SALE—EAST HALF OF SEC. 5, Center Twp., Co. of Emmet. Correspond with owner. **JESSE E. WEBSTER, Pellston, Mich.**

FARM FOR SALE—76 ACRES, CLAY LOAM well drained. Best of soil. No county ditch. Good buildings, newly painted. Acetylene lights, will sell with or without stock, tools and crops. 60 rods to school, 2 miles to good market on main road. **A. R. ZIMMERMAN, Newaygo, Mich.**

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FURNISHING THIRD HORSE

A rents B a hundred-acre farm for three years. A and B each to furnish 1-2 livestock, seed and feed and each to get 1-2 of proceeds. B is to furnish horses tools and do all labor. A leaves 2 old horses which he hates to sell or kill on the place, one working as a third horse the other being only a buggy horse. B is to have use of these for care and feed. The second season both horses are unable to work. B takes care of them for 8 months without being able to get any use out of them. A at last consents to have them killed, nothing being said in the agreement about the number of horses B is to keep. He buys one making him 3. Does he have to pay A for 1-2 feed for third horse? After fall work was done B worked team on road for about 14 days. How much of the earnings can A claim? Has A any right to shut windmill or engine off thus depriving B of water for house and stock? Has A any right to fix toolshed into a garage and use it for self without B's consent?—W. W. Van Buren County.

The third horse is to be treated the same as the team, each furnishing one half of the feed. Unless there is something in the contract I am of the opinion that working on the road is not farm work and A would not be entitled to any portion of it. If B neglects his work on the farm to do the work he might be liable for any damage such neglect causes. If the farm was supplied with windmill and engine as part of the farm property A would have no control of them unless reserved in the lease and would be liable for any damage caused by his unauthorized conduct. A wouldn't have a right to any buildings or parts of buildings on the farm that he did not reserve in the lease.—W. E. Brown, legal editor.

KELLASTONE STUCCO

We wish to remodel our house this summer and would like to know if Kellastone Stucco put on with wood lath is durable and will not crack.—A Subscriber, Albion, Mich.

Kellastone Stucco has not been on the market very many years and I believe has proved very satisfactory when properly applied. You must first have a foundation that will not settle or else you are bound to have cracks. You must next have material that is dry enough to not shrink seriously.

It has proven up about as good on wood lath as on steel lath because it is water proof thus preventing the dampness from getting to the lath. The lath need not necessarily be kiln-dried but if you wish good success you should at least have the lath properly season dried, otherwise little fine checks is bound to appear. This finish makes a very beautiful job, fire proof, durable and exceptionally warm. Have it properly mixed and these reasonable precautions taken, and it will not crack.—G. A. Bugbee, Architect.

INHERITANCE TAX LAW

Will you please publish in M. B. F. a synopsis of the Inheritance Tax. What is the least one can inherit without paying a tax and what per cent does one have to pay.—Mrs. C. F. Lapeer, Mich.

The last inheritance tax law for the state is Act 148 of the Public Acts of 1919, page 272. On page 273 provides that property should not be taxable under this act unless it was personal property of clear market value of \$2,000 or more; and when the transfer was to the wife such transfer of property would not be taxable unless it is personal property of clear market value of \$5,000 or more and in that case the entire transfer would be taxable at 1 per cent of the clear market value. There are a number of other provisions and a different rate to all other classes than named in the statute so that a person should read the whole statute to ascertain its application to their own case.—W. E. Brown, legal editor.

REMOVING QUACK GRASS

Is there any way that quack grass can be killed or run out?—L. W. H., Tuscola County.

Thorough cultivation and good rotation will effectively check and eventually kill out quack grass. We would suggest the following method

as being most effective where quack grass has taken a firm hold:

Plow ground to a shallow depth of 4 inches in spring or summer previous to August 1st. Disc and cross disc to cut sod in pieces. Harrow with spring tooth or disc whenever green growth appears and soon after each rain. When roots and runners are dry, rake into heaps and burn. Continue thorough cultivation until winter. During the following spring plow deep, 8 inches or more, and follow with cultivated crop such as corn or beans, giving crop usual careful cultivation.

I have seen land bound in quack grass sod almost thoroughly freed from the pest by this method. During the following period all possible growth of quack grass leaves is prevented, thus starving the portion of the plant below ground. The roots are further weakened by winter action and when plowed deep the next spring, fail to send shoots to the surface with few exceptions.

Small patches of quack grass can be killed by frequent hoeing, or if noticed when it first appears in the field, can be smothered out by weighting down tar paper with stone.—J. F. Cox, Professor of Farm Crops, M. A. C.

WHAT STATES HAVE CONSOLIDATED SCHOOLS

Will you please tell me if Illinois and Indiana have consolidated schools. Also as many other states that you know of.—Reader, Copenish, Mich.

The following states have made the greatest progress in establishing consolidated schools: Massachusetts (one of the first to consolidate,) Indiana, Ohio, North Dakota, Louisiana, Mississippi, Minnesota, Iowa, New Jersey, Washington, Oklahoma and Arkansas. Nebraska, Texas, Kansas, Tennessee and Kentucky have also made great progress. Idaho, Wyoming, Nevada, New Mexico and Arizona have made a good beginning. P. O. Claxton, commissioner of education, stated in February, 1917, that there were 7,500 consolidated schools in the country one-half of which had been established during the last three years. He predicted that by the end of the year 1920 would be 10,000.—T. E. Johnson, Superintendent of Public Instruction, Lansing, Mich.

THE COLLECTION BOX

REFUND FROM CHICAGO FIRM

"Last June we lived at Sanford, Michigan, and we ordered two rugs from the _____ Company, Chicago. The latter part of June we returned the two rugs as they were not what we wanted. We waited a month and did not hear from them, so we wrote and waited some time again and did not hear, so I wrote again and had my letter registered, so in several days I got a letter and asked me to send the express receipts which I did. In September we got a check for the cheapest rug which was around eleven dollars, leaving a balance of sixteen dollars. We wrote back at once and they asked for another express receipt which we got from the agent and sent it in to them. We have never hear from them since. Can you help us out on it?—R. G., White Cloud, Mich.

Our subscribers complaint was taken up with this firm on June 1st, with the result that our subscriber received the balance due him on June 5th, according to the following letter:

"We are enclosing in this letter our check No. 16715 for \$16.25. Through a clerical error you were not credited for both rugs and we apologize to you for having delayed you so long. We are sending you one of our new catalogs under separate cover and if at any time you feel that you would like to order any goods from us, we assure you that your account will be most welcome."

STATE HEALTH LAWS

I am very anxious to know if there is a law in Michigan to prevent anyone from dumping fish entrails on the ground uncovered for days at a time a breeding place for flies and a menace to health.—Mrs. L. C. Charlevoix, Mich.

"I am enclosing herewith copy of the Nuisance Law under which the local board of health can improve sanitary conditions by the abatement of nuisances. You should apply to your local health officer who is empowered to order nuisances removed."—Edward D. Rich, State Sanitary Engineer.

The law pertaining to the burial of dead animals or any part thereof under which undoubtedly would come the nuisance of which you complain, reads as follows:

"Sec. 11432. If any person or persons shall put any dead animal or part of the carcass of any dead animal, into any lake, river, creek, pond, road, street, alley, lane, lot field, meadow or common, or in any place within one mile of the residence of any person or persons, except the same and every part thereof be buried at least two feet under the ground, and if the owner or owners thereof shall knowingly permit the same to remain in any of the aforesaid places, to the injury of the health, or to the annoyance of the citizens of this State, or any of them, every person so offending shall be deemed guilty of a misdemeanor, and upon conviction thereof shall forfeit and pay a sum of not less than five dollars nor more than ten dollars, together with the costs of prosecution, and in default in the payment thereof, shall be imprisoned in the county jail of the county in which such conviction may be had, not exceeding ten days, to be imposed by any court of competent jurisdiction; and every twenty-four hours said owner may permit the same to remain after such conviction, shall be deemed an additional offense and pay a further sum of not less than ten dollars and not more than thirty dollars, together with the costs of prosecution, to be recovered as aforesaid, and in default in the payment thereof, be imprisoned as aforesaid not more than thirty days, or be punished by both such fine and imprisonment, in the discretion of the court."

BIDDING FOR STATE PROPERTY

Last year through a mistake we paid taxes on another man's lots and in looking it up in hopes of getting our money back we find out that this man has not paid any taxes for six years and that it is state property and that if we bid those lots in at the tax sale, how long will it be before we will have to pay the state the taxes that are back for other years and whether we could get a good title to it or not and how long it would be before we could take possession of it. I would like to know how to go at it to get this property or get our money back. I don't think anyone else has any claim on it. The property lays next to us. I like your paper very much. Please answer through your columns.—Mrs. E. Gladwin County, Mich.

You do not give a full description of the tax situation but from what is said I am of the opinion that you would have to bid the whole of the back taxes held by the state. After the bid you would have to serve the notice required by law and six months after return of the sheriff of service of the notice title would become complete as a tax title. The law provides that after 5 years possession by the purchaser the deed shall not be set aside. Possession immediately after the expiration of the six months.—W. E. Brown, legal editor.

FORMULA FOR WHITE WASH

I would like to get a formula for a white wash to use in a sprayer. Would you give me one?—A Subscriber.

One bushel of quick lime slaked with 12 gallons of hot water and mixed thoroughly. In a separate container dissolve 3 lbs. of common salt and one pound of zinc sulphate in two gallons of water. When dissolved add this solution to the slaked lime. Finally add 2 gallons of skimmed milk and mix thoroughly.—A. J. Clark, Professor of Chemistry, M. A. C.

HOW FARMERS MAY RELIEVE SUGAR SHORTAGE

(Continued from page 4)

ghum stalks are passed to press out the juice. It may be operated by a gasoline engine or by a sweep drawn by horses.

The usual type of evaporator consists of a rectangular, flat bottomed pan of galvanized iron or copper. Evaporation may be produced by direct contact with fire or with steam. In the former case the pan is mounted on a specially constructed fire box. If steam evaporation is employed the pan is provided with steam coils which lie in the bottom of the pan. In some cases a double-bottomed pan is used, the space so provided being employed to carry the steam.

"Other articles needed are barrels or tubs for catching the juice, pipes for conducting it to the pan, skimmers for removing the scum, apparatus for testing the syrup's consistency and barrels or cans for holding the finished product.

"In making a syrup the blades of the plants are stripped off, the sorghum cut at about six inches from the ground, the seed heads removed. The sorghum is passed through the mill with as little delay as possible. When the weather is cool or there is danger of frost, the sorghum may be cut considerably in advance of pressing for when properly piled, it will keep for several days. The juice extracted by the mill is strained and then run into the evaporating pan. As it passes through the pan, it quickly comes to a boiling point and a scum rises to the surface. This should be constantly and carefully removed.

"Syrup should be evaporated to a point where it contains not less than 70 per cent solids; that is, has a weight of not less than 11 1-4 lbs. to the gallon. If placed in containers while boiling hot and properly sealed, it will keep indefinitely.

"The average yield of syrup an acre is from 75 to 200 gallons, although in some cases it has been as high as 400 gallons. The estimates on the yield of seed an acre vary from 600 to 1,600 pounds."

Those desiring additional information on that subject should write the Department of Agriculture for a copy of Farmers' Bulletin No. 477.

Syrup From Sugar Beets

The Department of Agriculture has also issued a very complete circular on the growing of sugar beets for syrup and the extracting of the syrup from the ripe beet. We are advised that one bushel of beets will yield between three and five quarts of syrup, depending upon the sugar content of the beets, so that a very small patch of beets should yield sufficient syrup to last the average family thru the season. Sugar beet seed may be obtained from any seed house and can be planted as late as July 1st. Farmers who are not familiar with the method of planting, cultivating and harvesting beets should write at once to the Department of Agriculture for a copy of Farmers' Bulletin No. 823 which gives such information in detail.

Extracting the Syrup

Beet syrup may be used for all purposes for which other syrups or molasses would be employed, especially for table use; for example, on buckwheat cakes, in making a dark colored cake, or in preparing certain kinds of home made candy. If the evaporation is carried far enough and the syrup is allowed to stand, a dark sugar will settle out. This sugar will be found very satisfactory for home uses in cases where refined sugar is not necessary such as in making pies and other pastry.

Improved Process for Use in the Preparation of Sugar Beet Syrup

The directions given in Farmers' Bulletin 823 for the production of table syrup from sugar beets on a small scale, as in the home, are briefly as follows:

"The tops are removed, cutting them at the line of demarcation between the green and the white skin; the beets are thoroughly scrubbed and washed and cut in very thin slices. The sugar is extracted from these slices by placing them in a receptacle, covering with hot water, and allowing to stand for about one hour. The water extract is drawn off, strained through cheesecloth and evaporated to syrup. It is important

that evaporation be carried on slowly, the length of time between commencement of boiling and removal of the finished syrup covering several hours, and that the considerable amount of scum forming upon the surface be constantly and carefully removed.

"Recent investigations relative to this subject have shown that the exposure of the cut slices to the air results in oxidation and consequent darkening of the surfaces, and that this, together with the presence of the skin of the beet, has a marked effect upon the color and flavor of the syrup. The long-continued boiling also has a tendency to darken the color of the syrup, but results in an improvement of flavor through the elimination of much of the characteristic and more or less objectionable beetlike flavor.

"The following modification of process is recommended:

"The beets after having been topped, thoroughly scrubbed, and washed are peeled and immediately (without allowing time for them to become darkened through exposure to the air) sliced allowing the slices to fall into a receptacle containing sufficient water to cover them. Sufficient water should be added from time to time so that when the receptacle is full the slices will be covered by about one inch of water. The mass is then heated to 70 degree to 80 degree C. (158 degree to 176 degrees F.) the receptacle covered and allowed to stand for about one hour. A wash boiler will be found satisfactory, and it is recommended that a thin wooden rack be placed in the bottom in order to avoid scorching the bottom layer of slices. The water extract is then drawn off, strained through cheesecloth, and evaporated directly to syrup. While the amount of scum formed will not be as great as in the original method, nevertheless it should be constantly and carefully removed. In the case of a considerable number of syrups made by this process, a very marked improvement in color, flavor and palatability has been apparent. The water extracts are clear and practically colorless, while the finished syrups are of a light amber color and possess little or none of the more or less objectionable flavor and unpleasant taste is sometimes noted in syrups made according to the other method. Iron vessels should not be used either in preparing the water extract or in evaporating the extract to a syrup. It is essential that the beets used in the preparation of the syrup should be thoroughly ripe."

"GET FAIR PROFITS OR QUIT," SAYS DAIRYMAN

(Continued from page 13)

or quit. When the world war was raging we farmers were asked to eat what our hogs would not and now we will have to, if things are allowed to go much further. I think it is high time we struck, not for less hours and more pay but the right to just exist and pay taxes. Wake up and do something if it is no more than just to agitate the question.—R. G. H., Allegan County.

Our sympathies are with you fellows outside of the Detroit area because we cannot see how you are receiving much benefit from the State Association. Of course, it helps all the dairy business in Michigan in a slight degree to have a high milk price in Detroit and encourage the marketing of as much milk as possible in that city, but it certainly seems as if there ought to be other ways in which the producers outside the Detroit area can receive more direct benefits from organization. We advocate the establishment of a producers' milk plant in Detroit because that seems to provide an immediate solution to the marketing problems of the members of the Detroit area. The solution to the problems of those outside the area has not yet appeared, but having solved the Detroit conundrum the State Association would be left entirely free to devote its energies to its less fortunate members in other parts of the state.—Editor.

Liars

An evangelist who was conducting nightly services announced that on the following evening he would speak on the subject of liars. He advised his hearers to read in advance the seventeenth chapter of Mark.

The next night he arose and said: "I am going to preach on 'liars' to-night, and I would like to know how many read the chapter suggested?" A hundred hands were upraised.

"Now," he said, "you are the very persons I want to talk to—there isn't any seventeenth chapter of Mark."



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Oats and Peas Profitable for Silage

IN the Northern States and high altitudes where early frosts make corn uncertain, oats and peas can be grown profitably for silage. Along the northern border of our country, especially in those sections where frost often prevents the maturing of corn, Canadian field peas with a good variety of oats make a most excellent crop for silage. Oats and peas withstand light frosts and make an excellent crop for silage. Oats and peas withstand light frosts and make an excellent growth even with low temperatures. Many of the clay soils in northern Wisconsin and Minnesota are especially adapted to the growth of this crop; and it can be planted very early in the spring, which will enable the grower to mature a crop ready for the silo at about the time of the first cutting of clover. When unfavorable weather for harvesting clover sets in such as a long rainy spell, the clover can first be put in the silo after which the oats and peas can be harvested. In sections where corn will not do well on account of a lack of heat, oats and peas, as a rule, will produce more tonnage and the silage will be much better, being nearer a balanced ration. A dressing of barn yard manure will increase the yield, especially on new lands which have not been inoculated by clovers. We have found here in northern Wisconsin the growing of oats and peas the most satisfactory way of getting rid of quack grass; especially when the crop is sowed thickly it will smother out the quack grass. Oats and peas contain more than twice as much protein as corn and therefore make a ration which is practically balanced in itself. As a food for dairy cows it is most excellent, and will substitute the best of pasture.

In the fall of 1918 I had an occasion to test the worth of oat and pea silage compared with corn silage. I had been feeding corn silage to a number of dairy cows, and on the 21st of January came to the place in the silo where oats and peas had been put in. We noticed at once an increase in the production of milk from our herd. One cow which was

nearly dry, giving about fourteen pounds per day, rose quickly to 20 pounds per day; another increased from fifteen pounds to 24 pounds, and similar increases were noted by other animals of the herd. This was sufficient evidence for us to prove that oats and pea silage was superior to corn silage, especially when given as we were feeding.

Our method of sowing is to work the ground as early in the spring as it can be plowed and harrowed, then sowing one and one-half bushels of peas to one and one-half bushels of oats per acre. The oats and peas will germinate even when the ground is cold and wet, and late spring frosts will not destroy the plants. The crop will come on in mid-summer and when the peas are well podded and most of the pods filled, the crop is ready for the silo. It should be cut and put in the silo while still green. Do not allow the forage to become dry and then be obliged to add water; the natural juice of the plants is the best and cannot be replaced by adding water.

Oats and peas can be handled much the same as hay when made into silage. It is better to cut, however, when the dew is on to prevent peas and oats from shelling. The land is cleared in ample time to prepare the ground for winter rye or wheat. This is a special advantage when considerable land is being farmed and labor scarce and hard to get. Oats and peas are much easier to raise than corn as they can be planted fully a month earlier and will not be damaged by frosts. More than that, no cultivation is needed, and when quack grass is bothersome, a heavy yield will choke out and destroy the quack grass.

Farmers who live in the northern states can well afford to test out this valuable crop, especially if they are finding it difficult to mature good corn for the silo. Oats and pea silage will come as near duplicating June pastures as any feed I know of, and it is well worth the trial, especially by those farmers who are conducting dairies in the northern states.—Y. M. Johnson, Ashland, Wis.

establish equal rates on flour and wheat for ocean transportation, and thus use the fleet built by American taxation to encourage increased operation of flour mills with resulting increased supplies of millfeed, much needed at this time.

RATIONS FOR BABY CHICKS

The first feed given the baby chicks should be something easy to digest. Many successful poultry keepers start the chicks on rolled oats. Others use dry bread crumbs or finely cracked grain. The first requirement is that the chicks should not be fed too soon and the second essential is that chicks should not be fed too much. No feed should be given the chicks until they are at least 48 hours old and not then unless they show a good appetite.

Whatever is given for the first feed should be fed in small amounts or the chicks should be watched and what feed is left, at the end of about ten minutes should be removed. Chicks should be fed four or five times a day during the first week so that they may secure plenty of nourishment without overheating at one time.

During the first few weeks of its life the chick grows very rapidly and it is very important that the ration contain the proper elements for making muscle and bone. Protein from an animal source is the material which insures a good rate of development in the chicks. Wherever possible the chicks should be given unlimited quantities of buttermilk or sour milk to drink from the time they are placed in the brooders. If milk is not available, then the protein should be supplied during the first week or ten days by the addition of hard boiled eggs to the ration. One egg daily for each fifty or sixty chicks will supply the protein needed for growth. After the chicks are about a week old, the ration should gradually be changed from the oatmeal or other starting feeds to a more substantial ration of cracked grain and dry mash. During the second, third and fourth weeks of the feeding period a good grade of commercial chick feed is very satisfactory for furnishing the grain for the ration, or finely crick-ed corn can be used.

The mash for baby chicks should consist of equal parts of wheat bran and shorts; or wheat bran, shorts, and corn meal in equal proportions. If protein is not being supplied thru milk, either commercial meat scrap or a good grade of feeding tankage should be added to the dry mash at the rate of one pound of meat scrap or tankage to each three pounds of bran, shorts and corn meal. As soon as the chicks begin to run outside and secure plenty of exercise, the feed may be given in unlimited quantities. The best way to insure rapid growth is to keep the dry mash constantly before the chicks in self-feeding hoppers and to feed as much cracked grain as they will clean up at each feed. To insure plenty of bone building material for growing chicks it is advisable that fine granulated bone be put out in self-feeding hoppers where the chicks will have access to it. Hoppers filled with fine charcoal is also a good thing to keep before the chicks as charcoal helps to correct digestive troubles. Green feed should form an important part of the chick ration. If the chicks are running at large on green grass, nature will take care of the green food supply. If they must be confined, then green food should be provided in such forms as lettuce, onions, sprouted oats, or other tender greens.

DEMAND FOR DRAFT HORSES

Frank H. Sweet of Sweet & Piper, at the Kansas City Horse Market, reports that the demand for heavy draft horses and mules has been greater, and the prices paid, higher, during the last two months, than any time in history.

Mr. Sweet, in commenting on this says, "For two or three years past we haven't had much demand from the eastern states for draft horses, but in the last two weeks they have been coming in strong. The preference is given to horses sixteen hands and over, weighing upward of

Wheat Exports Make High Mill Feeds

(Submitted by the Millers' National Federation)

ON May 29, 1920, wheat millfeeds were quoted, basis Chicago, carload lots, packed in 100 lb. sacks, as follows:

Spring bran, \$55@56 per ton; hard winter bran, \$55.25@55.75 per ton; soft winter bran, \$55@56 per ton; standard middlings (brown shorts) \$61@62 per ton; flour middlings (gray shorts) \$62@63 per ton; red dog, \$69@70 per ton.

The price of wheat millfeeds is regulated by supply and demand; if the supply were more nearly equal to the demand the prices would be lower. The supply of wheat millfeeds can be materially increased by the adoption of a national policy favoring the exportation of flour instead of wheat, retaining in the United States the millfeed resulting from such increased operation of the flour mills.

Few farmers appreciate what a loss is entailed to the farming community by allowing wheat to be exported. Based on the report of the United States Grain Corporation for the crop year ending June 30, 1919, (the latest authentic figures available) the wheat millfeed production of the mills of the United States for that crop year was 4,383,000 tons. Of this amount, 1,032,340 tons resulted from grinding flour that was exported.

If all the wheat that was exported during that crop year had been ground into flour by American mills there would have remained in this country 1,451,360 tons more feed than the figures given above.

These calculations are based upon an estimated production of 71 lbs. of millfeed from each barrel of flour manufactured; this basis was correct during the period that flour mills were operating under government regulations which forced mills to a high percentage of flour extraction; at present the amount of feed resulting from the manufacture of a

barrel of flour is between 75 and 80 pounds, depending upon the character of the wheat being ground. The above figures may therefore be accepted as conservative.

In round figures, millfeed constitutes one-third of the product of wheat flour milling. In other words, in every car of wheat containing 60,000 pounds that is exported, 20,000 pounds of valuable wheat millfeeds is lost to the farmers of the United States.

At present flour export trade is practically at a standstill, while wheat is being exported as rapidly as ships can be secured to load it. This is largely the result of the policy adopted by the United States Shipping Board, which has, for several months, indicated a rate for ocean transportation on flour 25 cents per 100 pounds higher than the rate on wheat. In doing so the Shipping Board is endorsing the action of the British Admiralty, which established the rate in order to discourage importation of flour and to encourage the constant operation of British flour mills; one of the principal factors in adopting this policy is the securing to British farmers the desirable millfeeds resulting from the milling of wheat in British mills. The resulting situation is that a branch of the United States Government, the Shipping Board, is lending its influence to the support of a policy which deprives American mills of the right of privilege of grinding the wheat and exporting the flour, and at the same time deprives the farmers and dairymen of the United States each month of thousands of tons of much needed millfeed, and the effect of larger supplies of millfeed as a factor in establishing the prices of all other feeding stuffs.

Farmers, dairymen and feeders can do much to increase the supply of wheat millfeeds by writing to their Congressmen and Senators, requesting them to use their influence with the United States Shipping Board to

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"Boston has taken a good many of these horses; other cities of the northeast have bought liberally. This is reported to be due to the heavy storms of the past winter in that section, which forced the transportation users to realize that the horse and mule were the only motive units wholly reliable.

Prospects for continued demand and unusual prices are excellent.

VALUE OF A TON OF MANURE

Trials made on the various experiment fields throughout the state by the University of Missouri College of Agriculture have shown that an average application of eight tons of manure to the acre once in four years has increased the yield of corn 10.5 bushels, oats 5.17 bushels, wheat 5.24 bushels and clover hay, 937 tons. At prices which prevailed the first of the year this increase would be worth \$4.83 at pre-war prices \$2.34 for each ton of manure applied. It will cost the farmer not more than one dollar a ton to collect the manure and haul it to the field. This would leave a net profit of \$3.83 at present prices, or \$1.34 at pre-war prices for each ton manure applied. The full value of the manure is usually not obtained during the first four years, for it leaves the soil in better condition and its effect upon later crops is often quite significant. This becomes more noticeable after the first two or three applications, since a liberal application of manure every four years will result in permanent improvement to the land.

By very careful handling of manure a live stock farmer, on average soil, should be able to return annually, about two tons of manure per acre to his cultivated fields. It is not easy to save this amount except by very careful methods and persistent efforts. It is necessary that all straw and other suitable materials be worked through the barns as bedding. This not only adds to the comfort of the animals, but serves as an absorbent for the liquid manure. If straw piles are sold, burned or left to rot it is, of course impossible to return this amount of manure.

Keep the manure together, don't let it get scattered about the barn or lots. Hogs and chickens may waste much of it. Where possible haul it to the field as soon as produced. If this is not possible, store it in shallow concrete lined pits to prevent leaching. Use plenty of bedding in the stable or on the feeding floor to absorb the liquid. Straw, old hay, grass and leaves may be used for this purpose.

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About 35 per cent of the nitrogen and 55 per cent of the potassium is to be found in the liquid material. There is, however, practically no phosphorus in this part. The plant foods in the liquid are all in soluble form and are very easily lost thru leaching. Furthermore, the nitrogen in this liquid portion readily passes off as ammonia when the manure is allowed to ferment, hence the necessity for preventing fermentation as far as possible.

The total solid and liquid manure produced in a year by a well fed, mature horse is about eight tons, with a plant food value of more than \$30. In the case of a well-fed steer weighing from 1,000 to 1,200 pounds the production is nine to eleven tons, with a slightly greater to-

tal value than the manure from a horse.

Three to five months exposure to the weather in an open lot may cause manure to lose approximately one-third of its plant food. If manure must be exposed to the weather it should be in a pit with a water tight bottom.

ORDER YOUR FALL FERTILIZER

"Transportation difficulties may become more acute during the summer and since the manufacture and transportation of acid phosphate is of a seasonal nature, the orders should be placed early.

"It may be necessary to use considerable fertilizer next fall to combat the Hessian fly, which has been quite destructive during this season. In some cases it is necessary to plant the wheat late and fertilize heavily, depending on the fertilizer to give the wheat a start equal to that of early sowing."

This is a very important matter to all wheat growers and one which should have their immediate attention. It is unfair to the railroads to ask them to move all the immense tonnage of fertilizer in a few weeks. Not only is it unfair but it is decidedly unsafe, if one wants the fertilizer to arrive on time. It takes no more time to put in an order in June than it does in August and there is a lot of difference in the surety of delivery for the June order.

This is no time to cuss the railroads. We need their service and we in return should do our part that they may give us service.

There is another item which must be considered by wheat growers, and that is the effect of delayed shipments of fertilizer on this year's crop of wheat. August and September shipments of fertilizer will get in the way of the wheat movement and vice versa. Here are two big freight movements which vitally effect the farm business and they should not be allowed to interfere with each other as they inevitably will if shipments of fertilizer are not made early. So order today what fertilizer you will need this next fall.

DELCO OFFERS CHEAPER PLANT

Those who have been waiting for a less expensive electric lighting and power plant to come on the market will be interested in the full page announcement of the Delco-Light Company, which appears on page 7 of this issue. Such an outfit, producing 1-2 kilowatt from a silent, air-cooled, kerosene-burning plant would be of little interest, if it were not brought out by such well-known and responsible manufacturers. The capacity, we believe, is large enough to take care of the average Michigan farm and it means not only ample and safe light in all buildings, at any time day or night, but power for running water, which is as great a help to mother and convenience to the boys. Of course, a washer, electric ironer, fans and other conveniences come with electricity, which is as Thomas Edison has said "the modern Genli," a humble slave to do your bidding. THE BUSINESS FARMER hopes that every reader who has ever thought of a lighting plant for their farm will send the coupon for full particulars which are gladly sent without any further obligation, if addressed to the company at Dept. Z, Dayton, Ohio.



Pabst Kornelke Cornflower

FARM LIGHTING SYSTEMS

One of the most important farm home convenience is a good lighting system, a system which will do away with the dirty, ill-smelling kerosene lamp, which is a constant source of danger, is inconvenient, inefficient, and a care to the busy housewife, says E. W. Lehmann of the University of Missouri College of Agriculture.

Conditions change from year to year and what were considered luxuries a few years ago are now considered necessities. This is particularly true with reference to conditions on the farm. Things are no longer "all right because our fathers got along with them." The up-to-date farmer must have his home equipped with all modern conveniences not only because they add to the pleasure of living but also because they make him more efficient in his farm work.

"I think your paper one of the best weekly farm papers published. I would also like to buy one of those Jersey cows pictured on front page of your paper."—A Subscriber.

Veterinary Dep't

LAME SHOULDER

I have a horse that slipped and hurt his shoulder March 28th. I was leading him out to water in the morning and noticed it at noon. By that time he could hardly get out of the barn. He drags that foot and leg. Have had two doctors and neither seems to help him. Bilistered it the first thing and then put bran poultice on for 24 hours. I am not giving him any exercise now, except once in a while lead him to water. His soreness is in behind and under the humerus in those muscles called extensor of elbow. That large muscle on the outside is shrunk away. He can stand on that leg but he tips his knee forward a good deal unless it is held back with a harness.—E. D. C., Sanilac County.

This shoulder should have been packed in ice or cold applications applied continuously for the first twenty-four hours; your blister simply added to the inflammation you already had. At the present time the animal should have absolute rest; should not be taken out of the stall for at least two weeks; this will accomplish much more than any local treatment. Hot water applied and massaging of the muscles will be found somewhat beneficial. Should the muscles remain shrunk away have your veterinarian inject equal parts of Tr. Iodine and chloroform deep into the muscle; inject about eight or ten drops of this solution in a place and place the injections about two inches apart. This should be repeated every four weeks until the shoulder is normal.—W. A. Ewalt, Veterinary editor.

REMOVING COLLAR BOILS

In answer to W. H. S., Newaygo County, would say that I had a collar boil removed by operation in 1912, from a horse four years old, and it has never bothered since. You can see the scar, but it has never been sore; of course you must use a perfect fitting collar. It took about six weeks to heal up.—J. M., Saginaw County.

FEEDING TOO MUCH

I have some hogs that don't eat what they ought to. I am feeding ground corn meal, and corn on the ear. Eighteen of them will only clean up one half bush of ear corn and about six quarts of meal to the feed. They grow but do not put on fat. They are last October pigs. What can I give them?—E. V. M., Genesee County.

You are feeding them too much corn, change the food to a more easily digested nature. After a short course on some other feed you will be able to put them back on the corn and they will take on fat. This should be done gradually though. Feed them a little charcoal in the feed morning and night. W. A. Ewalt, Veterinary editor.

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Oct. 28, Poland Chinas. E. R. Leonard, St. Louis, Mich.
Oct. 29, Poland Chinas. Clyde Fishet, St. Louis, Mich.
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257572, herl. sire, son of King Ona. His sire is from a 30 lb. cow that made 1,345 lbs. in one year and dam, Butter Boy Rosina 2nd 200, 540, made 29 lbs. and almost 800 lb. in ten months. She has a 33 and 34 lb. sister. Have some fine young bulls and heifers and some heifers bred to him all from A. R. O. cows with records from 22 to 30 lbs. Write for prices.
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age from 2 to 8 months
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two with 18 and 20 lb. seven day records. Five with good profitable cow testing records. Write for pedigrees and prices.

Herd free from disease.
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We are now booking orders for young bulls from King Pieter Segis Lyons 179506. All from A. R. O. dams with credible records. We test annually for tuberculosis. Write for prices and further information.
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His sire a 30 lb. son of Lakeside King Segis Alhan De Kol.
His dam, Glista Fenella, 32.37 lb.
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His three nearest dams average over 33 lbs. and his forty six nearest tested relatives average over 30 lbs. butter in seven days. We offer one of his sons ready for service.
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Bull calves from dams up to 28 pounds.

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A few choice bred gilts for sale. Also fall gilts and boars, some very good prospects of excellent breeding. Gilts bred to ORPHAN'S SUPERIOR by BIG ORPHAN'S EQUAL by BIG BONE ORPHAN by the BIG ORPHAN. Dam, BEAUTY'S CHOICE by ORANGE BUD, by BIG ORANGE A.

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Get a bigger and better bred boar pig from my herd, at a reasonable price. Come and see them. Expenses paid if not as represented. These boars in service: L's Big Orange, Lord Clausman, Orange Prince and L's Long Prospect.
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boars left. A few extra nice gilts left bred for April farrow.
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one yearling boar and also some fall boars that we will close out at a bargain.
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REGISTERED POLAND CHINA PIGS
3 BOARS AND 3 SOWS 8 WEEKS OLD FOR SALE. ADDRESS
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Orion, First Gr. Yearling
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DUROC JERSEYS, FALL BOARS, WEIGHT
200 lbs. each. Sired by a 800 lb. boar. Priced reasonable.
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PEACH HILL FARM Duroc sows and gilts sired by Proud Principal, Romeo Cherry King Brookwater Gold Stamp 7th and Rajah out of dams by Limited Rajah and the Principal IV. Bred to Peach Hill Orion King and Rajah Cherry Col.
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Sells Durocs Aug. th. Write for catalog.
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DUROC JERSEY FALL BOARS
sired by Orion Cherry King Col. 2nd, first aged boar at Detroit in 1919. These are growthy and the right type priced to sell.
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Duroc Jersey Sows and Gilts bred for Aug. and Sept. farrow. 1,000 lb. herd boar.
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DUROCS OF BREEDING SIZE AND QUALITY.
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Duroc sows and gilts bred to Walt's King \$2949 who has sired more prize winning pigs at the state fairs in the last 2 years than any other Duroc boar. Newton Barnhart, St. Johns, Mich.

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DUROC BOARS, GILTS AND BROOD SOWS of all ages. Sows bred or open. Newton & Blank, Hill Crest Farms, Perrinton, Mich. Farm 4 miles straight south of Middleton.

FOR SALE: ONE Duroc Boar from Brookwater breeding stock. Choice spring pigs.
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DUROC BOARS FROM PRIZE WINNING STOCK ready for service. Geo. B. Smith, Addison, Mich.

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Herd Boar—Reference only—No. 120219

1919 Chicago International
4th Prize Jr. Yearling

A few spring pigs left at \$25
BLANK & POTTER
Pottersville, Mich.

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DUROC GILTS BRED FOR AUGUST FAR- row. Spring pigs either sex.
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LARGE ENGLISH RECORDED BERKSHIRES. Bred gilts and spring pigs for sale.
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ARZA A. WEAVER, Chesaning, Mich.

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FOR SALE REGISTERED BERKSHIRES OF the most fashionable breeding. Bred or open. Gilts and young boars. Also a few fall pigs. No aged stock. Prices, \$50 to \$100.
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REGISTERED CHESTER WHITE PIGS FOR sale at prices that will interest you. Either sex. Write today.
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TWO FALL BOAR PIGS LEFT. BOOKING orders for spring pigs, \$15.00 at 8 weeks old.
W. A. EASTWOOD, Chesaning, Mich.

HAMPSHIRE A FEW BRED GILTS LEFT blood lines.
JOHN W. SNYDER, St. Johns, Mich., R 4

HAMPSHIRE

Am all sold out on sows and gilts bred for spring farrowing. Have a few sows and gilts bred for June and July farrowing that are good and priced right. Spring boar pigs at \$15 ea. at 8 weeks old. Satisfaction guaranteed. Call or write
GUS THOMAS, New Lothrop, Mich.

O. I. C.**BIG TYPE O I C****CHESTER WHITE SWINE**

A choice lot of spring and fall pigs. Two yearling herd boars. Two fine sows due in June and bred gilts. I ship C. O. D., register in buyer's name and guarantee satisfaction.
JOHN C. WILK, Alma, Mich.

O. I. C. Boar Pigs, Eight Weeks old, Sired by Mountain Giant. Reg. in your name, \$20 each.
HARLEY L. FRY, North Adams, Mich.

O. I. C. GILTS WEIGHING 200 to 275 LBS. in breeding flesh bred for March, April and May farrow. Guaranteed safe in dam. I will replace any proving otherwise to your satisfaction or refund purchase price in full. Have a few October boar pigs ready for spring service that are right priced to sell. Herd cholera immunized by double treatment. F. C. Burgess R3, Mason, Mich.

O I C AND CHESTER WHITE SWINE— Boar pigs of March farrow ready for June shipment. Price \$20 each. Best of bloodlines. Recorded free in C. W. R.
CLARE V. DORMAN, Snover, Mich.

FOR SALE—REGISTERED O. I. C. BRED sows and sucking pigs.
JOHN ODOERFER, Marlette, Mich.

O. I. C.—8 Choice young boars, March and April pigs at weaning time.
CLOVER LEAF STOCK FARM, Monroe, Mich.

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J. A. MILLER, Swartz, Creek, Mich.

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offers O. I. C. spring pigs, also special summer prices on breeding stock in White Wyandottes, Barred Rocks, White Chinese Geese and White Runner Ducks. No more eggs this season.
DIKE C. MILLER, Dryden, Mich.

O. I. C. SWINE—MY HERD CONTAINS THE blood lines of the most noted herd. Can furnish you stock at "live and let live" prices.
A. J. GORDEN, Dorr, Mich., R 3.

SHEEP

I AM OFFERING FOR FALL DELIVERY HIGH class registered Shropshire yearling ewes and rams. Flock established 1890.
C. LEMEN, Dexter, Mich.

FOR SHROPSHIRE YEARLING RAMS that have size and type write or call on
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Everything sold out, both ewes and rams. I am breeding 50 ewes to "Stroman 200" an excellent big boned type ram lamb that weighed 176 lbs. October 1. Booking orders for 1920 rams.
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White and Brown Leghorn and White Rock Pullets, 8 weeks and 13 weeks old, ready for immediate delivery.

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Let us give you a description of this stock. All of these Pullets and Chicks are fine birds of excellent growth. American and extra high class English White Leghorns.

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Two great breeds for profit. Write today for free catalogue of hatching eggs, baby chicks and breeding stock.
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S. C. BUFF LEGHORNS, BABY CHICKS, EGGS for hatching. Hens, Cockerels. Farm raised. Good laying strain.
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LEO GRABOWSKIE, Merrill, Mich., R 4

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Silver Laced Golden and White Wyandottes. Eggs from best quality, only \$1.75 per 15; \$3.25 per 30 by parcel post prepaid. Buy from old reliable, Clarence Browning, R2, Portland, Mich.

White Wyandottes, Dustin's Strain, culled by experts for utility, size and color. Eggs 15 for \$2.00, 50 or more 10c each, by mail prepaid.
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BLACK LANGSHANS OF QUALITY Bred for type and color since 1912. Started from pen headed by Black Bob. First prize cock at International show at Buffalo, Jan. 1912. Eggs \$3.50 per setting of 15. Winter laying strain.
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Cons. shipped by Parcel Post. Special price on 1,000-lots. Get your order in for some of these high grade chicks, hatched from selected bred-to-lay breeders, kept on free range.

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

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THOROUGHbred DAY OLD CHICKS
Barred Plymouth Rox.

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S. C. Brown and White Leghorns.

25 chicks, \$6.25; 50 chicks, \$11; 100 chicks, \$20.00.
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"The Shepherding of the East."
I sell and ship everywhere and pay express charges. Write for club offer and price list. Oxford, Shropshire and Felled-Delaines.
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Also 10 mighty nice ewe lambs for \$350. Come and see them.
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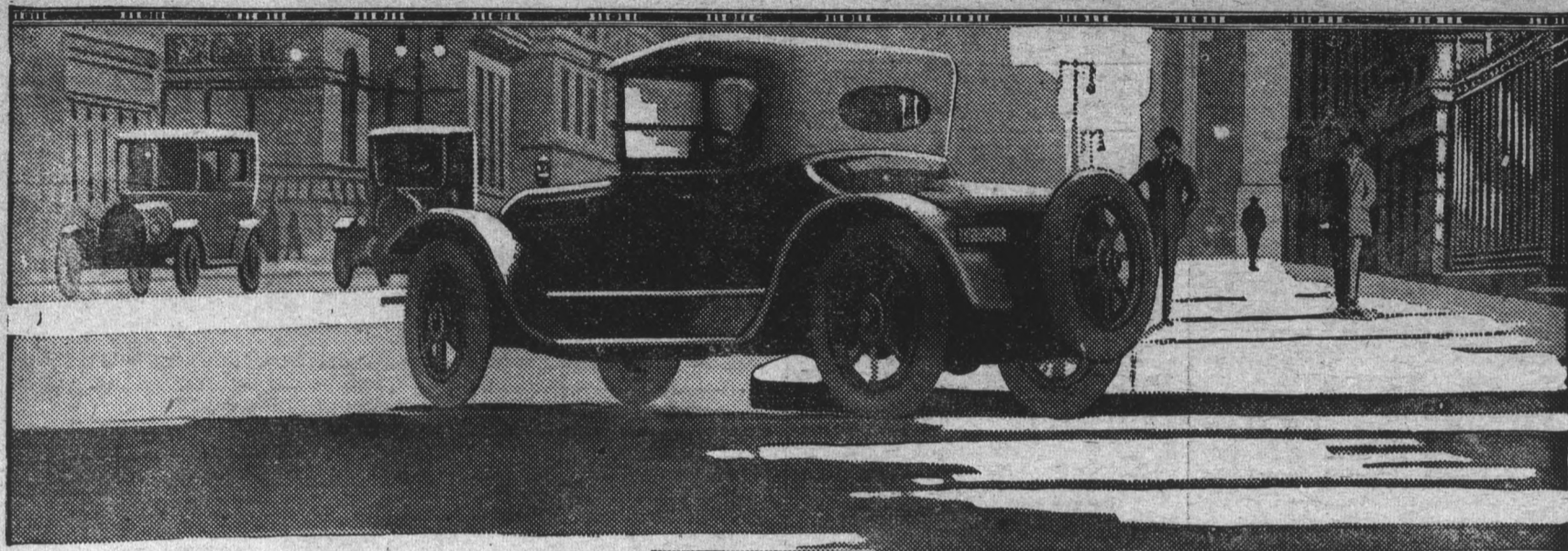
Spring gilts and fall yearlings bred for March, April and May litters. I ship C. O. D., pay express and register in buyer's name. If you want a BIG TYPE sow, guaranteed right in every way, write me.

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Five Million More Tires than last year

How much More Tire Economy



IT IS interesting to watch a car owner gradually becoming conscious of his tires. If his first tires don't give him what he has been led to expect, you will see him going back to the dealer for an allowance.

Finally he reaches the point where he prefers to shoulder his losses himself rather than argue the matter out with the dealer.

Meet him a year later and you will probably find him with two or three different makes of tires on his car.

* * *

There is less conviction in the minds of motorists about tires today than about any other subject connected with motoring.

The driver of the car in the foreground probably does not realize that by rounding the corner too quickly he may be taking as much as a thousand miles out of his rear tires.

A great deal of tire trouble can be avoided by slowing down to a reasonable speed in negotiating corners.

Despite all the claims, all the allowances, all the selling talks that are presented for the motorist's consideration, he goes along in his own way, seeking the tire that will give him the greatest economy.

Often you see him running foul of the irresponsible dealer.

But sooner or later he finds out that claims and allowances and selling talks can never take the place of performance.

* * *

More and more motorists are coming to realize that the

only way to tire economy is through *better tires*. Avoiding the dealer whose idea of business is merely to fill the eye or to supply a market and going direct to the *merchant who deals in quality*.

Never has the United States Rubber Company's policy of *quality first* been more thoroughly justified or widely appreciated than it is today.

Discounting, as it does, every temptation to force production in favor of a highly specialized, wholly standardized product.

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Even when the production of U. S. Tires has reached two or three times its present figure, the test will still be not how many tires—but *how good*.

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