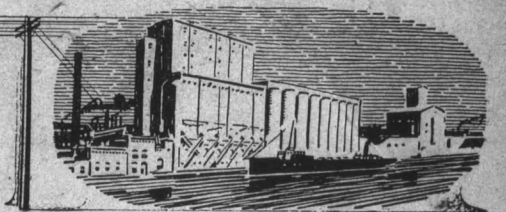


The Michigan **BUSINESS FARMER**



An Independent
Farm Magazine Owned and
Edited in Michigan



VOL. X, NO. 10

MT. CLEMENS, SATURDAY, JANUARY 6, 1923

\$1 PER YEAR



"Fit to Grace the Equipage of a King!"

Read Frank Roger's Article "Where Your Highway Tax Money Went?"—"The Truth About Henry Ford"—Agricultural and Business Survey—Also other Big Features found in no other publication!



Whatever else may fail

Linking city, village and farm, crossing mountain and wilderness, the telephone system challenges Nature in her strongholds and battles her fiercest moods.

Out on his lonely "beat" the telephone trouble-hunter braves the blizzard on snow-shoes, body bent against the wind, but eyes intent upon the wires.

North, south, east, west—in winter and summer, in forest and desert—the telephone workers guard the highways of communication. Traveling afoot where there are no roads, crawling sometimes on hands and knees, riding on burros, or motorcycles, or trucks, they "get there" as they can.

When Nature rages to that point where few things can stand against her, when property is destroyed and towns cut off, the telephone is needed more than ever. No cost is too much, no sacrifice too great, to keep the wires open. If telephone poles come down with the storm, no matter how distant they may be, no matter how difficult to reach, somehow a way is found, somehow—in blizzard, hurricane, or flood—the service is restored.

Whatever else may fail, the telephone service must not fail, if human effort can prevent it. This is the spirit of the Bell System.



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Current Agricultural News

STATE TAX LEVY CUT 2 MILLION

A REDUCTION of \$2,000,000, or more in the state tax levy next year is forecast in the closely trimmed budget for the coming biennial period, which the budget committee of the State Administrative Board was completing today.

Although no official announcement regarding the budget had been made, it was believed that the total for the fiscal year of 1923-24 would be approximately \$2,000,000 less than the state tax levy of more than \$17,000,000 this year. Further reductions, in the recommendations of the budget committee, may be ordered by the State Administrative Board before the budget is finally presented to the Legislature next week.

A \$30,000,000 Budget

It is understood that the budget total which will represent the recommended appropriations for institutions and departments—with the exception of the State Highway Department which members of the budget committee hope to finance from sources aside from the general tax—will be in the neighborhood of \$30,000,000 for the coming two years.

If that sum should represent the total appropriations made by the incoming Legislature for which state taxes would be levied during the next two years it would represent a saving of more than \$7,000,000, as the state tax in 1921 was more than \$20,000,000 and in 1922 more than \$17,000,000.

Two years ago the Legislature was presented with requests totaling nearly \$70,000,000, and the Legislature allowed but half the amount requested. The budget, as it will be presented to the Administrative Board, represents only the tax clause appropriations. In addition the corporation tax brings in something like \$6,000,000 a year, which goes into the general fund. It is reported that Gov. Groesbeck will urge the Legislature to remove the limit of \$10,000 provided in the Corporation Tax Law and if the Legislature makes the change the revenue from that source will be considerably increased. Whatever amount it is increased will probably mean a corresponding cut in the state tax.

Closing General Fund

The needs of the highway department are understood to constitute the principal worry of members of the budget committee. The department, it is said, would like a total of about \$8,000,000 or more a year for maintenance and the creation of a sinking fund for highway bonds. It will get \$3,500,000 or \$4,000,000 in 1923, from the automobile license fees. In addition, if its requests were to be met, it would take \$4,000,000 or \$5,000,000 from the general fund. That this amount will not be taken from the general fund, however, seems to be the prevailing opinion among members of the committees. A majority of them believe the legislature will enact a gasoline tax or boost the automobile license fees sufficiently to provide the needed money to take care of the highway department.

The prospective \$2,000,000 reduction in the state tax levy is based on the state tax as it now stands. The reduction may be much greater—from other causes taken the budget—before the Legislature concludes its deliberations. It will have tentatively before it a suggestion from a special tax commission that it abolish, or nearly abolish, the state property tax, and operate the state with the specific tax money now being paid into the primary school fund—about \$12,000,000 a year—and the corporation tax—about \$6,000,000 a year.

NEBRASKA FARMERS RUN OWN ELECTRIC PLANTS

NEBRASKA farmers, having failed in getting the electric companies of the state to supply them with light and power at a reasonable rate, have undertaken to do it themselves. The first of a number of farm electric companies to be organized under a new law has just received the approval of the state railway commission.

The farmers are mortgaging their

homes to get current but doing it under the modern way of issuing bonds. By petition of 10 per cent of the farm land owners in any described area the county board is obliged to order an election at which is submitted the question of whether the district shall bond itself to build a transmission and distributing system. If a majority votes in the affirmative all that is necessary is to invoke the powers of the state to get the current.

CHICAGO GETS TEN CENT MILK

THANKS to the Milk Cooperative Marketing Company the people of Chicago are saving thousands of dollars monthly on their milk bill. The Cooperative has broken the grip of a consciousness milk trust, which was recently found to be dumping good milk into the sewer in order to keep up the price by offering the storekeepers in the great city any quantity of milk to sell to their consumers provided the price is kept down to the cooperative level, which is two cents a quart less than the combine's prices. Nearly 200 grocery and delicatessen stores have taken advantage of the offer of the Milk Cooperative and are now selling pure, rich milk for ten cents a quart.

EIGHTH WEEK OF EGG LAYING CONTEST

THE week of December 26, concluded the second fourth weekly period. The standing of the pens for this period were as follows:

Evergreen Poultry Farm, W. W. 170; W. H. B. Kent, B. R., 155; J. A. Hanson, W. L., 149; Robt. Christophel, B. R., 147; H. E. Dennison, B. R., 146; Carterloa Farms, W. W., 143; F. W. Sinks, W. W., 139; L. W. Alstine, B. R., 137; Brummer's Poultry Farm, B. R., 136; Hollywood Poultry Farm, W. L., 131; H. A. Keister, W. W., 131, and E. E. Shaw, W. L., 130.

While Evergreen Wyandottes have made a remarkably good record for the month the high pen of the contest is still in the Leghorn class when J. A. Hanson's Leghorns finished with a weeks total of 43 eggs; 3 eggs below Evergreen bringing their total up to date of 303 eggs. Shaw's pen of Leghorns have dropped to second place with total production of 296 eggs. In the Leghorn class Hollywood's pen remains in third place, Taylor's pen fourth.

Dennison's Barred Rocks still lead this group with 279 eggs which also puts him fourth place for the entire contest. Kent's pen with a production of 269 moves up to second place and holds sixth place in the contest. Brummer's Poultry Farm dropped to third and Christophel remains in fourth with 257 eggs.

The exceptional good record maintained by the Evergreen Poultry Farm has put this pen in the lead in the Wyandotte section. The production of the Ancona class increased very slightly but the birds in this section are showing considerable improvement and we are expecting to see an increase here before very long.

Dunnings Reds maintain their position at the head of the Red section and Mrs. Travis' pen beat the College Reds to second place when they scored 25 eggs for the week and a total to date of 177.

The Wyandotte section is leading the contest with a 40% production. The Barred Rocks show 4% increase over last week. The Anconas a slight increase, the Reds and Leghorns show a slight decrease and the miscellaneous breeds are holding their own.

TO MARKET POULTRY AND DAIRY PRODUCTS

Co-operative dairy marketing associations of the United States plan to set up a national sales agency for collective selling of butter, cheese, condensed milk, eggs and poultry. E. B. Heaton, director of the dairy marketing department of the American Farm Bureau Federation, announced recently. A committee will meet in Chicago Jan. 16, to work out details for establishing the co-operative sales force. Branches are planned for all large consuming centers, he said.

SATURDAY
JANUARY 6th,
1927

VOL. X, NO. 10

Being absolutely independent
our columns are open for the
discussion of any subject per-
taining to the farming business.

"How to the line, let the chips fall where they may!"

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Mich., under act of March
3rd, 1879.

Says Gasoline Tax Will Solve Highway Problem

F. S. Newton, of Saginaw County, takes Issue with Horatio Earle who Advocated One Mill Property Tax as More Equitable

"FARMER" Earle is worried lest the State Highway Department have to go to the legislature and "beg for money."

He says we support the University of Michigan to educate the rich and propose to exempt the rich from taxes on their land. Who owns the big cars by the way? The hard pressed farmers. They are not, generally speaking sporting Cadillacs, Winton's and Paiges. On the other hand who are the majority of the land owners? The dirt farmers—not the dude farmers, like the distinguished advocate of an extra mill tax on real estate.

Considerate isn't it proposing to the discouraged farmers to sell or give away their property if unwilling or unable to pay their over-weening taxes.

Again the city "farmer" falls over in his attempt to excoriate the gasoline levy in one breath as discriminating in favor of Henry Ford and against the small car owner and in the next declaiming it is a thrust at the auto industry! That's the cat let right out of the bag. The oppressed motor manufacturers aren't concerned lest the owners of Fords pay a dollar or two more a year to help in the highway upkeep and the buildings. Oh, No! They're bothered about the possible check that might be put on the auto industry by requiring it to stand on its own feet and pay for the roads itself demands. Let them, in the words of the noble Roman, "if they don't want to pay, sell or get out!"

Too bad! That army of gasoline collectors! How about the swarm of employees, runners up and runners down, of our State and County highway departments? Surely Horatio should be better informed than to imagine such mountainous difficulties in a tax collected at its source.

In this connection note that Ohio and several of our neighboring states have adopted a gasoline tax. That means that the Michigan people who drive across the state line pay for the roads of Ohio, etc. Yet we are urged to impose no return tax on Ohio tourists who travel over Michigan's highways.

As to fairness, why should the owners of land, who may not own a car, pay for the hard surface type of roadway heavy cars require, while the benevolent owners of limousines and 8 ton trucks are let off free? Shouldn't those who dance pay the fiddler? Don't for heaven's sake compel the poor farm and home owners to fiddle and dance at the same time.

Mr. Earle is a Detroit manufacturer. He farms by proxy and evidently is in blissful ignorance of the desperate plight the agriculturalists are in. I would like to take him over a six-mile section of a trunk line in Arenac County which traverses light land. Four residents only along the six-mile stretch have the pleasure of owning either Fords or cars. Several live in log cabins. A considerable portion have been compelled to borrow money to meet recent taxes. Some are also in the district of the Covert road and levied on for that. Of course they have the privilege of seeing many fine cars whiz by their doors, kill their chickens and menace their children. Perhaps this show is worth paying for. But in the name of common sense is there to be no limit? Who then will buy the automobiles of Detroit factories. The fact is we are rapidly reaching the precipice. And such thoughtless, reckless urging of extravagant highway construction as our state is now rioting in will soon

The Business Farmer has opened its columns to a general discussion of the Gasoline Tax proposition believing it is of the utmost importance to the tax-paying farmers of Michigan. Mr. Earle's article referred to appeared in the December 9th. issue on this same page. Now what do you say?

drive us over. Once the farmers of Michigan are forced to quit, we'll then realize that agriculture was indeed our basic industry. We can't go on much longer pyramiding property on a single industry, and that of a mushroom sort. As between the motor industry and agriculture it is plain which way "Good Roads Earle" leans. He says, "Let the farmers sell out." How can they when all want to sell and no one to buy? Where have his eyes been as he tours about in his fine car, that he has failed to note the pathetic "For Sale" signs on farm after farm and if he ever drove off the trunk line he'd see enough abandoned farms and not bad ones either, to set him thinking in a more prayerful mood. When the American farmer's back is broken what do you suppose will happen to the automobile and tractor industry.

"Good roads for the farmer" has been a very much abused shibboleth. The program of our State Highway Department has been to put all the emphasis and spend all the public money on trunk lines with no regard to farm and marketing needs or with those needs treated as purely incidental. Why is it that very many roads thru our best farming country are now, after this orgy of spending, in worse condition than in the old dirt road days? Because the highway taxes are so over-burdensome that townships have felt it unavoidable to cut off at the one point possible and in ever so many townships of Central and Northern

Michigan no work has been done on local roads for the past two years.

What benefit having a \$35,000 a mile concrete boulevard that the produce can only reach by being hauled thru trackless mud? Again these pieces of state built pavement thru our up state villages, which our Highway Department designed to ornament the Dixie and other snake trails, are of no use to anybody except the few contractors who were enriched by the building. When the farmer with his wagon reaches this insult to his intelligence, his haul is done. There is no escape from the conclusion that our state highway officials have been guilty of wilful extravagance or worse. Had the bond issue been suspended and the petition of over 100,000 real Michigan farmers for a road holiday been considered by our State Administrative board, we should for one thing have witnessed a big come down in the prices demanded by the little pool of road contractors. The farming industry would have had little chance to recover from the smashing blows of 1920, and our State would not suddenly find itself saddled with a billion dollar load of highways built by federal, state and county appropriations, but everlasting costly and difficult to maintain. We have simply gone highway mad.

But now the question is. How are these colossal works which were expensively, and as a rule, poorly constructed to be kept in repair? Ex-officio Earle shouts, "Let the land owners foot the bill. That's

nice. They paid for these monumental works which have made many a small man great and lined up in favor of the road officials all the politicians thru the pork-barrel allotment of bits of pavement to every little town. Yes, dump on to the hapless land owners more taxation. They're getting off too easily. But don't, for goodness sake, rub the fur of the foreign tourist or the commercial truck operator the wrong way. They are performing too important a public service speeding with heavy loaded cars over our costly roads. They haven't had enough unearned favors with their snouts in the public throng and should be freely permitted to get their feet in too.

What does H. S. say to the declaration just passed by the Ohio State Grange that land is too heavily taxed?

The fact that Brother Earle and the writer are both non-resident farm owners. But the writer, not being a wealthy manufacturer, not a high salaried state official (nor ex-official) and also living out of the confines of the metropolis, happens to be closely in touch with the hard working tillers of the soil. No one, who knows their harassed condition at the present time, can fail to be impressed with the fact that their limit has been reached. After years of hard sledding and a complete smash in prices of everything they produce with no corresponding drop in the prices of what they have to buy, they now see skyrocketing taxes. They cannot stay on the farms and continue to produce if it continues.

What it means to our institutions to have our land workers menaced with extinction may be faintly imagined when we recall that in every past crisis in our Country's history the American farmer has been the bulwark of liberty and of law and order. They have been the saving element in society, without which it would surely have gone on the rocks. What now is to save our social fabric most seriously jeopardized as it is by national and international strife, if the independent yeomanry of our nation is wiped off the slate—or forced into factory jobs? Is the motor industry, with its breeding of discontent, luxury and laziness?

Ill fares the land, to hasten ills a prey,

Where wealth accumulates and arts decay,

Princes and lords may flourish and may fade,

A breath can make them as a breath hath made,

But a bold peasantry, their country's pride,

When once destroyed, can never be supplied.

It is a brilliant flash of imagination to conjure up an army composed of all owners of motor vehicles. "Richmen, poor men, beggar men, thieves; lawyers, doctors, merchants, chiefs," with the enraged washerwoman of our households bringing up the rear, and all this motley host flourishing bludgeons and broomsticks over the oppressive penny tax on gas. But a clearer insight into prevailing public sentiment of the times would have suggested that a movement like the gasoline tax which has in the short space of two years been enacted by 18 states and is being urged by farm organizations throughout the country is considered eminently just by a great number of owners of motor cars as well as plain citizens generally, and like the illustrious old Roman from whom he took his name, Horatio is apt to find himself left alone to defend the bridge.

—F. S. Newton, Saginaw, Michigan.

Says Feeding Potatoes Will Save Market

WHAT is the matter that we farmers can not find some way to take care of the over-production of potatoes this year? Are there not men among us that can start a successful feeding campaign?

We are told by our Experiment Stations that potatoes are worth from 25c to 30c per bushel for feeding to cows. Now if people do not want potatoes to eat suppose we turn them into butterfat. We surely cannot lose anything by feeding them they are only worth about 18c a bushel and the chances are that they will not be worth much more unless we do feed them.

If everyone would feed about four bushels out of every eight they have there would be no potatoes to throw out next spring and we probably would get 50c or 75c a bushel for what we have to sell.

I am feeding all I can and intend to feed as long as they stay below 30c a bushel. Now if everybody would feed we could sell at a profit instead of a loss. Other businesses stick together and make it pay, why can't we? Come on farmers, let us feed. W. N. Stephens, Edmore, Michigan.

Hints on Feeding Potatoes to Livestock

ACCORDING to the U. S. Department of Agriculture, potatoes may be fed to livestock in small amounts in connection with other feeds.

While they may be sliced and fed with dry feeds, it is best to cook them before feeding, as heavy feeding of raw potatoes will cause scouring. Under ordinary farm conditions, boiling or steaming is the most economical method of cooking the potatoes for livestock. Steaming increases their feeding value about 60 per cent.

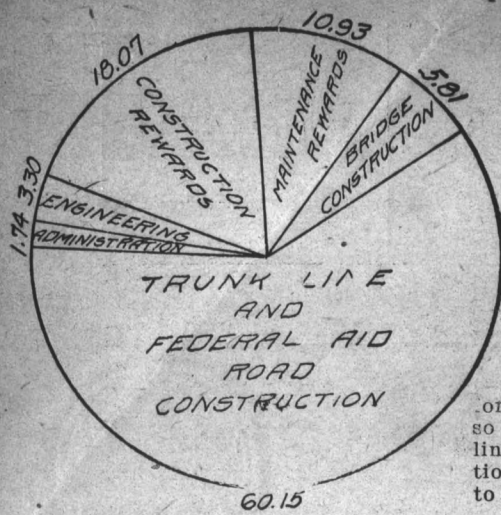
The low protein content of potatoes makes it advisable to feed them in connection with feeds that are relatively high in protein content. Feeding investigations indicate that when potatoes are fed with other feeds to balance the protein requirements, from 250 to 450 pounds of cooked potatoes have a feeding value equal to about 100 pounds of corn, while from 500 to 600 pounds of raw potatoes are required to equal 100 pounds of corn.

Horses—Potatoes are palatable and well suited for use as a horse feed. It is safe to feed as high as 15 pounds a day to work horses. They are equivalent to about one-third their weight in hay. When potatoes are fed, a legume hay is a desirable supplement. If a grass hay, such as timothy is fed, the ration should contain feeds rich in protein, such as concentrates, legume hay, etc. It is advisable to chop the potatoes to lessen danger of choking.

Cattle—Cooked potatoes may be fed to cattle at the rate of from 25 to 30 pounds a day per 1,000 pounds liveweight. The allowance should be lessened somewhat if they are fed raw, on account of their tendency to produce scouring. A heavy allowance of potatoes, however, produces milk and butter of poor flavor.

Where Your Highway Tax Money Went

The Question now uppermost in every Taxpayers' Mind is answered by Frank F. Rogers, State Highway Commissioner



How your 1921 dollar was spent.

MOST State Highway Departments started from small beginnings, probably none of them smaller than the Michigan Highway Department when it was first organized, July 1st, 1905. It then consisted of a Commissioner with a salary of \$2,500 a year, a Deputy at \$1,800 a year and a stenographer at \$1,200. That year there was an appropriation of \$30,000 of which \$10,000 was for departmental expenses and \$20,000 with which to pay state rewards on roads for one year, but since only 20 miles of roads were built that year there was plenty of money to meet all the demands for state rewards and some money to spare.

It is also of interest to note that as late as 1912, the appropriation for departmental expenses had not exceeded \$10,000 a year. It is worthy of note, however, that the Legislature of 1911 passed a budget allowing the Department \$15,000 a year but \$5,000 of this was cut off by the Governor when he signed the bill so that for the first eight years the department was obliged to scrimp along with this small amount which covered salaries, traveling expenses and other departmental items.

This caused the Commissioner to remark in 1913: "The work of the Department has necessarily increased in proportion to the number of miles constructed but on account of the fact that no greater appropriation is available for the expense of the Department than there was when organized, it has been impossible to give the Commissioners building roads, the detailed instruction which is for the best interest of the State and the community where the road is being built. Many counties are adopting the county road system, nine during the past year, making 44 in all. Many of these are bonding for large sums for improving roads and unless careful supervision is provided to direct construction, much money will be wasted."

This condition of things existed until the Legislature of 1913 made an appropriation of \$18,000 for departmental expenses for the year ending June 30, 1914 and \$20,000 for the following fiscal year. In addition to that the Legislature of 1913 passed the State Trunk Line Act which made appropriations of \$200,000 for the first year and \$300,000 for the second year for the purpose of paying trunk line rewards and building trunk line bridges and "paying salaries and running expenses incurred by this Act." This was the beginning of great things

for the Highway Department and also marked the beginning of trunk line highway and bridge construction on a scale heretofore thought to be impossible in Michigan.

I have before stated and wish to again repeat my regrets that this Trunk Line Act was not called the Alsweide Act, thus giving due recognition to Senator Alsweide through whose untiring efforts in the Legislature it became a reality.

Under the provisions of this Act the Highway Department expanded rapidly. The Commissioner was instructed to "cause preliminary surveys to be made and establish routes of the several divisions of the state trunk line highways herein provided and he is empowered to employ such engineers, clerks and other employees as may be necessary to carry out the provisions of this Act," which was given immediate effect.

The State Highway Commissioner was also directed "to design all bridges and culverts and construct all bridges greater than 30 ft. clear span on state reward trunk line highways," which made the employment of a bridge engineer an immediate necessity.

In this connection it is again worthy to note a recommendation of Mr. Earle, first State Highway Commissioner, in the first Biennial Report of the Department, which was as follows: "Give the State Highway Department the means to employ a first class bridge engineer who will save the state, through the townships and counties, many times his salary and expenses each year."

As the result of the expansion of the Department made necessary by these new laws, at the close of the fiscal year 1914, the Department had 35 employees and a monthly payroll amounting to \$2,673.52.

In 1915 the Legislature passed the so-called Covert Act, Act 59, P. A. 1915, which provided an additional method for improving and constructing public highways, paid by a special assessment upon the lands benefited thereby. Under the provision of this Act, petitions come direct to the State Highway Commissioner for all inter-county roads, and also for all roads that might be petitioned for in counties not working under the county road system. At present all of the counties of Michigan have adopted the county road system and all are functioning under it except Oceana and Benzie which counties have never put the county road law into operation.

In 1916 the first Federal Aid Act in recent years was passed by Congress which was followed by the Michigan State Federal Aid Act passed by the Legislature of 1917. It was impossible to begin actual construction of Federal Aid roads until the Michigan Act was passed assenting to the provisions of the Federal Gov-

ernment and also appropriating funds to meet Federal money.

This first Federal Aid Act made a cash appropriation of \$75,000,000 which was to be divided among the several states, one-third according to area, one-third according to population and one-third according to post road mileage. This provision brought to Michigan nearly three per cent of the Federal appropriation or a total of \$2,173,510.04.

Under the provisions of this Federal Aid Act and all subsequent acts up to this time, the states must match Federal money, dollar for dollar, in order to secure it but under the terms of this particular Act the maximum that could be received from the Federal Government was limited to \$10,000 a mile.

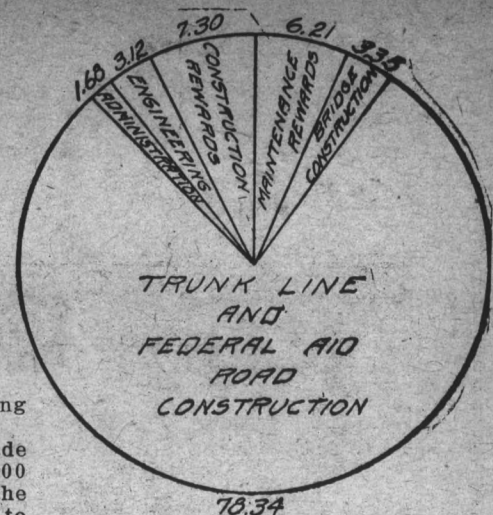
While Michigan, under the provisions of the Trunk Line Act, had been building trunk line bridges and even now was constructing roads under the provisions of the Covert Act, this Federal Aid Act made it mandatory that the states, in order to secure this money, should take active charge of the construction and maintenance of all roads in which the Federal Government participated. In order to comply with these requirements the Legislature of 1917 provided an appropriation of \$225,000 for the fiscal year ending June 30, 1919. This Act placed much responsibility and all of the details of construction upon the state and the department grew rapidly until in June, 1917, it had 67 employees and a monthly payroll of \$5,965.18.

During February of 1919, the Federal Government passed another appropriation of \$200,000,000 which made available for Michigan \$5,786,785.48. By this time, however, the state began to see the necessity of completing the state trunk line mileage of Michigan which now covered nearly 6,000 miles under the provisions of the Trunk Line Act of 1913 already mentioned in the article.

It became apparent, however that if the Federal funds were to be matched promptly and if the trunk line system of the state was to be completed within the lifetime of the present generation, that work on these roads would have to proceed more rapidly.

Accordingly the constitutional amendment was submitted to the people at the April election of 1919 which provided that the Legislature might issue not to exceed \$50,000,000 in bonds for highway construction. This money, for the most part, was to be used in the building of trunk line roads and bridges including such roads as the Federal Government was willing to participate in.

The bond issue carried by an overwhelming majority at the April election of 1919 which was followed by



Your 1922 dollar bought more roads.

the passage of the so-called Aldrich Act, Act 19, P. A. 1919, which provided among other things that "all trunk line highways established under provisions of Act 334, P. A. 1913, as amended, shall hereafter be constructed, maintained and improved in accordance with the provisions hereof under the direction and control of the State Highway Commissioner.

The Federal Aid Act originally passed in 1917 was also amended so as to co-ordinate with the Aldrich Act just referred to, both of which provided for a certain amount of financial participation from the counties on all trunk line and Federal Aid construction, the financial assistance from the counties being the same whether the roads were constructed wholly from the bond money or partly from the bond money and partly with Federal Aid.

These laws are still in force, having been amended slightly by the Legislature of 1921 but still call for assistance from the counties as follows: Counties with a valuation per trunk line mile of less than \$50,000 pay only five per cent of the cost of building trunk line and Federal Aid roads while counties with a valuation of over \$50,000 per trunk line mile pay 25 per cent of the cost of construction of such roads. Counties of intermediate valuations range in between these extremes, the rise being by steps of 2½ per cent in each case as the valuation increases.

A third Federal appropriation of \$75,000,000 was made in November, 1921, which made available to Michigan \$2,249,532.43 of additional Federal funds, the total Federal funds being more than \$10,000,000.

Again in June, 1922 the Federal Congress made a fourth appropriation of \$50,000,000 of which Michigan's share was \$1,499,688.29. This Congress also tentatively agreed upon an additional appropriation of \$65,000,000 and \$75,000,000 for succeeding years but this money will not be available until it has again received the approval of Congress.

Under the provisions of the several Acts above referred to, viz. the Covert Act, the Federal Aid Act and the Trunk Line Act, the State Highway Department has already placed under construction 2,821 miles of road at a total contract price of \$46,886,421.68.

It goes without saying that these millions of dollars worth of road construction in charge of the Highway Department each year during

(Continued on page 19)

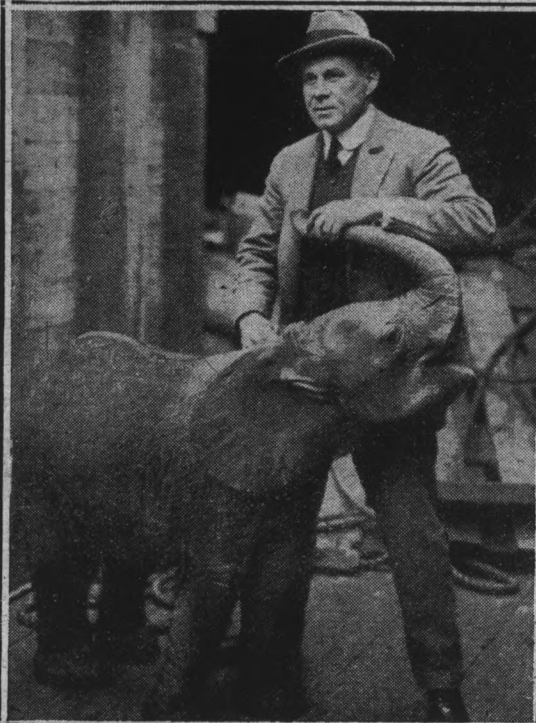


Fine stretch of paved road on M-11 in Ottawa county Mich., just south of Grand Haven.



View along M-11, about 2 miles north of Twelve Corners, in Berrien county.

PICTURES FROM FAR AND NEAR



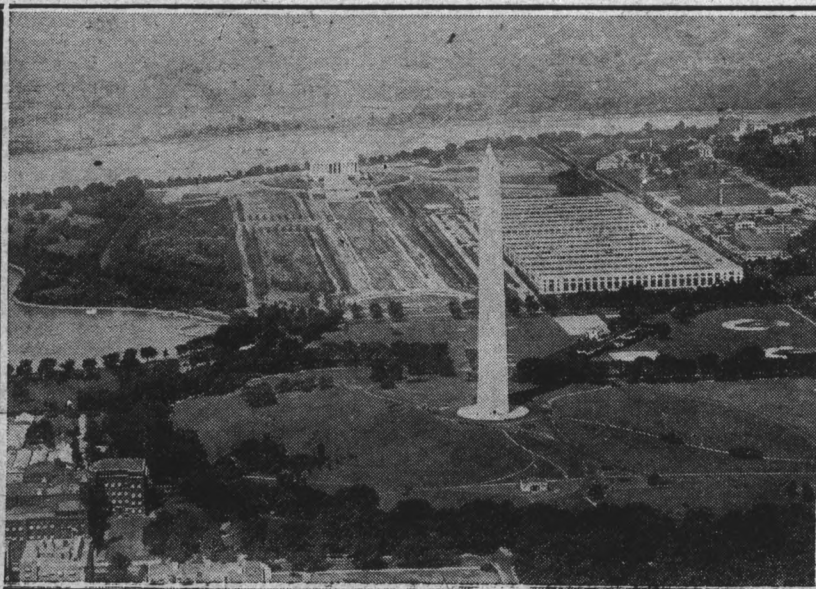
Here is the Loxodonecyclotis.—This "Pigmy" elephant arrived in New York on board the S. S. President Van Buren, and is seen with his captor, Captain Edward Cunningham. He is owned by the Bronx Zoo, New York City. He is one of the only two in captivity, and weighs 400 pounds.



Sand, Mermaids, 'n everything.—The Pollywog Restaurant has taken Greenwich Village, N. Y., by storm, for this new eatery on West 4th St., boasts of a sand floor; charming bathing beauties await your slightest wishes. There are beach umbrellas, fish on the walls, everything to give you that salt air tang.



Latest portrait of Italian Premier Mussolini.—Taken at Lausanne, Switzerland, where he has been attending the Peace Conference. Mussolini is reported to have stated that he had no intention of letting Germany get away without paying her war debt to Italy.



Seeing Washington by Airplane.—Everything centers around the Washington monument. On the lower left hand corner is the Bureau of Printing and Engraving, in the background, to the right, is the Navy Department and Munitions Building.



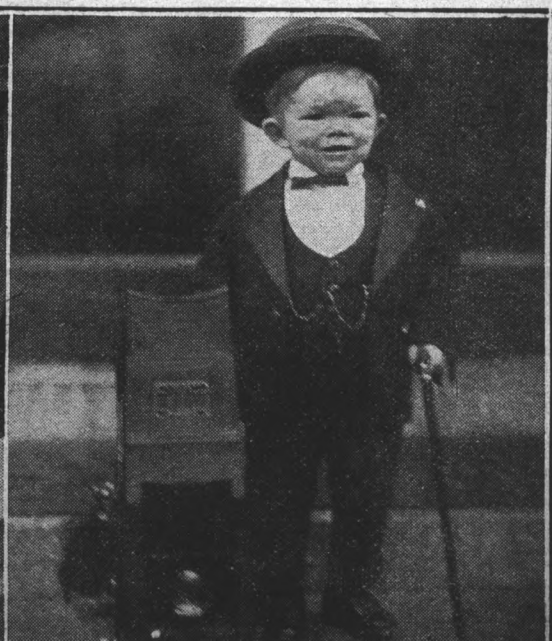
What is the pig population of the U. S. A?—Replies to 500,000 questionnaires distributed by rural mail carriers in a nation-wide pig survey are beginning to pour into the Department of Agriculture. Photo shows girls at work counting the "Pig Census."



David A. Brown, former Detroit newsboy, now a nationally known philanthropist, whom we mentioned last week editorially, as the man who told of the frightful conditions in Russia, after his six months of investigation there.



"Tiger" visits Independence Hall.—Georges Clemenceau, "Tiger of France," places his hand on the Liberty Bell in Independence Hall, Philadelphia, Pa., where he pleaded the cause of his country. His last speech in America was at the A. F. B. F. convention.



Smallest man in the world.—Major Mite, (Clarence Howerton) is 28 inches tall and weighs 19 pounds and is 18 years old. Major Mite is two inches shorter than Tom Thumb. At birth he weighed 9 pounds.

The Truth About Henry Ford

By Sarah T. Bushnell

Early Struggles—Ford's Failures—Organizing the Present Company



MR. HENRY FORD

(Continued from Dec. 23rd issue.)

Before long others than Mr. Ford were convinced that the horseless vehicle was a practical commercial proposition, and a company was organized in Detroit with Mr. Ford as the chief engineer. But at the end of the year little progress had been made in perfecting the machine and it was decided to let Mr. Ford go and employ another draftsman. This company later became the Cadillac Motor company. Mr. Ford's car was returned to him and the inventor organized a company of his own. This second venture likewise proved a failure, but reverses served only to strengthen Mr. Ford's confidence in the future of his invention.

He decided to perfect a racing car, sold his old machine and devoted all his energies to devising a car that would establish a speed record. Rumors of his new plans spread and many Detroiters visited the Ford shop to inspect the new marvel—that was to be. Tom Cooper, the champion bicycle rider, visited Detroit and offered his cooperation and financial assistance. Cooper later was killed in an automobile accident in Central Park, New York. An interesting story of this period has to do with one "Coffee Jim" and his financing the Ford racer. The story, sad to relate, is unfounded; a man who operated a night lunch car in Detroit took a great interest in Mr. Ford's work, but advanced him no money. The financing of the racer, which was called 999, came from the farms in Springwells and Dearborn township.

Mrs. Ford has vivid recollections of that period. "Expenses were so great that I thought we never again would have any money for ourselves," she said.

Work on the car went steadily on, for a race had been arranged and Mr. Ford was eager to win it. To test the carburetors a steep grade was necessary and the steepest the inventor could find was in the cemetery. Here the final tests were made and the car was finished on the day set for the race, which was held on the Grosse Pointe race track, ten miles away. For days Alexander Winton had been on the ground with his car tuning it up for the great event. No other cars were entered, but a hilarious crowd was present to see the strange contest. The Winton car was finely finished and the low-slung, strange looking 999 seemed outclassed. But the race is not always to the beautiful, and 999 won.

In 1902 Mr. Ford began experimenting with a two-cylinder car. The work was carried on in a small wooden shop on Park avenue and Grand River, back of the Parker and Webb building. The messenger and handy man about the place was John Wandersee; Gus Degner was the mechanic, and C. H. Wills was draftsman and "boss" of the "force." The wages paid averaged twenty-two cents an hour. Mr. Ford gave up his position as coal buyer for the Edison company and devoted all his time to the new car. One of his friends was Alexander G. Malcomson,

a prominent Detroit coal man. Mr. Malcomson was greatly interested in Mr. Ford's project and often visited the shop. Sometimes he was accompanied by his bookkeeper, James Couzens, in whose judgment he had great confidence.

One day Mr. Malcomson remarked to Mr. Ford, "Henry, my boy, you are working mighty hard, but you are not getting ahead fast enough. What you need is a barrel of money."

Henry Ford's gray eyes twinkled. "I reckon I'll have to make haste slowly," he replied. "I've tried two companies already and it looks like I am too venturesome. I'd better stick to the slow pace I am following now. If we could build a lot of machines and make them cheap enough all of us working in this little shop would be rich."

"You've got grit and it takes grit to put over a new idea," declared Malcomson. "I've had my eyes open and before you know it Haynes, Duryea and Winton will be so far ahead that you'll never catch up. It looks like we'll be obliged to organize a company—a big company. We ought to get together a hundred thousand dollars; that would be enough to start the wheels going. I would be willing to put up about twenty thousand in cash. You can put in old 999," and he pointed to a corner where the machine stood. "You've used up a deal of money in experiments—I expect you have spent all of seven thousand, and your time has been worth a lot. Suppose we start in as equal partners; I'll furnish the money and you the hard work—and genius."

Henry Ford, a joker himself, feared his friend was jesting. "And then what?" was his guarded question.

"Why then, we'll move this big working force of yours over to a building in Mack avenue. I'm nearly positive I can organize a company. Jimmy Couzens has saved up about two thousand dollars. He is young and level-headed and can afford to take a chance. Besides, Jimmy knows a lot about business. I'll add him to the force and I'll peddle the stock. We can try it anyway. If we fail—"

"We won't fail," Henry Ford interrupted; "we can't fail. We'll either succeed or I'll die in the attempt." He shut his lips grimly; then a cheerful smile appeared and he added, "we can have a lot of fun doing the right thing."

Even at the time it was Mr. Ford's idea to make good cars in large numbers and for a low price. In a few months the plant was moved to the Mack building and Mr. Ford was enabled to devote his time to perfecting his machine. The astounding success of the Ford company dates from that day.

It is interesting to note the rise of the men who worked with Ford at that time. As the business grew Mr. Ford sent John Wandersee all over the country to investigate and study chemistry, and today Mr. Wandersee is head chemist at the Ford company. Gus Degner is superintendent of inspection at the same plant. Harold Wills was sent about the country to study steel. It is he who invented molybdenum, the toughest and lightest of steels. At the time of the Chicago Tribune

libel trial it was testified that Mr. Wills had received a salary of \$80,000 a year for some years. Mr. Wills is now a motor manufacturer himself. Enough has been said here to show that these men, although they did not buy stock in the Ford company have been rewarded with salaries and bonuses that have made them rich. They have shared in Henry Ford's prosperity just as if they had shared in the original risk.

Mr. Couzens invested twenty-five hundred dollars in the company and organized and directed five departments—bookkeeping, time clerk, purchasing agent, sales manager and business manager; but he had no assistants; he did all the work. Mr. Malcomson found it more difficult than he had expected to sell the company's stock but finally secured the following purchasers:

John S. Gray, a rich candy maker, who put in ten thousand, five hundred dollars in cash.

John Anderson of the law firm of Anderson & Rackham, attorneys for the company, who invested five thousand dollars.

Horace Rackham, his partner, who likewise invested five thousand dollars.

Albert Shelow, who invested five thousand dollars and later sold his holdings to Mr. Couzens for twenty-five thousand.

V. C. Fry and C. H. Bennett, who bought five thousand dollars' worth of stock each and later sold out to Mr. Ford and Mr. Couzens for twenty five thousand each.

Alexander G. Malcomson, who put in twenty-five thousand, five hundred dollars in cash.

Mr. Ford was given an equal amount of stock for his assets.

At the end of two years the largest stockholders in the company were Alexander Malcomson, Henry Ford, James Couzens and John S. Gray. The Dodge brothers offered their foundry for the making of the car parts and each invested five thousand dollars in the company and became a director.

Back of the selling of one block of stock is an interesting story. Both Mr. Anderson and Mr. Rackham were young attorneys and Mr. Malcomson was their client. He talked to them of the company he was organizing, and Mr. Anderson, at once put his money into it, "taking a chance, as he said. Mr. Rackham's case was different. He lived only two doors from the Ford home and had no acquaintance with the inventor, but his health was poor and he could not afford to speculate with his savings. So he went to a leading banker for advice.

The banker took him to a window. "Look," he said pointing to the street. "You see all those people on their bicycles riding along the boulevard? There is not as many as there was a year ago. The novelty is wearing off; they are losing interest. That's just the way it will be with automobiles. People will get the fever; and later they will throw them away. My advice is not to buy the stock. You might make money for a year or two, but in the end you would lose everything you put in. The horse is here to stay, but the automobile is only a novelty—a fad."

Mr. Rackham was convinced. But a few days later he met Mr. Malcom-

son who showed him facts and figures and talked eloquently. Rackham was convinced again—but the other way. He sold some real estate and took the money to Malcomson. "Here, take this money and buy the stock before I have time to change my mind again," he said. Anderson and Rackham drew the incorporation papers for the company and each man held his stock, selling it finally for twelve and one-half million dollars.

CHAPTER V.

The Story of Magical Success

On October 1, 1902, Mr. Couzens took a trial balance—in pencil—which showed that the Ford company after three months of operation was making rapid progress. By January, 1903, the first commercial car was sold, and soon orders began to come in faster than they could fill them. One hundred and sixty-five cars were sold that year. A larger factory, located on Piquette street, was secured and the work went forward rapidly. In 1905 the company began to pay 6 per cent dividends.

In this Piquette street plant a young bookkeeper named Klingensmith was employed at a salary of sixty-five dollars a month. Mr. Ford advanced him rapidly and in time Mr. Klingensmith became Vice-President and Treasurer of the Highland plant. He testified in the Tribune suit that for several years his salary had been \$75,000 a year. The drafting room at the Piquette street plant was in charge of Carl Emde, a German, who took out his first naturalization papers in 1902, and his second papers in 1911. When the company moved to the Highland Park plant Emde was put in charge of the tool room. This employee suddenly found himself in the spotlight of publicity in the last days of the Ford-Newberry senate campaign, as will be told later.

Another employee at the Piquette street plant was a pattern maker named Sorenson, a Dane, who for years has been manager of the River Rouge foundry and tractor plant.

These are some examples of the way in which Mr. Ford has rewarded the men who have worked faithfully for him during long years. It always has been a source of pleasure to him to share his prosperity with his employees.

Following the famous race at Grosse Pointe, when the Ford 999 defeated the Winton car, there were other races in various parts of the country, but in these Mr. Ford had no part. Finally, however, he decided to rebuild 999 and make it the "fastest thing on wheels." Soon afterward it was decided to hold a race against time on the frozen surface of Lake Sainte Claire in the hope of breaking the record then held by Vanderbilt. The race track was built of cinders laid on the ice and racing officials had come from many cities to serve as judges and time keepers. Mr. and Mrs. Ford and their small son, Edsel, had gone to the lake the evening before and Mr. Couzens followed them on the morning of the race. Mr. Ford was to drive 999, for the event was all important to him.

Early in the morning the engine was tested as a precaution, and to the consternation of the officials in the factory did not run well. They toiled over it like mad and finally, two hours before the time set for the race, the trouble was corrected, and the start made for Lake Sainte Claire, then considered a long way out in the country, although only ten miles from Detroit. Distances have shrunk since that day. The weather was cold and raw, with a high wind that added to the discomfort of the spectators. Mr. Ford huddled in a short thick coat of black curly astrakhan and wished 999 would arrive.

Finally the car appeared down the road and preparations for the start were completed at once. Mr. Ford took his seat, and at the crack of the pistol threw on the power. For a moment 999 stood on its hind wheels, as if imitating a broncho,

(Continued on page 17)

HENRY FORD ON SLEEP

"Don't you think 10 or 12 hours a day is a fearful long time to spend in bed?" Mr. Ford was asked.

"It all depends on the individual—on his or her recuperative powers," said Mr. Ford. "I have no particular rule about sleeping except that I sleep whenever I feel tired and I stay in bed until I am rested."

"How long does it generally take—your night's rest?" he was asked.

"Oh, it depends on a lot of things—and it varies. As a general rule I like to go to bed early and get up early. Pretty frequently 9 o'clock sees me abed; sometimes earlier. Then, sometimes, I wake up at 5 o'clock in the morning. If I feel fine and rested I get up—I can't lie in bed if I'm rested—and I like few things better than a good walk in the early morning—helps keep a fellow young."

"But if, on the other hand, I don't feel rested and stay in bed until 7:30 or 8 o'clock—well, that's all right, too. That's what beds were made for—to give rest, and there's no use getting up before you're rested."

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A practical and good-looking model of pressed velour with generous collar of real Brown Honey fur. All-around belt and button trimmings. Sizes 16 to 20, women's 3 1/2 to 4 1/2. Order by No. 96E-5703. Send no money. Pay \$5.98 and postage on arrival.

Fur Trimmed Coat for Girls \$3.98

Pressed Velour in Navy Blue or Brown, regular \$7 value. Has collar of genuine Kit Coney, which buttons snugly around throat. Belt all around, two novelty pockets and two buttons at back. Sizes 7 to 14 years. Order Brown by No. 96E5595. Navy by No. 96E5596. Send no money. Pay \$3.98 and postage on arrival. State size.

MEN'S WINTER UNDERWEAR 1.19

Heavy weight flat knit union suits of long fibre cotton in popular Jaeger or gray Random color. Brushed fleece lining. Wrists and ankles elastic knit. Sizes 34 to 46 chest. Order Jaeger color by No. 96C1279. Order Random gray by No. 96C1280. Pay \$1.19 and postage on arrival. State size. Boys' Flat Knit Union Suits of fine quality cotton. Sizes 22 to 34 for 3 to 16 years. Order by No. 96C1355. Pay 89c and postage on arrival.



Women's Kid Hi-Cut Shoes \$2.29

Send for this handsome rich kidskin shoe in black. Note the medium toes with pretty imitation perforated tips, the perforation around vamp and on lace stays. Very popular model and really a sensational bargain now. Durable, flexible soles. Sizes 2 1/2 to 8. Wide widths. Order black by No. 96A122. Give Size

Women's Felt Moccasins, Ribbon Trimmed 98c



Fine grade wool felt with combination insert of fawn. Order American Beauty by No. 96A389. Order Copen by No. 96A390. Order Lavender by No. 96A391. Sizes 3 to 8. Send no money. Pay 98c and postage on arrival.

GUARANTEED!

For six months' wear

U. S. Army Work Shoe \$2.98



Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth \$5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather or counter, riveted to prevent ripping. Sizes 6 to 14, wide widths. Order by No. 96A699. Send no money. Pay \$2.98 and postage on arrival.

Men's Special Hip Boots \$2.98

Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually retailed at \$5. Be sure to order your pair while this great saving offer lasts. Sizes 7 to 11. Wide widths. No half sizes. Order by No. 96A949. Give Size



Men's and Boys Comfort Work Shoes \$1.79 UP

State Size



Order your pair quick while this bargain offer lasts. Wonderful work shoe for men. Has soft, strong uppers that resist barnyard acids. Solid leather insoles. All seams stitched with waxed thread. Strong leather soles. Wide widths. Sizes 6 to 11. Order by No. 96A-758. Send no money. Pay \$1.79 and postage on arrival. Order boys' sizes, 1 to 5 1/2 by No. 96A-554. Price \$1.89. Order little boys' sizes 9 to 13 1/2 by No. 96A555. Price \$1.79 and postage on arrival. Mention size.

One-Buckle Arctic 99c UP

In All Sizes.



Heavy cashmerette snow-proof top. Genuine gum rubber bottoms with heavy single soles. Full fleece lined. Sizes for all the family. Misses' sizes 11 to 2, No. 96A970. Price 99c. Women's sizes 2 1/2 to 8, No. 96A969. Price \$1.19. Youth's sizes 9 to 13 1/2, No. 96A968. Price \$1.19. Boys' sizes 1 to 5 1/2, No. 96A967. Price \$1.20. Men's sizes 6 to 12, No. 96A966. Price \$1.49. Pay bargain price and postage on arrival. State size.

Women's Warm Fleece-Lined Comfort Shoes \$2.29

You'll never get cold feet in these splendid kid-finished comfort shoes. Uppers are warm, thick, cream-fleece lined. Splendid natural oak soles; low rubber heels. Roomy comfort last, built in wide widths. Sizes 2 1/2 to 8.

Order by No. 96A-396. Send no money. Pay only \$2.29 and postage on arrival. Money back if not satisfied.



Be sure to mention size.

Women's Felt Everett 79c



Give Size.

For cold weather wear indoors. Durable felt uppers. Combination soles, outside of natural oak leather and middle soles of warm felt. Pretty bow ornament on toe. Low rubber heels. Sizes 2 1/2 to 8. Wide widths. Order by No. 96A380. Send no money. Pay 79c and postage on arrival. State size.

MEN'S STORM BOOTS

Wonderful Hi-Cut Storm Boots of soft brown cowhide leather, absolutely barnyard proof. Durable outsoles, sewed and nailed; solid leather in-tongues. Sizes 6 to 12. Wide widths.

Order by No. 96A-769. Send no money. Pay \$2.98 and postage on arrival. State size. Order boys' sizes, 1 to 5 1/2, by No. 96A570. Price \$2.45. Order little boys' sizes, 9 to 13 1/2, by No. 96A571. Price \$1.98. Send no money. Pay bargain price and postage on arrival.

\$1.98 UP



MEN'S 16-INCH BLUCHER HI-CUTS

Acid-proof, bellows tongue, pull strap, grain leather inner soles, tow strap and buckles. Natural oak leather outer soles and leather heels. Men's sizes 6 to 12, wide widths only. Order by No. 96A777. Send no money. Pay \$4.98 and postage on arrival.

Women's Popular Stitchdown Dark Brown Oxfords \$1.98

GIVE SIZE

Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of dark brown leather. Smooth leather insole. Flexible stitched-down oak outsoles. Low rubber heels. Sizes 2 1/2 to 8. Wide widths. Order by No. 96A268. Send no money. Pay only \$1.98 and postage on arrival.



"Stylish Stout" Gabardine Dress \$3.98

Women of large figure will see in this new model their ideal dress. Planned to give long slender lines. Note how the collar, revers and panels carry out the long effect. Attractive embroidery on sleeves, vestee and panels. The self-material belt ties at back. Sizes 39 to 53. Order Navy by No. 96E5470. Black No. 96E5471. Brown No. 96E-5472. Send no money. Pay \$3.98 and postage on arrival. State size.



Embroidered Gabardine Dress \$2.98

This delightful model is sure to be one of the favorites of the season. It is of beautiful cotton gabardine with vestee, smart bell sleeves and fashionable panels richly embroidered. The self material belt ties gracefully at back. Sizes 16 to 44. Order Navy by No. 96E5525. Order Brown by No. 96E5526. Send no money. Pay \$2.98 and postage on arrival.



Men's Four-Buckle All Rubber Arctics \$2.48

State Size



Order Quick Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced. Snow-excluding tongue. Furnished in men's sizes 8 to 12. Wide widths. Sensational value. Send quick. Order by No. 96A990. Send no money. Pay \$2.48 and postage on arrival.

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For Tractors

Use it in your Tractor, it will develop more power than ordinary Coal Oil because every drop is consumed in the firing chamber, eliminating any chance of the unused portion diluting Lubricating oil in the crank case.

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Use National Light Kerosene for your Lighting Plant, Lanterns, every purpose where Kerosene is used you will find "National Light" more satisfactory and economical.

You can use a drum or more. Mail your order if your dealer cannot supply you and we will ship from one of our 96 Distributing Branches nearest to you.

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UNLAWFUL FOR COUSINS TO MARRY

Is it unlawful for Cousins to get married in Michigan? If so, what States is it lawful? How old must a female be to get married without permit of parents?—J. K., Zeeland, Michigan.

—Section 11356, of the C. L. 1915 prohibits marriage of cousins of the first degree. I do not have a list of states that permit cousins to marry. Act 195 of the Public Acts of 1917 requires written consent of parents or guardian if the female is under 18 years of age.—Legal Editor.

KEEPING CIDER SWEET

What can I put into a 50 gallon barrel of cider to keep it sweet?—D. E. W., Hale, Mich.

—A fifty gallon barrel of cider may be kept sweet by the addition of 0.1 per cent benzoate of soda. This per-ounces of benzoate of soda to fifty gallons of cider.

Care should be taken in measuring the cider to which benzoate of soda is to be added as too little will result in no preservative action, while if too much is added it might have a harmful effect.

Cider to which benzoate of soda has been added cannot be used for vinegar-making as vinegar is the result of microbial fermentation and the growth of microbes is inhibited by the benzoate of soda.—R. L. Tweed, Res. Asst. in Bacteriology, M. A. C.

ERROR IN "RIGHT OF TEACHER TO PUNISH CHILD" ARTICLE

In the December ninth issue of the Michigan Business Farmer on the Farmers Service Bureau page, you published an article entitled "Right of Teacher to Punish Child" and included in connection with this a letter from me but you did not publish this letter as I had given it to you. I made the following statement:

"The law does give the school board the authority to make and enforce suitable rules governing the external affairs of the school."

You have given it in such a way as to convey the opposite meaning from what it is intended to convey. In your article it reads as follows:

"The law does not give the school board any authority, etc."

Will you kindly give the necessary explanation and print this in the correct form in your next issue.—B. J. Ford.

MORTGAGE

If A gave B a mortgage on 40 acres of land and A being a married man and his wife refusing and not signing the mortgage can B collect the same by law; or is there certain clauses that would make a difference.—B. H., Boyne Falls, Michigan.

—If the land mortgaged was a homestead the encumbrance would be void. The land would be free. If the land mortgaged was not a homestead the mortgage if not paid could be foreclosed and deprive the husband from any interest therein. The mortgagee could hold the land during the life of the husband subject only to the power of the wife if she lived longer than he. If she died first the mortgagee would obtain the whole title. If the husband gave a note with the mortgage that the wife refused to sign he would be holding for the note and it might be collected from other property of the husband besides the homestead.—Legal Editor.

PAYING TAXES

We came up here in August, 1920 and bought this place in Osceola county, for \$5,000 with \$1,000 cash and possession in November. We moved here the first week in Nov. 1920, paid the taxes for that year, interest due March 1st. We paid our interest in March that year. Now at prices the way things are, we feel we can not go on and pay for the place, we are back \$220 and our last years interest. The man will take the place back, but says we shall pay the taxes for this year, 1922,

as we had the use of the place, but he had the use of the place in 1920 and we paid the taxes also taxes last year of course. Will you please tell me if we will be made to pay taxes for this year? We would like to keep the place, but how can we with potatoes at 30 cents, hay at \$5 and \$6, etc.? This man claims he had to pay \$28 to have the sale of this place recorded, is this true? Can such charges be made?—G. B., Sears, Michigan.

—If the taxes of 1922 were assessed to you and you have any personal property from which the tax could be made the town treasurer would be under obligations to levy upon the personal property to pay the tax. If the tax was not assessed to you then the tax would be returned against the land and hold against the land the same as a mortgage. The owner can not compel you to give up the land without foreclosure of mortgage, if you gave a mortgage, or steps to forfeit the land contract, if you gave a contract. You did not say which. You do not tell what the deal was in getting the place. If you took a deed there would be revenue stamps of 50 cents for each \$500. If there was a mortgage or a land contract that would have a tax of 50 cents for each \$100. The recording fee alone would not amount to \$28 but the revenue stamps and tax might amount to \$23 on a \$5,000 farm. The purchaser of a farm under contract or by giving a mortgage can not be required to give up the property until the time provided by law for forfeiture in one case and foreclosure in another.—Legal Editor.

CULVERTS TOO SMALL

We live on State Reward Road M10. When the builders put in the culverts they were informed by the land owners that the culverts were too small to carry off the water in the spring but they put them in just the same. Can we ask damages done by water in cellars caused by culverts being too small? If the culverts had not been there the water couldn't do any damage as it could get away.—M. H. Hawks, Mich.

—You would not be in a position to press your claim for damages. You would receive more benefit if you would call the attention of the District Engineer or the County Highway Engineer to the condition which exists by reason of the inadequate culvert, asking that the same be enlarged and if his contention is correct the request would be granted.—H. H. Partlow, State Highway Dept.

MORE ABOUT COST OF LAND CLEARING SCHOOLS

In a recent issue I note a query asking as to who pays the expenses of the land clearing special trains and crews which have been operating in northeastern Michigan. I also note the answer which Mr. Baldwin of the Extension Department of the Agricultural College says, which answers fully as the question goes, but I believe the writer of the question would be interested in knowing that there is much more to this than simply Mr. Baldwin's answer.

For instance the land clearing special work has saved the farmers \$182,000.00 in explosive alone and in addition to that has saved them \$30,000.00 by buying of explosives in carload lots; thus a nice saving of \$162,000.00 as a result of the work which Mr. Baldwin points out costs the tax payers of Michigan such a small amount.

I know of one particular instance where the County Road Commissioner required a ditch through a swamp which would cost him \$75.00 and Mr. Livingston with one helper from the land clearing crew in one hour's time and with \$10.50 worth of dynamite completed the ditch, giving a larger and better ditch than would have been constructed by team or man labor.

Farmers of the state and others should not get the notion that this

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land clearing work is in behalf of clearing up a lot of wild or new land. Perhaps this may be a result, but the effort being put forth is to clean up land which is already being tilled, getting stumps and snags out of these fields, and this demonstration work shows the best way that this cleaning up can be done and at the least cost—T. F. Marston, No. Eastern Michigan Development Bureau.

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—A mortgage may be foreclosed in Chancery and the original maker of the mortgage, and note accompanying the same, and all subsequent purchasers who assumed the mortgage and agreed to pay the same may also be made parties, and if the land does not sell for enough to pay the mortgage, the mortgagee may take judgement against all who agreed to pay the mortgage for the balance and costs and require them to pay it if they have property from which it may be collected above exemptions.—Legal Editor.

READJUSTMENT ON TIRE

Some time ago I bought a tire, guaranteed, but after running it 200 miles it gave out. We took it to the agent, who sent it to the company for readjustment. He gave me a new tire in place telling us there was a flaw in the tire and did not think we would have to pay for it. The first tire was returned with a bill of \$3.85 for repairs, the company saying it was no fault of the tire. Is the guarantee any good and do we have to pay for the tire and readjustment also?—E. W., Boyne City, Michigan.

If it was not the fault of the tire you would have to pay for the repair of the tire if you ordered it repaired. If you did not and they were not authorized to make any repairs you can tell them to keep the tire. If it was the fault of the tire you are entitled to be protected upon the guaranty and your dealer should assist you.—Legal Editor.

FUR DEPARTMENT

EDITED BY A. R. HARDING

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QUESTIONS ANSWERED

HIDES AND FURS

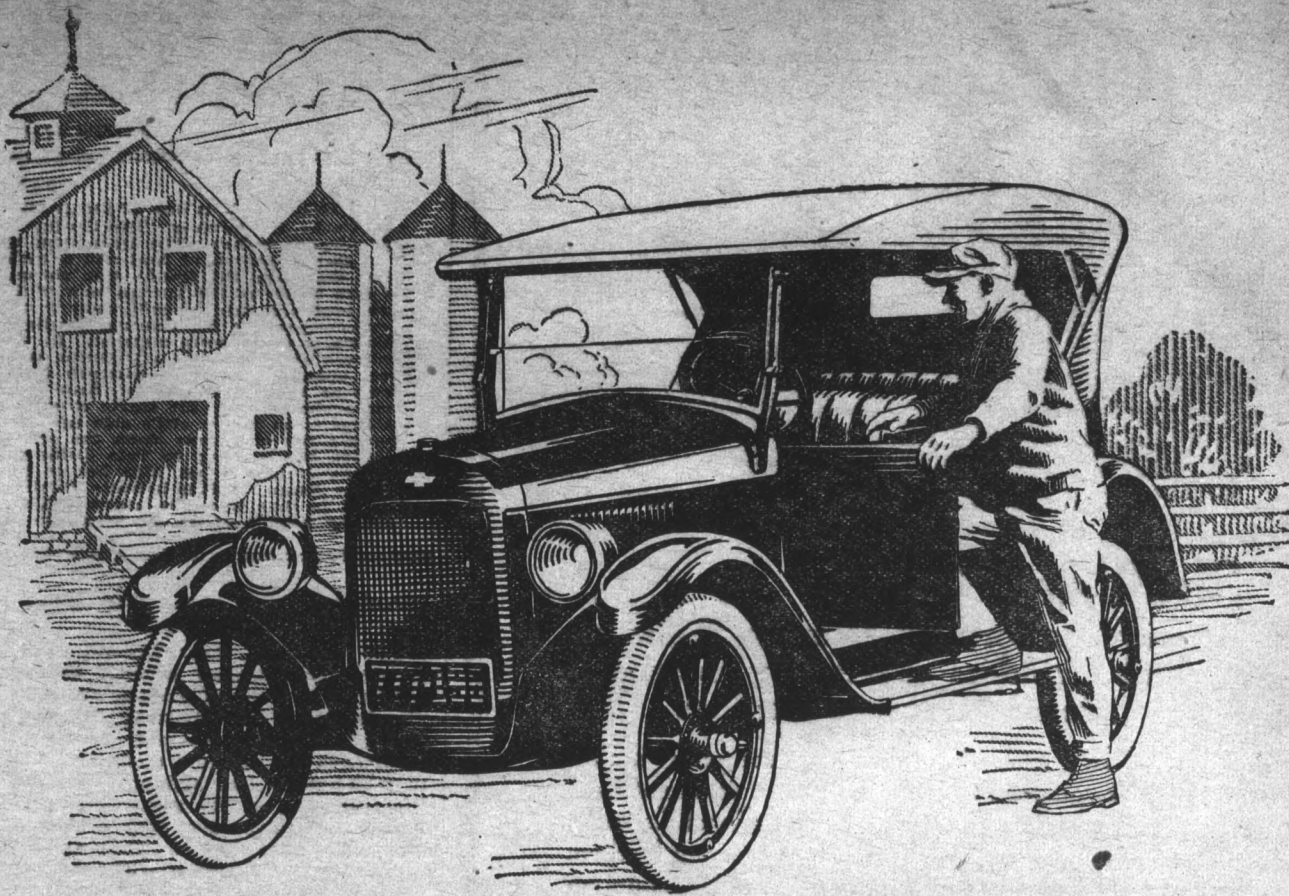
Will you please tell me if it hurts hides or fur to let them freeze after skinning them? How to take care of them?—B. C. N., Lawver, Wyo.

—Freezing does not hurt or lessen the selling value of either. Hides—cattle, horse, calf, sheep are usually salted heavily a few hours after killing, using say two gallons of salt on a hide that weighs 40 pounds. The object of not salting immediately after skinning is to allow the animal heat to get out. In some parts of the country—Wyoming for instance, where the altitude is high hides will cure without salt and are known as flint but are not as convenient to ship and handle as salt cured.

Fur pelts, such as fox, wolf, skunk, mink, etc., are stretched on a board made shape of the pelt and nailed. Fur pelts do not need any salt. Surplus fat and flesh should be removed. The pelts can be removed from the stretching boards after they have dried sufficiently to hold their shape. Pelts are placed on the stretching boards pelt side out—fur in.

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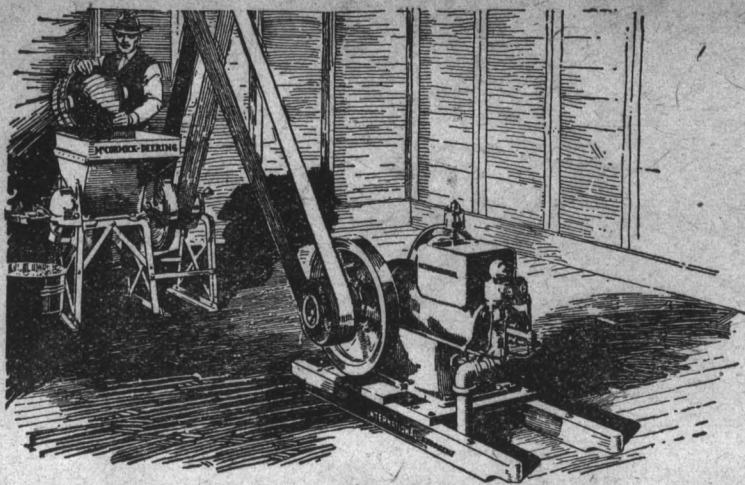
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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Foremost Author of the Great Northwest

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SYNOPSIS

JOANNE GRAY is one of the passengers on the train bound for Tete Jaune Cache, the home of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents, she goes in search of food and a bath. She is directed to "Bill's Shack" and here she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass out of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which they have passed. In but a moment the girl steps out, face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl money but before he can do so Aldous steps to the girl's side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave. Upon their arrival at Tete Jaune they are met by friends of Aldous at whose place they are to stay during their stop.

(Continued from Dec. 23rd issue)

CHAPTER XII

For an hour after Donald MacDonald had pledged himself to accompany Joanne and Aldous on their pilgrimage to the grave in the Saw Tooth Range the two men continued to discuss the unusual complications in which they had suddenly become involved, and at the same time prepared themselves a supper of bacon and coffee over the fire. They agreed upon a plan of action with one exception. Aldous was determined to return to the town, arguing there was a good strategic reason for showing himself openly and without fear. MacDonald opposed this apprehensively.

"Better lay quiet until morning," he expostulated. "You'd better listen to me, an' do that, Johnny. I've got something under my shoulder that tells me you'd better!"

In the face of the old hunter's misgiving, Aldous prepared to leave. It was nearly ten o'clock when he set back in the direction of Tete Jaune, Donald accompanying him as far as the moonlit amphitheatre in the forest. There they separated, and Aldous went on alone.

He believed that Joanne and the Blacktons would half expect him to return to the bungalow after he had seen MacDonald. He was sure that Blackton, at least, would look for him until quite late. The temptation to take advantage of their hospitality was great, especially as it would bring him in the company of Joanne again. On the other hand, he was certain that this first night in Tete Jaune held very large possibilities for him. The detective instinct in him was roused, and his adventurous spirit was alive for action. First of all, he wanted proof of what MacDonald had told him. That an attempt had been made to assassinate the old mountaineer he did not for an instant doubt. But had Joe DeBar, the half-breed, actually betrayed them? Had he sold himself to Culver Rann, and did Rann hold the key to the secret expedition they had planned into the North? He did not, at first, care to see Rann. He made up his mind that if he did meet him he would stop and chat casually with him, as though he had heard and seen nothing to rouse his suspicions. He particularly wanted to find DeBar; and, next to DeBar, Quade himself.

The night carnival was at its height when Aldous re-entered the long, lighted street. From ten until eleven was the liveliest hour of the night. Even the restaurants and soup-kitchens were crowded then. He strolled slowly down the street until he came to a little crowd gathered about the bear equestrenne. The big canvass dance-hall a few doors away had lured from her most of her admirers by this time, and Aldous found no difficulty in reaching the inner circle. He looked first for the half-breed. Failing to find him, he looked at the woman, who stood only a few feet from him. Her glossy black curls were a bit dishevelled, and the excitement of the night had added the vivid colouring of her rouged lips and cheeks. Her body was sleek and sinuous in its silken vesture; arms and shoulders were startlingly white; and when she turned, facing Aldous, her

black eyes flashed fires of devilry and allurements.

For a moment he stared into her face. If he had not been looking closely he would not have seen the swift change that shot into the siren-like play of her orbs. It was almost instantaneous. Her slow-travelling glance stopped as she saw him. He saw the quick intake of her breath, a sudden compression of her lips, the startled, searching scrutiny of a pair of eyes from which, for a moment, all the languor and coquetry of her trade were gone. Then she passed him, smiling again, nodding, sweeping a hand and arm through her handsome curls as she flung a shapely limb over the broad back of the bear. In a garish sort of way the woman was beautiful, and this night, as on all others, her beauty had nearly filled the silken coin-bag suspended from her neck. As she rode down the street Aldous recalled Blackton's words: She was a friend of Culver Rann's. He wondered if this fact accounted for the strangeness of the look she had given him.

He passed on to the dance hall. It was crowded, mostly with men. But here and there, like so many faces peering forth from living graves, he saw the Little Sisters of Tete Jaune Cache. Outnumbered ten to one, their voices rang out in shrill banter and delirious laughter above the rumble of men. At the far end, a fiddle, a piano, and a clarinet were squealing forth music. The place smelled strongly of whisky. It always smelled of that, for most of the men who sought amusement here got their whisky in spite of the law. There were rock-hogs from up the line, and rock-hogs from down the line, men of all nationalities and of almost all ages; teamsters, trail-cutters, packers, and rough-shod navies; men whose daily task was to play with dynamite and giant powder; steel-men, tie-men, and men who drilled into the hearts of mountains. More than once John Aldous had looked upon this same scene, and had listened to the trample and roar and wild revelry of it, marveling that to-morrow the men of this saturnalia would again be the builders of an empire. The thin, hollow-cheeked faces that passed and re-passed him, rouged and smiling, could not destroy in his mind the strength of the picture. They were but moths, fluttering about in their own doom, contending with each other to see which should quickest achieve destruction.

For several minutes Aldous scanned the faces in the big tent-hall, and nowhere did he see DeBar. He dropped out, and continued leisurely along the lighted way until he came to Lovak's huge black-and-white striped soup-tent. At ten o'clock, and until twelve, this was as crowded as the dance-hall. Aldous knew Lovak, the Hungarian.

Through Lovak he had found the key that had unlocked for him many curious and interesting things associated with that powerful Left Arm of the Empire Builders—the Slav. Except for a sprinkling of Germans, a few Italians, and now and then a Greek or Swiss, only the Slavs filled Lovak's place—Slavs from all the Russias and the nations south: the quick and chattering Polak; the thick-set, heavy-jowled Croatian; the silent and dangerous eyed Lithuanian.

an. All came in for Lovak's wonderful soup, which he sold in big yellow bowls at ten cents a bowl—soup of barley, rice, and cabbage, of beef and mutton, of everything procurable out of which soup could be made, and, whether of meat or vegetable, smelling to heaven of garlic.

Fifty men were eating when Aldous went in, devouring their soup with the utter abandon and joy of the Galician, so that noise they made was like the noise of fifty pigs at fifty troughs. Now and then DeBar, the half-breed, came here for soup, and Aldous searched quickly for him. He was turning to go when his friend, Lovak, came to him. No, Lovak had not seen DeBar. But he had news. That day the authorities—the police—had confiscated twenty dressed hogs, and in each porcine carcass they had found four-quart bottles of whisky, artistically imbedded in the leaf-lard fat. The day before those same authorities had confiscated a barrel of "kerosene." They were becoming altogether too officious, Lovak thought.

Aldous went on. He looked in at a dozen restaurants, and twice as many soft-drink emporiums, where phonographs were worked until they were cracked and dizzy. He stopped at a small tobacco shop, and entered to buy himself some cigars. There was one customer ahead of him. He was lighting a cigar, and the light of a big hanging lamp flashed on a diamond ring. Over his sputtering match his eyes met those of John Aldous. They were dark eyes, neither brown nor black, but dark, with the keenness and strange glitter of a serpent's. He wore a small clipped moustache; his hands were white; he was a man whom one might expect to possess the sang froid of a devil in any emergency. For barely an instant he hesitated in the operation of lighting his cigar as he saw Aldous. Then he nodded.

"Hello, John Aldous," he said.

"Good evening, Culver Rann," replied Aldous.

For a moment his nerves tingled—the next they were like steel. Culver Rann's teeth gleamed. Aldous smiled back. They were cold, hard, rapierlike glances. Each understood now that the other was a deadly enemy, for Quade's enemies were also Culver Rann's. Aldous moved carelessly to the glass case in which were the cigars. With the barest touch of one of his slim white hands Culver Rann stopped him.

"Have one of mine, Aldous," he invited, opening a silver case filled with cigars. "We've never had the pleasure of smoking together, you know."

"Never," said Aldous, accepting one of the cigars. "Thanks."

As he lighted it, their eyes met again. Aldous turned to the case.

"Half a dozen 'Noblemen'," he said to the man behind the counter; then, to Rann: "Will you have one on me?"

"With pleasure," said Rann. He added, smiling straight into the other's eyes, "What are you doing up here, Aldous? After local colour?"

"Perhaps. The place interests me."

"Decidedly. And I understand that you've played an important part in the making of it," replied Aldous carelessly.

For a flash Rann's eyes darkened, and his mouth hardened, then his white teeth gleamed again. He had caught the insinuation, and he had scarcely been able to ward off the shot.

"I've tried to do my small share," he admitted. "If you're after local colour for your books, Aldous, I possibly may be able to assist you—if you're in town long."

"Undoubtedly you could," said Aldous. "I think you could tell me a great deal that I would like to know, Rann. But—will you?"

There was a direct challenge in his coldly smiling eyes. "Yes, I think I shall be quite pleased to do so," said Rann. "Especially—if you are long in town." There was an odd emphasis on those last words.

He moved toward the door.

"And if you are here very long," he added, his eyes gleaming significantly, "it is possible that you may have experiences of your own which would make very interesting reading if they got into print. Good-night, Aldous!"

For two or three minutes after

Rann had gone Aldous loitered in the tobacco shop. Then he went out. All at once it struck Aldous that he should have kept his eye on Quade's partner. He should have followed him. With the hope of seeing him again he walked up and down the street. It was eleven o'clock when he went into Big Ben's pool-room. Five minutes later he came out just as a woman hurried past him, carrying with her a strong scent of perfume. It was the Lady of the Bear. She was in a street dress now, her glossy curls still falling loose about her—probably home-ward bound after her night's harvest. It struck Aldous that the hour was early for her retirement, and that she seemed somewhat in a hurry.

The woman was going in the direction of Rann's big log bungalow, which was built well out of town toward the river. She had not seen him as he stood in the pool-room doorway, and before she had passed out of sight he was following her. There were a dozen branch trails and "streets" on the way to Rann's, and into the gloom of some one of these the woman disappeared, so that Aldous lost her entirely. He was not disappointed when he found she had left the main trail.

Five minutes later he stood close to Rann's house. From the side on which he had approached it was dark. No gleam of light showed through the windows. Slowly he walked around the building, and stopped suddenly on the opposite side. Here a closely drawn curtain was illuminated by a glow from within. Cautiously Aldous made his way along the log wall of the house until he came to the window. At one side the curtain had caught against some object, leaving perhaps a quarter of an inch of space through which the light shone. Aldous brought his eye on the level with the space.

A half of the room came within his vision. Directly in front of him, lighted by a curiously shaped iron lamp suspended from the ceiling, was a dull red mahogany desk-table. At one side of this, partly facing him, was Culver Rann. Opposite him sat Quade.

Rann was speaking, while Quade with his bullish shoulders hunched forward and his fleshy red neck rolling over the collar of his coat, leaned across the table in a tense and listening attitude. With his eyes glued to the aperture, Aldous strained his ears to catch what Rann was saying. He heard only the low and unintelligible monotone of his voice. A mocking smile was accompanying Rann's words. To-night, as at all times, this hawk who preyed upon human lives was immaculate. In all ways but one he was the antithesis of the beefy scoundrel who sat opposite him. On the hand that toyed carelessly with the fob of his watch flashed a diamond; another sparkled in his cravat. His dark hair was sleek and well brushed; his bristly little moustache was clipped in the latest fashion. He was not large. His hands, as he made a gesture toward Quade, were of womanish whiteness. Casually, on the street or in a Pullman, Aldous would have taken him for a gentleman. Now, as he stared through the narrow slit between the bottom of the curtain and the sill, he knew that he was looking upon one of the most dangerous men in all the West. Quade was a villain. Culver Rann, quiet and cool and suave, was a devil. Behind his depravity worked the brain which Quade lacked, and a nerve which, in spite of that almost effeminate immaculateness, had been described to Aldous as colossal.

Suddenly Quade turned, and Aldous saw that he was flushed and excited. He struck the desk a blow with his fist. Culver Rann leaned back and smiled. And John Aldous slipped away from the window.

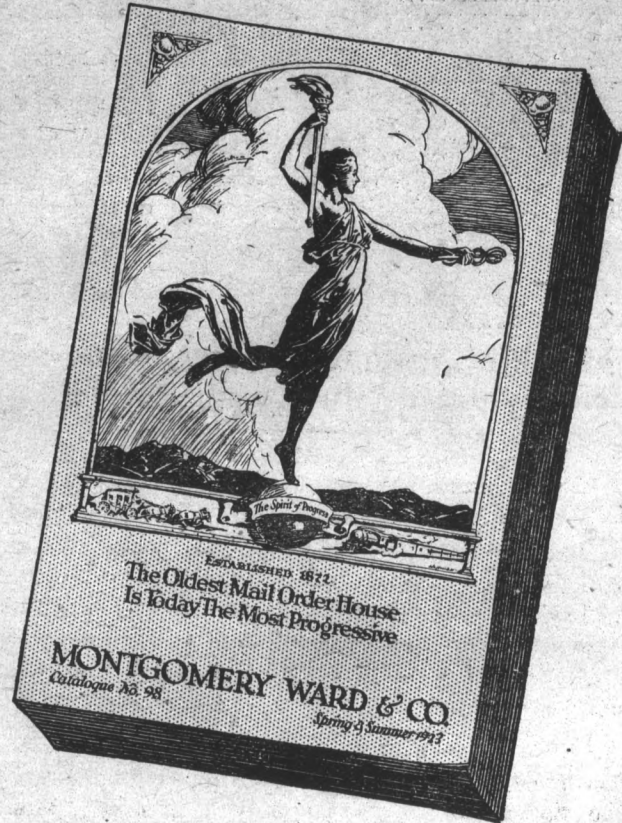
His nerves were quivering; in the darkness he unbuttoned the pocket that held his automatic. Through the window he had seen an open door behind Rann, and his blood thrilled with the idea that had come to him. He was sure the two partners in crime were discussing himself and MacDonald—and Joanne. To hear what they were saying, to discover their plot, would be three quarters of the fight won, if it came to a fight. The open door was the inspiration.

(Continued in Jan. 20th issue.)

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SATURDAY, JANUARY 6, 1923

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EVENTUALLY, why not now!" is a famous slogan. The farmers would like to apply it to the farm market situation. Every month shows an improvement in the trend of prices paid for farm crops. Every report shows Europe buying more of our surplus crops that have hovered over us like threatening clouds the past two years.

Things have undoubtedly improved for the farmers of America!

But it is a slow grind up the hill. Reminds us of the days we used to slide swiftly to the bottom of the long icy hill. Once in a while there was a bare spot or a stone at the bottom. Then we stopped with a dull, sickening thud. Climbing out of the scrambled pile, tired and bruised, we had to climb the long hill again. Sometimes our feet slipped and we seemed to lose what we had gained. It used to seem O, so much farther back up the hill than it did sailing swiftly down.

Now, it's a long way up the farmers hill. But, we are already three-fourths of the way back to where we started in 1913. It does you good to pause a moment and look back over what you have passed thru these past two years. That is why the thoughtful reader will get a lot of boiled down information and some satisfaction out of the Agricultural & Business Survey, the second report of which you will find on page 21 of this issue. Study it!

THE SUGAR BEET PROBLEM LOOMS AGAIN!

WHY is it impossible for the two interested parties to the successful marketing of beet-sugar from the state of Michigan to get together? Has it come to the point of an ancient feud, which smells of dark-ages or Italian vendetta? Is the whole industry in Michigan to be sacrificed on an altar of false pride, which keeps stubborn heads from getting together as sane men should, laying the facts on the table and arriving at a sensible and practical solution.

The Business Farmer speaks now for the ordinary, every-day sugar-beet grower who asks only a fair profit over and above his actual cost of production. Surely the sugar-beet factories are not so near-sighted, but what they can see that unless they can continue to satisfy the men who grow beets, each year the problem of getting acreage will become harder, until finally the

actual cost of maintaining the necessary supply will eat up all the profits.

There are enemies without the sugar-beet industry in America who are bent on wrecking it or making it impotent. They will find it much more easy to count the empty factories and smokeless chimneys of beet-sugar factories in not only Michigan but California and Colorado, if the present dissention within the ranks continues much longer.

It is costing the factories of Michigan many times what it should cost them to induce farmers to grow beets. There is no excuse for this. This waste of effort is costing the grower and the stock-holder money, which should be saved and put where it belongs if there was a friendly feeling between grower and factory.

Some one man is responsible for this "grower-be-damned" attitude which, varnish it with prize money as they may, still lurks between the lines of every sugar beet contract written. This man, wherever he is, is a traitor to the farming business in Michigan, and we propose to hunt him out and crush him as we would a snake. For this service, we will be thanked equally by the men who grow the beets and the men who own the factories.

Will you help us find him? We'll guarantee to go present the facts to the board of directors of the company that is hiring him, that he will be fired on the spot!

SHALL THE GOVERNMENT FIX THE PRICE

EVER since the government relinquished control of grain prices following the war there has been an insistent demand that this control be restored. The farmer has suffered severely the past several years because of the unstable condition of his markets and the low prices, and it has been argued that it would be to the benefit of the entire country for the government to create a subsidized board for the purpose of purchasing grains outright from the farmer and disposing of them as the demand would warrant. Nor has this suggestion come solely from the ranks of "small-fry" critics. No less a personage than a former Secretary of Agriculture has carried on an extensive propaganda to create sentiment in favor of such a scheme, and there are a number of intelligent men in Congress who are known to be in sympathy with this proposal.

Congressman Sinclair of North Dakota, a former Michigan boy, and not by the way a Non-Partisan Leaguer, has introduced several bills along this line. One of them was "pigeon-holed" in turn at the last election. Sinclair expects to re-introduce his bill at the next session, and he will have strong support from most of the members of the "farm bloc."

If the Senate finally puts its approval on the merchant marine bill, Congressman Sinclair will have an excellent argument to present in support of his own measure. The merchant marine bill is in fact a subsidy to ship owners, and if Congress can conscientiously and with good reason vote to subsidize a few hundred private ship owners it will have an embarrassing time explaining why it cannot also vote to subsidize six million farmers, if in the final accounting the subsidization does not cost the government a cent.

Until the affairs of the world become a little more ordered the prices of farm products will fluctuate over a wide range. Would not some kind of government control and price-fixing prove a great influence in stabilizing the markets and restoring prosperity to the farms?

WHAT WILL THE POOR BUYERS DO?

WHEN crop prices got caught on the tail of the war-aeroplane, prices of farm lands everywhere went up. Nowhere, however, did they reach the fabulous prices which were paid in Illinois, Iowa and some of the Mississippi valley states. Five hundred dollars an acre bought only an average quality of farm land. Most of the sales were made by farmers attracted away from the farms by the prospects of selling their homesteads at unheard-of prices. In some localities it became sort of a wild speculation, like the "tulip-bulb bubble" of Dutch history, when the prices of single bulbs, much sought-after, passed from hand to hand, though they were of little intrinsic value, until the market burst over night.

There were hundreds of farms sold in these states for prices so out of proportion to actual producing value, that the buyer could never expect, except during peak-war-time prices to make a fair profit from his investment.

It is a pathetic picture. These families, chained down to high-priced land. Working a treadmill that leads no nearer their goal of

ownership at the end of a hard years work.

Michigan was remarkably free from this wild land speculation. Though it is true many farms were sold at seemingly high prices, they shrink in comparison. Michigan too, is so climatically fortunate that specialty crops, like celery, sugar-beets, pepper-mint, chicory and all fruits can be grown profitably, which are unknown in the western states mentioned. America's fourth city is our metropolis and still growing. Chicago, one of the world's largest cities, is but a few hours water-haul from our shores. We are but a few miles from the center of population. We have thousands of acres of as good land as America can boast. Michigan land might with equal justice, have sold as high as Iowa and Illinois land, but luckily for us now, it didn't!

DANGER IN THE SHREDDER

IT is a common thing these days to pick up a newspaper and read an account of some farmer losing one or both of his hands in a corn shredder. To lose one's hands is not a pleasant experience. Hands are very useful things to have. Even the man who works most with his brain finds his hands convenient at times. But for the farmer whose brain is practically useless unless he can execute its bidding with his hands, the loss of those appendages is certainly most tragic.

Most accidents are preventable. There are few victims of the ordinary run of accidents who cannot say, "If I had only been a little more careful this would not have happened." So with the farmer who loses his hands in the corn shredder or ensilage cutter. He would never let his familiarity with the machine breed contempt for its dangers. Danger lurks in every mechanism driven by mechanical power. The very whirr of revolving knives spells DANGER. "Beware," "beware," they sing. But despite the warning many stick their hands into the maw and the terrible accident occurs.

Take heed, dear reader, it may be your turn next unless you are careful. Let safety come before every other consideration, whatever your work may be.

MICHIGAN CITIES PROSPEROUS

ONE department store in the city of Detroit is reported to have done a business of \$280,000 in one day during Christmas week. All stores reported the largest business in their history. Detroit is undoubtedly the most prosperous city in America today. Manufacturing plants, of course, did it. Lansing, Flint, Grand Rapids are prosperous too. All growing and will need more fresh vegetables, fruit, dairy supplies, etc., from our farms. They ought to help lower the taxes too, if they pay their just portion of the states expense. One way would have been a state income tax on incomes over \$5000. Things do not look so bad for farmers in Michigan as they do in other states. That is if we continue to work together and are not led astray by rattle-brained prophets of a farming business millenium.

Clemenceau says that Germany is preparing for another war. If the French Tiger should contend that an egg which is crushed could again gather its component parts together again and mount of its own accord to its former resting place, we might believe him, for we have great admiration for the doughty old Frenchman. But when he says that Germany is capable of waging another war now or a quarter of a century from now, we know that he is talking in his dreams. No egg was ever so helplessly crushed as the German military machine.

* * *

The tax on gasoline to raise funds for highway maintenance is a subject we are discussing pro and con in these columns. It reminds us of the sales tax discussion. The folks you expect to be for it, are against it, and vice versa. It is a live issue in Michigan. You cannot avoid arriving at a decision regarding it, because nothing can prevent its coming up for settlement by a popular vote. We are presenting both sides by the best authorities available, so if our readers do not get all the facts, it will not be our fault.

* * *

One writer says "he hears" we have sold out to Henry Ford, another that an agent for another farm paper told him The Business Farmer had been sold to Armour. We published a list, (in accordance with postal regulations) of the owners of this publication in our October fourteenth issue. There has been no change in the ownership since. As Abe Martin says: "Rooms must be a'gettin scarce agin, thars so many rumors goin' round!"

What the Neighbors Say

ACKERMAN NOT SATISFIED WITH CONTRACT

I AM enclosing a letter from the Owosso Sugar Company which I understand has gone out to all large growers generally. You will notice the tone is very personal and is I think, an attempt to break the stand of the growers that are through with raising beets until a fair 50-50 contract can be secured. The Owosso Company is also out offering a span of Belgium horses to the man growing the largest acreage in a township and also a job working to get contracts for 304 weeks for a contract. Well you can say to the growers, organized and unorganized that I believe, we through the Michigan Sugar Beet Growers' Association never asked for anything but what was right. I will say, as far as I am concerned personally that unless a fair 50-50 contract can be offered which expresses the same tone of fairness that the company in the enclosed letter seems to want the farmer to give their contract labor, I am done with growing beets forever, to any extent at least, under present conditions.

Now we come to the old, old question. What is a fair contract? We will answer the question just the same as we have always answered it. Let representatives of the growers and the factories meet together, place their cards on the table, face up, go over the local conditions that change from time to time and get out a contract and then go to it. However, I have a feeling that the sugar beet business in Michigan is on the decline and the greatest effort on the part of growers and factories must be used through earnest cooperation to ever bring it back to where it was once.

W. H. Wallace says, "When you try to find out what the growers want for a 50-50 contract they head off on something which shows they don't know what they want!" You see we never have been together in a real conference, therefore cannot understand each other. All we can do is to again come out in the press with our claim.

The grower has more invested in growing a ton of beets than has the factory in milling a ton into sugar and we employ six times the labor. Therefore, are we unfair in asking for one-half the sugar in a ton?

Take the last twelve years extraction and average it and you will find there are 200 pounds of white sugar in a ton of beets. We want a contract which pays us an amount equal to the price of 130 pounds f. o. b. New York or one-half the amount received by the factory, an amount which is still not really all the grower is really entitled to. We never did receive any good from a guaranteed minimum so why consider it?

The factories will have to hold the 80,000 acres they had this year and get 100,000 acres more to get themselves back to full capacity. Can

they do it? On a \$6 contract with \$23.00 an acre, can they get the labor for that? This is a poorer contract than offered last year which was \$5.50 beets and \$16.00 an acre labor. Where can fertility and manager costs come in on either of these contracts? C. E. Ackerman, Shiawassee County, Michigan.

—It is high time for the growers and the beet sugar factories of Michigan to get together on a plan which is equitable to both parties. The stand of the factory owners in refusing to meet with the organized growers was in defensible. The sugar beet industry is in too precarious a position for either factory or grower to refuse to cooperate on a plan which will work to the mutual advantage of both. One thing is certain. The factories have expert accountants who can tell them exactly what it costs to produce sugar from beets. If they will go 50-50 with the growers on their profit, we believe the grower can be satisfied and the factory, thru lessened cost of maintaining acreage, solicitors, attorneys, etc., will actually make more for their stockholders and save their management all the disagreeable feeling which has existed practically from the day the first factory in Michigan started to grind beets. —Editor.

TAX EXEMPT—WHAT IT MEANS!

I HAVE read the editorial in the Michigan Business Farmer of December 9th headed "Tax Exempt." I agree with your sentiments thoroughly. Millions and millions of dollars that are usually available for the financing of farm operations and industrial plants have been withdrawn from active service and returned to the safety deposit boxes in the form of tax exempt securities. Naturally, the income from tax exempt bonds is not taxable.

That was one of the principal points that we tried to make with the farm organizations in the income tax campaign. A good many of the farm organization representatives thought they might reach the income from these tax free bonds by a state income tax. Such, of course, is not the case, and an income tax for Michigan (had it been adopted) would have fallen upon the shoulders of those who are already paying the taxes, namely the farmers and manufacturers. In other words, most any form of taxation will be loaded on those who now pay them unless we can change the situation in reference to tax exempt securities. We now penalize initiative and genius and business ability, whether on the farm or in the factories, by our form of taxation. When, as a matter of fact, the producers should certainly be encouraged rather than penalized. We encourage, by our laws now, the hiding away of wealth which should be active.—John L. Lovett, Wayne County.

The Week's Editorial

FARMER-LABOR FALLACY

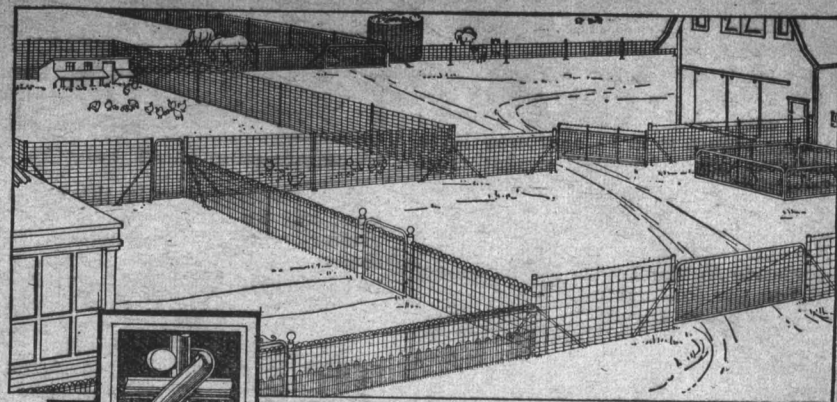
Two paragraphs in Secretary of Agriculture Wallace's annual report should not be lost on those who dream of a Farmer-Labor combination as the popular third party of the near future.

In one paragraph it is declared that the farmers have gained nothing from Labor's success in keeping its wares from 50 to 100 per cent. above pre-war levels. On the contrary, as a direct consequence, farmers have had to pay more for transportation, fuel, implements, clothing and everything else they buy, without getting larger markets or higher prices for what they raise. And it might have been added that competition has drained the farmers' labor supply and raised his labor cost.

In another paragraph it is shown that the farmer has paid the cost of Labor's right to strike. Interruption of industry has reduced the food demand, stopped the marketing of

some farm products, forced down the prices of others, raised fuel costs enormously and clogged the transportation lines with coal just when they should have been open for the crops.

If the farmers are to join forces with Labor, they will have to get something better than this out of the alliance. They have no means of coercing Labor, as Labor, by striding, can coerce them. If they ever join forces, it will be with a real partner, not a taskmaster. They want to see Labor fully employed, and at good wages. But when wages are forced beyond the points where consumption of products is increased, the farmer becomes a victim of Labor's cupidity. He is not likely to look with favor on any nation-wide merger to form a Farmer-Labor party so long as the Labor end of the partnership wants to dictate the policy for its own selfish advantage. —Philadelphia Bulletin.



SQUARE DEAL LONG-LASTING PRODUCTS

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Lawn Fabric—Beautifies the home; costs little.

Sheep Fence—An economical fence because of its wide spacing.

Steel Posts—Last longer; look better than wood; save expense and repairs.

Steel Gates—Save labor; won't sag; always look neat.

Tilting Gates—Can't bank snow, freeze in or drag.

Handy Panels—Necessities for breeding and show use.

Corn Cribs—Cheapest for temporary storage.

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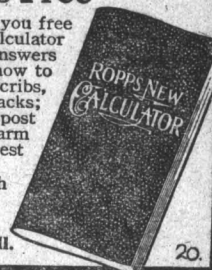
- 1—Full gauge wires are stronger and last longer than the skimped kind.
- 2—Good galvanizing keeps out rust and decay.
- 3—Square Deal Knot holds stay and strand wires in a vice-like, yet flexible, grip.
- 4—Stiff stay wires act as pickets—keep fence tight and trim.
- 5—Wavy or crimped strand wires provide elastic tension that prevents bagging and sagging.

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WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

PARENT-TEACHER ASSOCIATIONS

A PARENT-teacher association is a voluntary partnership of parents and teachers and others whose object it is to surround little children with the environment most favorable for their development.

This organization brings parents and teachers together to study child life in regard to care and proper guidance in the home, in the school and in the community.

It aims to cooperate with educational institutions intelligently; to work for public welfare with regard to health, morals, playground facilities, children's courts, mother's pensions, etc.

What would it mean to the children and the schools of the United States if every school would have the cooperation of a wide-awake, progressive parent-teacher association.

In the state of California there are more than 1,100 of these organizations connected with the public schools, with an individual membership of over 53,000 parents and teachers.

State Superintendent Wood, of California, says of the movement: "I believe in the Parent-Teacher Association because of the good it has done and the good it promises to do. An association of mothers and fathers deeply interested in the schools is certain to improve not only the school but the entire community. Our Parent-Teacher Associations are little democracies devoted to the advancement of the interests of boys and girls. I am deeply gratified by the growth of the Parent-Teacher Associations throughout the State during the last three or four years. Ere long we shall realize our aim to have a Parent-Teacher Association in every community." This is the testimony of the State Superintendent of Public Instruction in the State having the largest membership. In the United States there are now more than a half million members in parent-teacher associations. There are organizations in every State.

Where does our State stand on the list? Can we afford to let other communities progress while ours stand still? Why not have a parent-teacher association in every school by 1924?

Call the parents together with the teachers in the schoolhouse, and see what can be done to make your school district the model for your State. Communicate with other organizations in your State and find out how they do it; exchange experiences; cooperate; work together for better citizenship, because the children of today are the citizens of tomorrow.

BETTER BUSINESS BUREAU

DETROIT has a Better Business Bureau and the bureau issues a timely warning. This government is about ready to pay out several hundred millions of dollars to the holders of war savings stamps and victory bonds. The parasites who make a living out of other people's misfortunes are all ready with their get-rich-quick investments, in which to place your money, promising a small fortune in a short time; there are people who will be taken in, that is the pity of it, in spite of all advice but be one of the wise and make no investment that is against the best judgement of your banker or of some reliable trust company. These agencies are always willing and anxious to help as prosperity for one man helps his neighbor and we are all neighbors of each other, tho miles intervene. This is verily the age of interdependence and no man liveth unto himself either in matters of business life, social life or morality. The big financial concerns of the country are anxious that you reap the full benefit of your savings and that not one cent be lost to the unscrupulous promoter.

STOP, LOOK AND LISTEN, GIRLS
AT the Banker's Convention held recently in New York City, the wives of the bankers were beautifully entertained at lunch at the homes of some of the wealthiest and most exclusive of New York women. Their homes are most elegantly appointed and the guests were attended by innumerable servants in livery. Mrs. Douglas Robinson, Theodore Roosevelt's sister, assisted

The Farm Home

A Department for the Women

Edited by MRS. GRACE NELLIS JENN

one of the hostesses in the receiving line; but we are coming now to the matter of real importance. These society women wore no rouge, little powder, hair done most simply and eye brows as natural (not plucked.)

A JUST CRITICISM

THIS is one of Margot Asquith's criticisms of us and one we might well take to heart.

"As a complete outsider with a short and hurried experience of the United States, this has struck me more than anything else. Beauty, which is so obvious in the architecture and other things, seems to be

price of new books we have decided to see what we could do about getting second-hand books or perhaps get in touch with some other Sunday School that has an old library to sell. We would greatly appreciate any help or suggestions you may be able to give.—Mrs. B. L. F.

I am publishing this letter so that if there are any Sunday Schools that have found a way thru this difficulty, they may give our subscriber the benefit of their experience. Some public libraries in the large cities make a practice of sending out quite a number of books, well selected, to smaller communities for a stated

THE VILLAGE WEEKLY

At last the floundering carrier bore

The village paper to our door.
Lo! broadening outward as we read
To warmer zones th' horizon spread;
In panoramic lengths unrolled
We saw the marvels that it told.
Its corner for the rustic Muse,
Its monthly gauge of snow and rain,
Its record mingling in a breath
The wedding-knell and dirge of death;
Jest, anecdote, and love-torn tale;

underestimated, and where nature should dominate, I have been shocked on every road that I have traveled by huge billboards and advertisements of the most flamboyant kind, which irritate the eye and distort the vision of what otherwise would be unforgettable and inspiring. It is much the same everywhere. In Chicago the Michigan Boulevard, with the lovely lake on one side and grand buildings on the other, running at enormous width for a long distance, is one of the finest broadways in the world; but it is spoilt by a vulgar erection at the end, advertising something or other against the sky in electric bulbs of rapid and changing colors."

SCHOOL LIBRARY

I wrote you some time ago and wish to thank you for your answer. Now I want to ask another question. Our Sunday School which is quite small has a small fund wish to start a library. Considering the high

The latest culprit sent to jail;
Its hue and cry of stolen and lost,
Its vendue sales and goods at cost,
And traffic calling loud for gain.
We felt the stir of hall and street,
The pulse of life that round us beat;
The chill embargo of the snow
Was melted in the genial glow;
Wide swung again our ice-locked door,
And all the world was ours once more.

—From Whittier's "Snowbound"

time and for a nominal sum, the books to be returned and others to take their places. The Public Library of Detroit has such a service. Why not write and find out what arrangement can be made. That plan would give you a circulating library which has some decided advantages. Address, Service Department, Detroit Public Library, Woodward Avenue, Detroit, Michigan.

PANCAKE RECIPE WANTED

I am a reader of the Business Farmer and receive lots of help thru the Woman's Department. I would like to see a recipe for pancakes, that can be made in the morning, quickly and easily and in time for breakfast.

I am having trouble with my starch, after I have it boiled as the directions say on the box and set it aside to cool, it gets lumpy and a thick film is all over the top; and when I want to iron my clothes the starch sticks to the iron, what makes

this? I hope I have not asked too much.—A Reader.

—Is it a recipe for wheat or buckwheat cakes that is wanted? Perhaps we can have some recipes for both.

—Mix the starch with cold water and then slowly add the boiling water, first being sure that there are no lumps in the cold starch, put on the stove and boil slowly, carefully stirring all the time, do not allow it to get too thick. Add a little turpentine to the starch to prevent the iron from sticking. Smoothness and glossiness can be secured by stirring the starch with a paraffin candle two or three times. Use two or three tablespoons of starch to one quart of boiling water, a teaspoon of kerosene oil to one quart of starch will also prevent sticking. If any reader has any further suggestions to offer we will be glad to print them.

ONE MORE DILL PICKLE RECIPE

I saw your request for dill pickle recipes in the best of farm papers. I have tried the following several years but never had it fail.

Pack cucumbers in layers with dill and a large grape leaf between each. Then cover with a brine made of 2 quarts of water, 1 quart of vinegar and 1 cup of salt. These can be packed either in open or sealed jars. I pack some in 2 quart jars and seal and they are good the second season.—Mrs. C. S.

HUNGARIAN GOULASH RECIPE

Peel and cut into pieces, 2 large carrots, 1 white turnip, 3 potatoes, 6 large onions, let cook in a little water until tender, then add 6 tomatoes or 1 can, 6 bay leaves, 1 green pepper, sliced, 2 large apples, peeled and sliced. Cook until tender, add a good sized piece of butter and thicken with browned flour. This makes a good supper or lunch dish.—Ed.

FRUIT CAKE RECIPE No. 1

2 cups sugar, 1 cup butter, 5 eggs, 1 cup buttermilk, 2 wine glasses boiled cider or some fruit juice, ¼ pound citron, ¼ pound almonds, 1 pound raisins, 1 pound currants, ½ cup molasses, 1 teaspoonful cloves, 2 teaspoonfuls ginger, 2 teaspoonfuls soda, 2 teaspoonfuls cinnamon, 2 teaspoonfuls allspice and 5 cups flour. The above is a "corking" good recipe and produces three good sized fruit cakes.

Fruit Cake Recipe No. 2

2 cups brown sugar, 2 cups ground dried apples, 1 cup molasses, 1 cup ground salt pork and ½ cup shortening. Let all boil up until pork is melted, spices, cinnamon and nutmeg added, 1½ cups sour milk, 1½ teaspoonful soda, 1 pound raisins, 1 cup nut meats, citron, orange peel, if you like, add the flour.

Fruit Cake Recipe No. 3

2 cups sugar, 1 cup lard, 1 tablespoon nutmeg, 1 teaspoon cloves, 1 tablespoon cinnamon, part teaspoon salt, ½ cup buttermilk or sour milk, 1 teaspoon soda (dissolved with water) 2½ cups flour and 1 cup of raisins or currants.

Bread Recipe

1 pint of potato water, 1 pint of milk, 3 quarts flour, measured before sifting, 1 cake compressed yeast, 2 tablespoon sugar, 2 tablespoon shortening and 1 tablespoon salt. If you make your yeast, ½ cake dry yeast in 1 quart of liquid will give the same results.

Soak yeast with 1 teaspoon of sugar in enough lukewarm water to cover it. Scald the milk. Place the rest of the sugar, the salt and the shortening in the mixing bowl and pour the scalding milk and potato water on them. (The water in which two or three medium sized potatoes have been boiled may be used if one has not saved the water in which the potatoes were cooked for dinner.) When cooled to lukewarm, add the yeast and about half of the flour. Set it to rise in a warm place for a half to three-quarters of an hour, then add the rest of the flour, enough to make a dough that will not stick when kneaded with but a slight sprinkling of flour on the kneading board. Stir in the mixing bowl or knead until the flour is well worked in. A cup of mashed potato will improve the quality of the bread. Let it rise in a warm place until almost double in volume, then knead

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

Address orders to Mrs. Jenney, Pattern Department, M. B. F.
Catalog 15c—Pattern 12c



A Popular Day Dress

4158. A frock of this kind is neat and chic, and simplifies the work of the woman who makes it. The model is in "slip on" style. The bell shaped sleeve is comfortable and up-to-date. Plaits at the side seams, give added fullness to the skirt portions. This Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46, and 48 inches bust measure. A 38 inch size requires 3 1-4 yards of 54 inch material. The width at the foot with plaits extended is about 2 1-4 yards.



Girls' Dress With Sleeve In Either Of Two Lengths

4204. Plaid suiting was used for this design, with ruffles of taffeta. Inserted pockets are a pleasing feature of this style. The Pattern is cut in 4 Sizes: 4, 6, 8, and 10 years. A 6 year size requires 3 yards of 36 inch material.



A Comfortable Protective Apron

4193. Blue and white check gingham with rick rack braid for trimming is here illustrated. Crepe with a finish in colored yarn would be nice, as would also be percale of sateen with binding in a contrasting color. The Pattern is cut in 4 Sizes: Small, 34-36, Medium, 38, 40, Large, 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 4 1-2 yards of 36 inch material.

A Jaunty Frock For The "Young Miss"

4207. Checked woolen and serge would combine well in this model. It is also good for wool knit fabrics, and for velveteen. The sleeve may be in wrist or elbow length. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 1-2 yards of 32 inch material. To trim as illustrated will require 3-4 of a yard of 32 inch material.



until smooth and velvety and mould into loaves. Put in tins and when it has raised so that the volume or size has about doubled, it is ready for the oven. Bake about 45 minutes in a moderate oven.

REMOVING INK

Would it be possible for some of your readers to describe how to remove lettering from unbleached muslin feed sacks? I have tried various methods without success.—S. L. F.

ADDRESS WANTED

Will our Subscriber who makes sleeveless sweaters please send me her address? It is wanted and I have mislaid it.

NOT ADVERTISING

While we cannot use this column for advertising purposes, we will mention anything that promises to be a mutual help. This department has been the means of getting a good deal of help to a number of people, thru their making their wants known here.

J. D., Hastings.—Your card with the canning recipe did not reach me. If you will write again I will gladly publish it. Address your letter to me, in care of Home Department.

If you will send me an addressed envelope or postal card I will give you the address of a firm selling Rust Proof.

Well I'm back again to thank all those who helped me with my bread problem and those who gave the fruit cake recipes. I tried the bread recipe and it proved very satisfactorily, and as for the cake recipes I have not used all of them but I am keeping them for future use.—Nellie Isles.

NANCY HANKS

1-2 cups white sugar, 1-2 cup butter, 3 eggs beaten separately, 2 cups of flour, 2 teaspoons baking powder, 2 squares Baker's chocolate dissolved in 1-2 cup hot water.

Icing for Nancy Hank: 1 cup brown sugar, 1 cup white sugar, 1 desertspoon vinegar, 1-2 cup water. Boil till this forms a soft ball in cold water. Remove from fire. Beat in the whites of 2 eggs (beaten) put back on fire and add 8 marshmallows, stir until these dissolve. To be put on cake when cold.—Canadian Subscriber.

GRAPE CONSERVE

1-2 peck grapes, 2 oranges (juice) 2 lemons, 1 c. chopped nut meats, sugar equal quantities as you have mixture. Wash fruit, remove grapes from stems. Remove skins from pulp. Cook pulp until soft. Strain to remove seeds. Place the strained pulp and skins in the preserving kettle. Add orange and lemon juice.

BEAUTIFUL ANGELS

(By request)

Beautiful angels are guarding us ever,

Sent by our Savior above;

Beckoning earnestly t'wards the bright river,

Sweet guiding angels of love.

Guarding us ever as onward we struggle,

Over life's ocean so broad;

Vigils they're keeping thro' joy and thro' trouble,

Beautiful angels of God.

Coming with heavenly mercies abounding,

Coming on missions of joy;

Life's fitting journey with brightness surrounding.

Coming its griefs to destroy.

And as we pass from its changes forever;

Leaving its glitter and gloss,

When we arrive at the beautiful river,

Angels will guide us across.

Angels will strengthen our faltering footsteps,

If their still voices we heed;

Sweetly they'll teach us the Lord's holy precepts,

Unto his kingdom they lead.

And when at last, we, through portals of brightness,

Enter the mansion above,

There we shall see in their heavenly whiteness,

Beautiful angels of love.

Uncle Rube Spinach Says

JUST THINKIN'

THE holiday season is just past an' gone an' of course most of us has had a great time. The weather was fine an' everything turned out as we would have it—for most folks any way. An' I'm thinkin' now of all the happy-kiddies—happy 'cause Santa Claus came to them an' gave them the very things they wanted an' some of them the things they really needed.

An' I am also thinkin' of the little fellers that Santa missed this year jest as he has missed them every year since they were born. Say folks! Do you know I am sorry for the man or woman that has no little kiddies to make happy when Christmas times comes?

I know the joy that comes to one plannin' and buyin' the little things or maybe, bigger things to make the kiddies glad.

An' it takes so little to make a child happy! So you see I pity the ones who have no kiddies to buy for. An' oh how sorry I am for those who have little fellers an' yet, on account of sickness or misfortune, are not able to do what they would like to do an' have to tell the little ones that Santa could not come this year. I can feel for them as I picture the disappointment of the little boys an' girls to whom some of them Santa never comes—to them Christmas means nothin'—it's the same as any other day unless some one with a big heart, who knows conditions an' considers it a privilege to step in an' help Santa out.

Yes, I pity those who have 'no little fellers an' I sympathize with those who have an' can't do anything for 'em. But I have no patience an' no love for the man or woman to whom God has given little ones—who are able to do everything for them an' yet do nothin'. Such folks don't know the joy of livin'. They care nothin' for the happiness of little folks; they forget they were ever children themselves. Some of 'em are so wrapped up in makin' money they pinch a dollar or a nickel so tight an' have pennies always before their eyes so they can't see anything else an' they don't want to see anything else 'cause money is their God an' nothin' else counts with them.

If they lose a horse or a cow or hog, they take on somethin' awful—an' yet they neglect the most valuable thing they have on earth except the mother of the little ones an' the chances are they neglect her too.

I always look with suspicion on the man or woman who has no love for children. There is somethin' wrong in their makeup. An' somehow, I always feel like puttin' my hand on my pocketbook—if I have one—whenever I meet up with one of the kind.

Children were given us to be loved an' it's up to us to love 'em an' treat 'em right. Not only our own little fellers but every child for they have the same right to live an' enjoy life as we have. We were all little fellers once. Many there are what act as though they never were—they have no patience with kiddies—act as though they'd like to see 'em boiled an' made into soap or somethin'. An' yet the boys an' girls of today will be the fathers an' mothers of a few years hence—they will be runnin' things then an' the old curmudgeons who are so cranky to them now will be in their second childhood—if they are allowed to encumber the earth that long—an' will be dependent on the very kiddies whom they now look on with disdain.

Well, anyway it's been a great holiday season an' now as I get back into the harness for another year's work I look back at the last few weeks an' find that I stored up happiness enough to last me for the time until we go through the same thing again.

If there is any one thing that I am more thankful for than any other it is—that God has given me children to live an' a heart to love 'em. An' not only the ones He has given to me but a love for childhood in general.

An' so here's wishin' for all that is brightest an' best for the little folks all over this great land of ours. Cordially yours—UNCLE RUBE.

THE SIGN OF QUALITY
For Your Protection

Lily White

"The Flour the Best Cooks Use"



A GOOD RECIPE FOR MILK BREAD

3 quarts of Lily White Flour, 3 pints of lukewarm milk, 1 cake of Fleischmann's yeast. Set in morning in warm place and rise until light. 3 teaspoons of salt, 1 tablespoon of sugar, 1 tablespoon of melted butter or lard. Mix with Lily White Flour until stiff, or from 20 to 25 minutes. Set in warm place and let rise until light. Make in loaves and work each loaf from six to eight minutes. Set in warm place until light. When light take warm milk and sugar and put over top. Keep good fire and bake slow one hour and when baked wash over again to make nice smooth brown crust.

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We Guarantee you will like Lily White Flour, "the flour the best cooks use" better than any flour you ever used for every requirement of home baking.

If for any reason whatsoever you do not, your dealer will refund the purchase price. He's so instructed.

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50 Cents

worth of common kerosene (coal oil) will keep this burner in operation for 24 hours and will produce 1000 ft. of the best cooking gas known to science. The same amount of city gas would cost \$1.25. No coal—no ashes—no soot—no fire to build. Absolutely safe, easy to light, even temperature for cooking or baking, easily installed in any kitchen range.

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Try the Knight Burner for 15 days in your own stove. Be convinced that it is the most efficient and economical burner you can buy.

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at low cash price for immediate delivery. 100 Standard, No. 1 mixed colors for \$2.00 or 40 for \$1.00. Also all the rare raised sorts, 100 for \$3.00 or 30 for \$1.00 postpaid.

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Never Let a Cold Get a Start



Break it up overnight

THE quick direct treatment for colds of children and grown-ups too, is an application of Vicks-vapo-rub throat and chest at bedtime. Not only is Vicks absorbed thru the skin, but its healing vapors of camphor, menthol, eucalyptus, turpentine, etc., are breathed all night directly into the affected air passages. Relief usually comes by morning. Just as good, too, for cuts, burns, bruises, stings and itching skin troubles.

Write to Vick Chemical Co., Box 191 Greensboro, N. C., for a test sample.

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Handsome, guaranteed time keeper, given for selling only 40 packs of vegetable or flower seeds (mention which) at 10c per large pack. Easily sold—EARN BIG MONEY OR PREMIUMS. Get sample lot today. Send no money. We trust you till seeds are sold.

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FREE—To introduce our Pedigreed Everbearing Strawberries we will send 25 fine plants free.

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WHEN WRITING ADVERTISERS MENTION M. B. F.

Aspirin

Say "Bayer" and Insist



Unless you see the name "Bayer" on package or on tablets you are not getting the genuine Bayer product prescribed by physicians over twenty-two years and proved safe by millions for

Colds	Headache
Toothache	Lumbago
Earache	Rheumatism
Neuralgia	Pain, Pain

Accept "Bayer Tablets of Aspirin" only. Each unbroken package contains proper directions. Handy boxes of twelve tablets cost few cents. Druggists also sell bottles of 24 and 100. Aspirin is the trade mark of Bayer Manufacture of Monoacetic-acidester of Salicylic acid. (1)

BREAK UP THAT COLD WITH INDIAN HERB TEA

Taken steaming hot at bedtime *Indian Herb Tea* assists nature to quickly break up a cold and guard against

Grippe, Influenza or Pneumonia.

Indian Herb Tea, a pure veg table medicine, contains only barks, seeds, leaves and roots. Pleasant to take.

Send for Free Sample. Large Family Packag., 50 doses, \$1 by mail.

Money refunded if not satisfied.



American Herb Co.,
Pittsburg, Pa.

Rheumatism

A Remarkable Home Treatment Given by One Who Had It

In the year 1893 I was attacked by Muscular and Sub-Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

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& bow given—sell only 40 packs vegetable or flower seeds (mention which) at 10c large pk.
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Mich. Business Farmer, Mt. Clemens, Mich.



DEAR Nieces and Nephews:—
Again Christmas has come and gone and we are on the threshold of a new year. Most girls and boys go forward with shining eyes eager to see what the future has in store for them but the majority of the older people like your fathers and mothers or grandparents, or like Uncle Ned, hesitate and take inventory. We stop a moment in our daily work to balance the books, or to count the good deeds we have done during the past year and then compare them to the bad ones we did. Sometimes we are pleased with the results but many times we are not and then we decide that we will increase the number of good deeds and decrease the bad ones during the next year. I know that many girls and boys also do this but I think it would be a great step taken toward making this world of ours a finer and better place to live in if everyone, both large and small, would stop and take inventory every now and then.

If you will notice the people that pass your home you will soon be able to pick out the ones that stop each day to perform some good deed and the ones that do not. And, dear boys and girls, you will find that the tramp who calls at the back door for something to eat and the man known as "the miser" in your neighborhood are not of those trying to make our world a little better and brighter. Learn to stop and take inventory of yourself.

I certainly received a fine lot of Christmas stories. Some of them did not arrive until after the prizes had been awarded. I wish that we had space on our page to print them all even though Christmas is over but we cannot. However, we will try and have another contest soon so that all those who lost out this time can try again.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned and Cousins:—
May I snuggle in your cozy corner and enjoy "The Children's Hour" with you? I read our corner each week and enjoy my cousins' letters very much.

I am fifteen years old and I am in the eleventh grade in school. I, and a brother and sister go to the Elsie high school. I am taking four subjects, American literature, physics, modern history and algebra II. We have our semester tests in about three weeks. I like to go to high school better than I did at the country school. We have a high school assembly each month. The freshmen had charge of the assembly this month and they gave a very fine entertainment.

I am taking piano lessons now. I am in the fourth book. I like music and so I get along all right.

I think Lydia Sounart's story entitled "A Russian Santa Claus" very good but I am glad our Santa Claus drives a reindeer, aren't you?

I am sorry to leave your corner but I expect you will think I am taking all the room. Won't some of the boys and girls who read this corner please write to me. I will try and answer all who write to me. Well, good-bye Uncle Ned and Cousins. Your niece and cousin, Margaret Cook, Elsie, Michigan.

Dear Uncle Ned—Hello, everybody! How's the world treating you? If I'm thinking correctly, and I think I am, I said in my last letter that I was dreadfully lonesome here, but it must have been my imagination, as it's not a bit lonesome, now at least. If I had not had my age down pat I'm sure I wouldn't have known how old I really was, I'm not sure yet. It sure kept me guessing for a while to know how old I really was. Those who guessed sixteen were right, those who did not guess that were wrong (naturally). I certainly like to read, and my favorite author is Zane Grey. Of course I like many more but I believe I enjoy his books the most. I intend to spend my spare time during the Christmas vacation reading. I wish some of the boys and girls would write to me. Did I hear you sigh?

I know I did! Yes, I know Christmas is coming on and you most all are busy making gifts, but can't you spare,—well, say five minutes,—to write to me? I assure you that I'll answer back so prompt that you'll be shocked. Try it, will you? Well I know Uncle Ned's eyes are tired reading my scribbling, so we'll say "Au-rovoir". Your niece, Venus Gazlay, Sidnaw, Michigan.

Dear Uncle Ned and Cousins:—
I just read the December 23rd issue and though I would try my luck again. I have described myself before but probably you have forgotten what I look like. I am five feet and one inch tall, blonde complexion, and 16 years old. My birthday is the 17th of August. I wish those who have a birthday on the same day would write; not only them but all of the cousins around my age. I will gladly answer all that write. I am a freshman in high school.

How many had a merry Christmas? I hope you all did. Santa was very good to me this year.

I am a member of the Junior Red Cross. Our school made wreaths and calendars and sent them to the hospital in Newberry. It sure is great fun to join together and work. How many of the cousins joined the J. R. C.

My fountain pen is so poor tonight that I misspelled almost every other word. I would like to hear from the cousins. A happy New Year to all.—Lillian Kuivinen, Box 71, Lewiston, Michigan.

Dear Uncle Ned:—I am a farmer boy and I am ten years old. My birthday is on the tenth of February. I go to school and I am in the sixth grade. There are twenty scholars in our school. For pets I have about thirty rabbits and one cat. It is snowing today. There is about four inches of snow and in some places it is about a foot deep. I went skiing and sleigh riding. We are going to have a program for Thanksgiving at our school. I earned \$8.33 picking up potatoes this fall. We have taken the Business Farmer several years and I like to read it. I will close. From your nephew, Hugh Evan Good, Lake Ann, Michigan.

Dear Uncle Ned—May I join your circle of happy boys and girls? My father takes the M. B. F., and I have been a silent reader of the Children's Hour for some time. I would like to become acquainted with some of the boys and girls that write to the Children's Hour. I am ten years old and go to school every day. I am in the fifth grade and have about one mile to walk to school. I live on a 180-acre farm. We have 29 head of cattle, 6 horses and 14 pigs. For pets I have a little puppy, and a pony. I call my puppy collie and my pony's name is Baronet. I am sending you a photo of our pony. I have two brothers and three sisters. I would like to hear from some of the boys very much. Well I guess I will close for this time. From your friend, Alma Miller, Herron, Mich.

Dear Uncle Ned—I would like to join your merry circle. We take the M. B. F. and I like it very much. I enjoy reading the children's letters. I go to the Spicerville school. It is a little over a mile and a half. There are 9 children in our school. I am in the sixth grade. I have one brother. He is in the eighth grade. He is two years older than I am. We live on a farm of 80 acres. For pets I have two cats. We have two colts and two horses. We have one cow and three calves, and some chickens. We live a mile and a half from town. From your friend, Marion Wedon, R. 7, Eaton Rapids, Michigan.

Dear Uncle Ned:—I am a new writer and like to write letters. We take the M. B. F. and like it very well and I like to read the children's page.

The answer to the riddle that Francis wrote is "coal," because

coal is stone at first and fire is the blaze, dust is the ashes, black is the color, red is the fire, white is the ashes.

I have brown eyes and hair, I am 12 years old and am in the 7th grade. I am four feet and five inches tall. I have a sister 9 years old and a brother 7 years and a baby brother 16 months old, which has a head of yellow curls. Well I will close. Your friend, Hope Kratzer, R. 1, Allen, Michigan.

Dear Uncle Ned—Well it is not so very long ago since I wrote my last letter. We are having quite cold weather now days. I did not know what to say when I got up this morning and the ground was all covered with snow. We have lots of fun at school if there is snow on the ground. The boys make a big ring and then we all play fox and geese. The other morning we had a little snow. Of course the boys thought they could snowball us girls, but the teacher told them the first one that threw a snowball, would have to stay in all their noon hour and recess all winter through so we got along very good.—Esther Mann, R. 1, Mount Clemens, Michigan.

Dear Uncle Ned—How are you these days? The most snow we have had this month is 1 inch and that did not last only a day, but father says we can go skating next Sunday and I am as glad as can be. I got a pair of skates last winter and it didn't take me long to learn to skate. My sister and I went skating and we had a lot of fun. The ice on the lake is about two inches thick. Good-bye, from Jeanette Sass, R. 1, Clayton, Michigan.

Dear Uncle Ned:—May I join your merry circle? My father takes the M. B. F., and enjoys it very much, and I read the Children's Hour. I am a girl 13 years of age, am in the 7th grade at school. I am taking up a health course and in one month I gained 7 pounds. My height is 60 inches. I have two brothers. We live on a 120 acre farm. Hope to hear from all the cousins.—Mary A. Brassinger, R. 1, Amadore, Michigan.

Dear Uncle Ned:—I am writing just a few lines. I am a girl of 12 years of age. I am in the sixth grade. My father takes the M. B. F. Your niece, Leota Way, 213 Meek St., Caro, Michigan.

Dear Uncle Ned:—May I join your merry circle? We take the M. B. F., and enjoy it very much. I am 14 years old and in the eighth grade. My birthday is October 26th. If I have any twin sisters or brothers please write to me. If I have no twins I would like to hear from any boy or girl. I have two sisters and one brother. For pets I have two cats. I hope you enjoyed your Christmas as I did mine. Love to all.—Helena E. Van Ouden, Weberville, Michigan, Box 96.

LAUGH IT OFF

Are you worsted in a fight?
Are you cheated of your right?
Laugh it off.

Don't make tragedies of trifles;
Don't shoot butterflies with rifles;
Laugh it off.

Does your work get into kinks?
Are you near all sorts of brinks?
Laugh it off.

If it's sanity you're after,
There's no recipe like laughter—
Laugh it off.

—Modern Methods.

Delay Doesn't Pay
Break That Cold Today



CHECKS Colds in 24 hours—la grippe in 3 days. Quickly relieves Headaches. Tablet form. Standard remedy world over. Demand red box bearing Mr. Hill's portrait and signature.

At All Druggists—30 Cents

W. H. HILL COMPANY (A-203) DETROIT, MICH.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

RADIO LECTURE DATES

January 29th, 7:30 p. m., Baptist Church, Tekonsha, Michigan.
January 31st, 7:30 p. m., Community Club, Cressy, Michigan.

HAVE YOU ARRANGED FOR LECTURE AND DEMONSTRATION

In order to save extra letter writing and the wait for a reply, the following arrangement is being made to enable you to figure the exact cost to you for a lecture and demonstration on Radio.

1st. Railroad fare from Elberta and return is to be paid.

2nd. Board and lodging and transportation to and from station for one night.

3rd. Estimated cost of necessary supplies and incidental expenses that are incurred in giving demonstration, breakage of parts and wear and tear due to rough handling by transportation companies, such as vacuum tubes (each one broken or burned out costs us \$6.50 and this is one item only.) Therefore a fixed charge of \$10 is necessary in addition to items 1 and 2.

4th. If dates are arranged at places close to each other the railroad fare would then be divided and the cost would be less, but this would have to be in the nature of a rebate to you.

It is our effort to arrange the schedule, in so far as possible, so that railroad fare will be divided between two or more places.

You can charge admission to these lectures and in that way pay all expenses and in fact make a little extra money to put into your treasury.

We will supply you tickets free, all you have to do is to fill in the date and time of the lecture.

What You Will Get!

1st. An actual demonstration of receiving by radio, hearing music and speeches or other entertainment.

2nd. First hand demonstration of the working of a receiving set, actually seeing it work.

3rd. An opportunity to ask questions and receive answers at once.

4th. Hearing a lecture (or talk) in plain language that you will understand, about Radio, where to buy your parts for making sets, what to avoid and what you will need.

5th. How to apply radio to your actual benefit as well as entertainment.

PUBLISHER'S DESK

PATENT ATTORNEYS

I notice that you are handing out a lot of good advice in every issue, so I come for a little myself.

I have an idea which I think might be patented, and have been corresponding with a man in Washington, D. C., who says it is possible to legally protect an idea before patenting, so that it may be made known to manufacturers and their opinions solicited as to its commercial value, or even sell it without running the risk of losing your rights by making the idea known.

I am enclosing a treatise sent out by this man and would like your opinion as to its soundness.

He also sent me a blank form to be filled out and signed by witnesses and a notary public. It also has

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on 10-day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make \$250 to \$500 per month. (Adv.)

blanks for sketches. What is your opinion of this?

I agree with him when he says it is better to spend twenty dollars than seventy-five or more in finding out if an idea is of commercial value. But I would like to have someone else's opinion before investing even twenty dollars. Hence this letter.

—The gentleman from Washington may be all right and his may be a good plan, but we have never heard of Mr. Green and I wonder why he does not give his post-office address so we, or you, might look him up. I am sure your state representative at Washington would be glad to have someone in his office look Green up for you or recommend a good patent attorney. Without the address I cannot even find him in a commercial rating book.

SONG POEM "BUYERS"

I sent the Lenox Company a poem a year ago, they said it was good and they wanted me to accept their offer, since then I have heard from them several times. Now how can I find out if they will deal square. I like to write poetry and would like to make some money from my talent. Can you tell me how to proceed. I first read their ad in "Comfort."

—I hope you have not sent the Lenox Company or any other any money. Their scheme is to get you to pay for seeing your own poem in print. Few copies are ever sold, if any. We have had several experiences with these people, but have never known of anyone writing a "hit" for them. If you have real talent, send your material to any legitimate song publisher, they are anxious to buy suitable material and will not ask you to pay them first.

THE TRUTH ABOUT HENRY FORD

(Continued from page 6)

then the tires gripping the surface of the track and the machine was away like a shot. The hundred or more spectators held their breath as the little car tore along the track, then cheered wildly as it crossed the finish line. In a few minutes the timekeepers announced that Mr. Ford had broken all records by making the mile in 39 4-5 seconds. This feat made the car and its designer known the world over.

That race and the previous one in which he defeated Alexander Winton were the only speed contests in which Henry Ford drove his own car. Shortly afterward Barney Oldfield drove 999 at New York, Chicago, Los Angeles and other cities and won many successes, but the company's racing was destined to end soon in a near tragedy. Frank Kulick was driving a six cylinder car in a race at the Michigan State Fair when a rear tire exploded, flew off and struck him on the head. The blow stunned Kulick and the speeding car crashed through a fence. Kulick was extracted from the tangled wreckage and hurried to the hospital. As the unconscious driver was carried away Mr. Ford declared: "Never again will I risk the life of one of my men in this way."

Never, since that day, has the Ford Company entered a race.

Kulick recovered and is still in the employ of the Ford company. Likewise all the men who prepared the car for the race now hold important positions with the company. A picture was taken of them when the racer was completed. They were Peter E. Martin, now general manager of the Highland Park plant; Charles Hartner, now assistant plant superintendent; Gus Degner, now superintendent of inspection at the Highland Park plant; Fred Rockelman, now manager of the Indianapolis branch; Fred Haas, now in charge of all branches, and Ray Daling, who will be mentioned again in the account of the peace ship. This racer was the first of its type ever built.

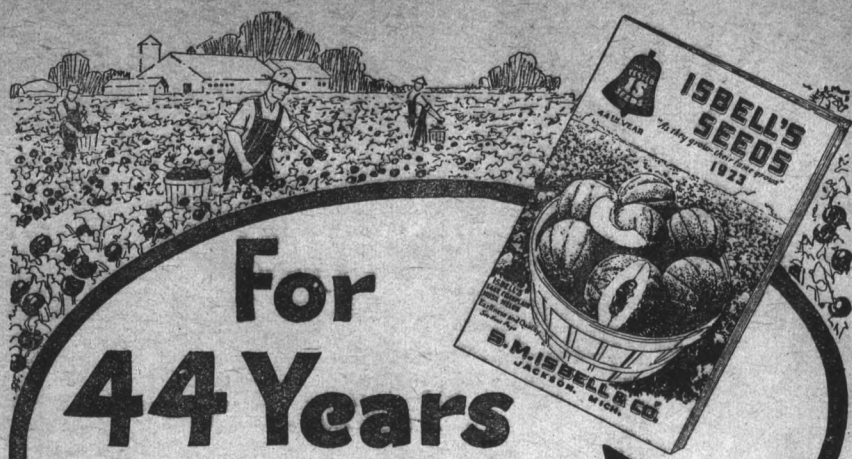
Further chapters of "The Truth About Henry Ford" in Jan 20 issue.

BILLS AND NOSES

"There was a strange man here to see you today, papa," said little Ethel, on meeting her father in the hall.

"Did he have a bill?"

"No, papa; he just had a plain nose."—Everybody's Magazine.



Isbell's have been improving seeds—developing hardier, earlier, bigger yielding strains—adapting crops to northern soil—improving methods of preparing seed. That's why Isbell's Seeds are the favorite whenever tested—why they give sure, abundant harvests and withstand adverse weather and soil conditions.

Hardy, Big-Yielding, Michigan Grown

Isbell's Seeds
"As They Grow Their Fame Grows"

FOR FIELD

It pays to plant pedigreed seeds—the labor is no greater and the crop is more certain; and often is double or triple the yield. Pure bred seeds pay big profit, for the same reason that thoroughbred stock does—generations of selections has built the strain.

FOR GARDEN

Write for Your FREE Catalog, Today

Isbell's 1923 Seed Annual is ready and your copy will be sent on request. It tells of seed, their growing, selection, testing and cleaning—gives cultural directions—tells what crops to grow and how. It is a mighty helpful catalog—and it is authoritative.

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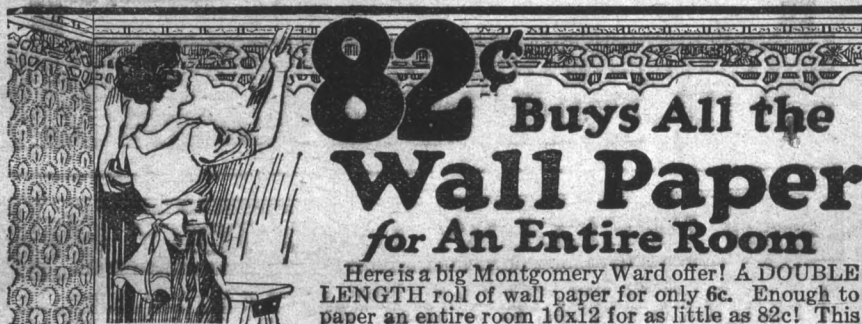
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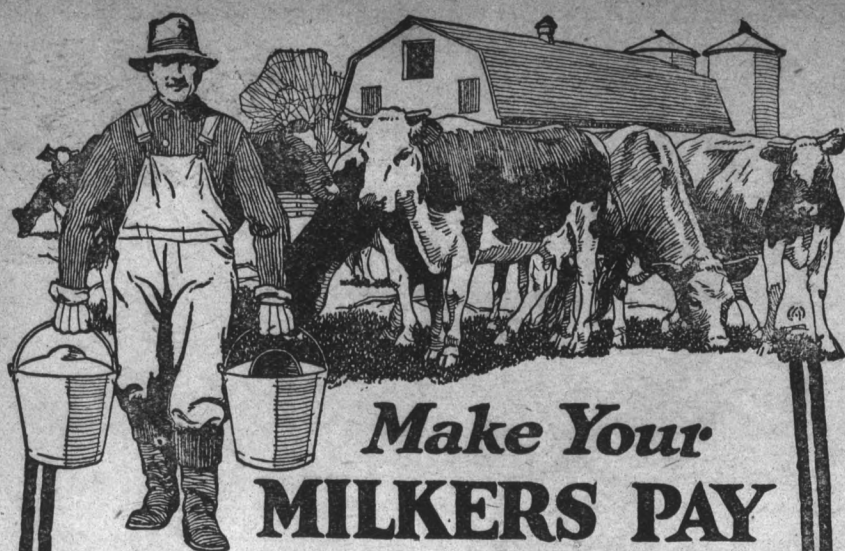
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Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 608 E. Douglas Street, C-489, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

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Every cow in your herd can be made to produce up to her full capacity

—if you look well to her ration, her health, her appetite and her digestion.

Balance the ration. Feed bran, oats and corn, or their equivalent, cottonseed or linseed meal, clover hay, alfalfa, silage—pasture in season.

Remember, the better the appetite the greater the food consumption, the greater the milk production.

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Keeps Cows Healthy Makes Cows Hungry

It conditions cows to turn their ration of grain, hay and fodder into pails of milk.

It contains *Nux Vomica*, greatest of all nerve tonics. *Quassia* produces appetite, aids digestion. *Salts of Iron* keeps the blood rich. There are *Laxatives* for the bowels, *Diuretics* for the kidneys, to help throw off the waste materials which so often clog the cow's system.

Excellent for cows at calving. Feed it before freshing. Good alike for all cattle.

Tell your dealer how many cows you have. He has a package to suit. **GUARANTEED.**

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

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

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Dr. Hess Dip and Disinfectant
Keeps the Dairy and Stables Healthful and Clean Smelling

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OUR SPECIALTY:

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We are experienced salesmen, Expert Judges and money getters.

Right prices. Write today for good dates and our terms, address either of us.
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U-Need-A Practical Competent Auctioneer to insure your next sale being a success. Employ the one Auctioneer who can fill the bill at a price in keeping with prevailing conditions. Satisfaction **GUARANTEED** or **NO CHARGES MADE.** Terms \$50.00 and actual expenses per sale. The same price and service to everyone.

I specialize in selling Polands, Durocs, and Chesters. Let me reserve a 1922 date for you. Write or wire,
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CATTLE

HOLSTEIN-FRIESIAN

EXCEPTIONAL FINE BULL CALF BORN Dec. 12th. The Dam is the best cow we have and has A. R. O. records. Sire Romeo King Segs Pontiac Korndyke—son of the \$30,000 bull. The first \$25.00 gets him—don't linger. Entire herd free from T. B.
SCHAFER BROS., R. 4, Oxford, Mich.

OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1,100 lbs. on yearly test. Free from T. B., \$50.00 and up.
WOLVERINE DAIRY FARM
Prop.—H. G. Booth Gladwin, Mich.

32 LB. SIRE—30 LB. DAM—HERE'S A BULL bargain that will be snapped up quick. Born Nov. 3rd, 1921, ready for light service, nicely marked, more white than black.

His dam, a great grand-daughter of King Segs and Pontiac Korndyke, was 2nd Prize Junior 4 yr. old in both 7 and 30 day divisions, State of Michigan in 1918; her records being 30.79 lbs. butter and 653.10 lbs. milk in 7 days and 124.21 lbs. butter and 2779.90 lbs. milk in 30 days. His 32 lb. sire is by a son of Pontiac De Nijlander, a \$5.43 lb. Michigan champion. The 32 lb. dam of his sire is also a 2nd Prize Michigan cow in the Senior 4 yr. old 7 day division in 1918 and her dam a 29.43 lb. cow. First check for \$250.00 gets him f. o. b. White Pigeon, Mich. Pedigree and photo on request.
ALBERT G. WADE,
130 N. Wells Street, Chicago, Ill.

FOR SALE—HOLSTEIN BULL CALF, 8 weeks old. Dam 28.91 lbs. butter, sire 33 lbs. with 1,100 lb. yearly record. Price \$300.00 or will exchange for suitable female.
COOK BROS., Fowlerville, Mich.

FOR SALE—REG. HOLSTEIN BULLS FROM A. R. O. dams ready for service.
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RICHLAND SHORTHORNS

We offer one red, low down, thick bull calf fifteen months old, also one roan calf fifteen months old. A bargain if taken at once. Also a few young cows with calves at foot.

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SHORTHORNS AND POLAND CHINAS—NOTHING for sale at present. Are holding for public sale Nov. 15th. Write for catalogues.
SONLEY BROS., St. Louis, Mich.

A POLLED SHORTHORN HERD BULL 2 years old. Scotch Orangeblossom Family. Fit to head any herd. Younger ones for sale.
L. C. KELLY & SON, Plymouth, Mich.

GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. **W. S. HUBER, Sec'y, Gladwin, Mich.**

DAIRY and LIVESTOCK

CONTROL OF CATTLE LICE

CATTLE lice are more or less common in all parts of the United States. They are found mostly on underfed and poorly housed cattle, although they often occur on cattle in good flesh and kept in sanitary quarters. As a rule individual members of a herd are not infested equally, some being infested much worse than others, because some cattle seem to be practically immune. Young and old stock, and weak poorly fed cattle suffer the most from lice. Infested calves do not thrive or gain weight normally during the winter season and will remain stunted until the coat is shed in the spring at which time practically all the lice will disappear. The loss in weight is sufficient to warrant adopting some method of treatment.

Cattle lice live upon food obtained from the body of the host. The irritation caused by their feeding is shown by the efforts of the infested animals to obtain relief by rubbing and scratching, and one will often see animals with areas of skin where the hair has been rubbed off and the part bruised and raw from rubbing against objects.

There are three kinds of lice that are usually found on cattle, and are commonly known as "Short nosed cattle lice," "Long nosed cattle lice," both of which are blood sucking lice, and the "Biting lice of cattle," whose presence is not as serious as that of the former. All, however, are treated in the same manner.

In the control of cattle lice, plenty of nutritious food are essential to success, whatever method of control you choose to adopt.

There are two commonly used methods of treating cattle for lice: first, hand applications and, secondly, by spraying. The method to adopt will depend upon the season of the year, the remedies selected, the number of cattle to be treated and the facilities available. All animals in the herd should be treated regardless of whether they show evidence of being infested or not.

Of the hand applications, the common prepared louse powders that are on the market are useful in helping to hold in check the parasites during the season when the weather is too cold for dipping or spraying.

Grease and liquid preparations can be made up at home which are fairly effective and practicable where the farmer has only a few head to treat and will give the matter his personal attention. A small quantity of raw linseed oil applied with a stiff brush over the surface of the body is very efficient. A mixture containing equal parts of lard, kerosene and sulphur is very useful when applied in the same manner.

An efficient decoction can be prepared by placing a pound of larkspur seed in a gallon and a half of water and boiling down to a gallon, this preparation has worked well in the treatment of many herds. This may also be applied with a brush.

For spraying the coal tar dips will be found efficient if in making up the solutions you will add about ten ounces of vinegar to each quart of the coal tar solution. The vinegar is added for its destructive action upon the eggs of the lice. As soon as you have finished spraying an animal it is well to rub the solution in well with a brush. Further information on this subject may be obtained by sending for "Farmers Bulletin No. 909," United States Department of Agriculture, Washington, D. C.—Edw. K. Sales, Veterinary Division, M. A. C.

MEANING OF "TANKAGE"

Please give me the definition of the word tankage. I notice it so much in Farm Journals but it is new to me.—H. H., Lyon Manor, Mich.

—The word "tankage" refers to the by-product from the tanning of dead animals, and waste meat scraps, such as are found about abattoirs. All animals which arrive at terminal markets dead, those that are so severely injured as to be unfit for human food, or are diseased rendering them unfit for human food, are first skinned and then placed in a tank where they are thoroughly cooked until the flesh all falls apart and all of the grease is removed.

The grease is drained off and used for inedible purposes. The meat is dried and then ground, the product being called tankage.

—Tankage is in several grades. A great deal of low grade tankage is sold to fertilizer manufacturers, whereas the better grades of tankage are sold for animal feeds. Tankage is used almost entirely as a hog feed, not being palatable to other classes of livestock. In purchasing tankage it is usually best to buy one of the better grades of "digester tankage," the word "digester" indicating that it is a feeding tankage. We always buy the grade containing 60% protein and take pains to see that we get it from an abattoir which has Federal inspection, so as to be absolutely sure that it has been thoroughly sterilized.—George A. Brown, Prof. of Animal Husbandry, M. A. C.

WILL SILAGE DETERIORATE?

Does ensilage deteriorate in feeding value if thrown down in a pile and let to heat twelve to twenty-four hours before feeding.—J. E. S., Edmore, Michigan.

—During warm weather silage should be thrown out of the silo as it is used, as it will deteriorate considerably if allowed to lay in a pile and heat from twelve to twenty-four hours before feeding. In cold weather, however, it will not deteriorate any and it is often advisable to throw it down at least twelve hours ahead of feeding, throwing any frozen of the top of the silo down first and then some of the warm silage from a little lower down on top. If this material is then slightly packed in the silo chute, it will often warm up enough to expel the frost from that which was thrown down first and the entire mass will be better as feed. This last will only apply where the chute is warm enough so that further freezing will not take place. George A. Brown, Prof. of Animal Husbandry, M. A. C.

FATTENING COW

I have a cow to sell, one of our cattle buyers offered 1½¢ a lb. alive, calls her a canner. I asked him what she would be worth if I fattened her, he said he would give me 3¢. What I would like to know is if I can't get more for my corn if I fatten her than to take 1½¢ per lb. for the cow and 30¢ per basket for corn, have a feed grinder also. I have never fed cows or fattened them. How long does it take?—W. F. C., Standish, Michigan.

It would not be profitable to fatten a canner cow with corn at present prices. It would be much better for you to take 1½¢ per pound for the cow and sell your corn at 30¢ per basket than to feed the corn to the cow and later sell her at 3¢ per pound.

The transaction, if you were to fatten the cow, would figure out something like the following: One canner cow weighing 800 lbs. would be worth at 1½¢, \$12.00. To make her weigh 1000 lbs. and sell for 3¢ per lb. would require in the neighborhood of 800 lbs. of corn and 800 lbs. of clover hay, for each 100 lbs. gain or you would increase the value of the cow from \$12.00 to \$30.00, or \$18.00 worth. To do this would require about 1600 lbs. of corn and a like amount of hay, which would be worth more than \$18.00.—George A. Brown, Prof. of Animal Husbandry, M. A. C.,

VETERINARY DEPARTMENT

TAKING CATTLE FROM STATE TO ANOTHER

Do milk cows have to be tested for tubercular trouble when taking from Illinois to Michigan? If so, for how long will the test hold good? Do horses have to be inspected in order to take them?—L. A. R., Cordona, Illinois.

—The importation of cattle into this state for breeding or dairy purposes is prohibited except when such cattle are accompanied by a certificate of inspection made by a duly qualified veterinary surgeon who is a graduate of a recognized veterinary college in

20 Cents

to keep this separator in perfect running order for one year is the testimonial of 51 American farmers who purchased Melottes over eight years ago. They are still giving perfect service every day and skimming so close that not a single trace of cream is left in the milk. We will send you a Melotte right to your farm on **30 Days' Free Trial!**—then, if satisfied, only \$7.50 and a few easy payments—and—the wonderful Belgium Melotte Separator is **YOURS.**

No Money Down!

Catalog tells all—write.

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes cream waste! The Melotte bowl is self-balancing. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. The Melotte has won 264 Grand and International Prizes.

Catalog FREE

Write for new Melotte catalog containing full description of this wonderful cream separator and the story of St. Jules Melotte, its inventor. Don't buy any separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee. The Melotte Separator, H. B. Babson, U. S. Mgr., 2843 W. 19th Street, Dept. 3301, Chicago, Ill.



Runs so easily, bowl spins 25 minutes after you stop cranking unless you apply brake. No other separator needs a brake. Bowl chamber is porcelain lined.

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With Simple Mixture, Farmer Can Produce Better Hams and Bacon Than the Packers

Any farmer can produce high-priced sugar-cured meats, better than packing house products, by using a simple, quickly-prepared mixture. Besides sugar curing ham and bacon, the mixture preserves spare parts and makes cured mutton delicious.

To make it add a large jar of Wright's Ham Pickle to 27 pounds of salt and use as dry pack or brine. Let the meat cure 4 to 8 weeks. Then smoke it with Wright's Condensed Smoke, which will take only a few minutes, and you'll have meat that will delight the family or bring fancy prices. Wright's Smoke and Ham Pickle are fully guaranteed. They cost little at any drug store.

Send your name to the E. H. Wright Co., 850 Broadway, Kansas City, Mo., and receive, free and postpaid, a new \$1 book, "Meat Production on the Farm," which tells how to cure every kind of meat. This book is free to farmers only. Write for it today.

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On trial, Easy running, easily cleaned. Skins warm or cold milk. Different from picture which shows larger capacity machines. Get our plan of easy **MONTHLY PAYMENTS** and handsome free catalog. Whether dairy is large or small, write today. **AMERICAN SEPARATOR CO.** Bainbridge, N. Y. Box 7067

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IS YOUR FARM FOR SALE?
AN AD IN M. B. F. WILL SELL IT.

United States, Canada or Europe. Such certificate shall show at the time of said inspection and within sixty days prior to shipment said cattle had been subjected to the tuberculin test and were free from tuberculosis.

The tuberculin test should not be considered as holding good for any length of time. If an animal passes a negative test, the result obtained merely indicates that the animal is not tuberculous at the time of the test.

It is unlawful to import horses into Michigan for any purpose except when such horses have been subjected to the mallein test by or under the direction of a graduate of some recognized veterinary college. A certificate shall accompany such horses and shall show the time and manner in which said test was conducted. The certificate shall further state that at the time of the inspection which shall not be more than sixty days prior to the importation, such horses were free from any contagious or infectious disease.—B. J. Killham, State Veterinarian.

COW SUFFERS FROM MASTITIS

I have a young cow that shortly after calving began giving long strings of curdly, clotted blood from one of her teats. The other teats do not seem to be affected at all. This is her first calf. Would be very grateful for information as to cause and cure. Is the milk from the other teats fit for use?

We saved a colt by taking advice given in your paper, and have pasted all your columns in a scrap book for reference. Thanking you in advance, I am, A Constant Reader, Decker, Michigan.

—The history indicates that your cow is suffering from mastitis, the causes of which are infection, refrigeration due to lying on cold floors and traumatism. The milk from the other teats would be fit for use providing the quarters are not all effected. As there is no specified treatment for mastitis I would advise you to consult your local veterinarian relative to treatment as it is very unsatisfactory to successfully treat diseases by mail. —John P. Hutton, Associate Professor of Surgery and Medicine, M. A. C.

HOG LAME IN FRONT LEGS

I have a large O. I. C. boar that got lame in one of his front legs. The shoulder is swelled badly but the foot isn't. I can see nothing the matter with it.—M. G. Clarion, Michigan.

—It would be useless for me to try to prescribe treatment for a case of this kind without knowing more about it. The foot may have something in it or it may have gotten injured in some other way. If the boar is valuable better get a good veterinarian on the job and make a thorough examination of the foot.—John P. Hutton, Associate Professor of Surgery and Medicine, M. A. C.

WHERE YOUR HIGHWAY TAX MONEY WENT

(Continued from page 4)

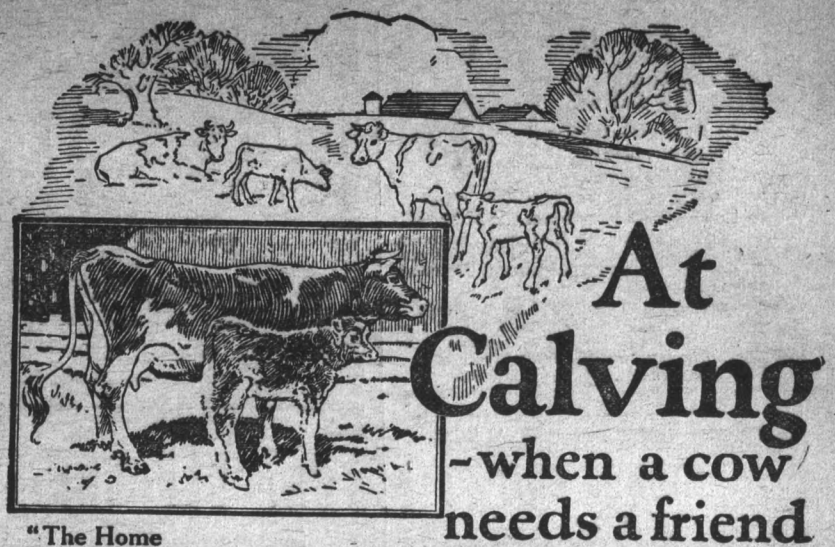
the past few years, has made further expansion necessary and during the month of June, 1922 the Department had 551 employees and a total monthly payroll of \$54,586.43.

Notwithstanding this large force, the total overhead of the Department including surveys and supervision of road construction this year, has been kept down to 3.1 cents on the dollar. In other words 96.9 cents of every dollar has gone into the actual construction of the roads, or looked at from a different angle, during June of the same year there were 252 road and bridge contracts under construction or an average of about two-employees for each live construction project.—Michigan Roads and Pavements.

(Editor's Note: The cuts used with this article are by the courtesy of Michigan Roads and Pavements.)

"And what did the poor little dog do when you brutal boys tied the can to his tail?"
"Oh, he just went broadcastin' down the road."

A drunken Congressman once said to Abraham Lincoln: "I am a self-made man." "Then, sir," replied Honest Abe, "that relieves the Lord of an awful responsibility."



"The Home Cow Doctor"

—this is the title of a genuine authority book on cow diseases, and how to successfully treat them at home.

We want you to have a copy of this book, and will send it free on request. We merely ask you in return to give us the name of your local dealer.

Drop us a postal today for your copy. The book has been worth hundreds of dollars to many cow owners by telling them just what to do at critical times.



NO NEED to tell you that calving is a severe strain on the vital organs of even the most vigorous dairy cow. In the shock and strain lurk many hazards to health and milk-giving.

The genital and digestive organs, carrying the burden of this function, need help. They need a real friend—before, during and after.

Here is where Kow-Kare comes in strong. It contains the medicinal properties to build up the genital organs to vigor, and regulate the digestive functions as nature requires. Because of its success in bringing cows safely thru calf-birth in perfect condition its use in this emergency is known in most well-regulated dairies.

The use of Kow-Kare is neither expensive nor difficult. Just a tablespoonful of the medicine in the feed twice a day for two weeks before and for two or three weeks after calf-birth. A few cents spent to assist nature will repay you with a healthy, productive milker and a vigorous calf.

Kow-Kare is equally effective in treating Retained Afterbirth, Abortion, Barrenness, Scouring, Bunches, Milk Fever, Loss of Appetite, etc. Many dairymen feed Kow-Kare one week each month to every cow, and realize big increases in milk yield thru the added vigor of the herd.

Try Kow-Kare and you will use it always. Feed dealers, general stores and druggists sell it. Large size \$1.25, medium, 65 cts. Sent prepaid if dealer is not supplied.

DAIRY ASSOCIATION CO., Inc.
Lyndonville, Vt.

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FOR SALE—FIVE REGISTERED DURHAM bulls from ten months to one year old. I have a few female Durhams for sale. **HENRY J. LYNCH, Mayville, Tuscola Co., Mich.**

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

FOR SALE—SIX YOUNG ABERDEEN-ANGUS cows and heifers. Well bred, good individuals. Price \$800.00 F. O. B. Mich. **GEO. HATHAWAY & SON, Ovid, Mich.**

SPECIAL PRICE ON BULLS, RANGING IN age from 8 to 11 months, until Jan. 1st, 1923. **RUSSELL BROS., Merrill, Mich.**

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FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding. **H. W. WIGMAN, Lansing, Mich., Box 52.**

SECURE YOUR NEXT BULL FROM ONE with both A. R. Sire and Dam. I have what you want. I also offer a few choice females. **A. M. SMITH, Lake City, Mich.**

GUERNSEY BULL Bred Heifer. Yearling of breeding. From good producers. Price right. Write **G. A. WIGENT, Watervliet, Mich.**

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REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description. **GUY C. WILBUR, Belding, Mich.**

FOR SALE—YEARLING JERSEY BULLS Shoppe 19th Tormentor breeding. **J. E. MORRIS, Farmington, Mich.**

HEREFORDS

BUYING, FEEDING AND SELLING FAT CATTLE at present, is too much like **GAMBLING**. All experience proves Baby-Beef growing **THE BETTER WAY**. **GROW HEREFORD BABY BEEVES**. Our Contractors are guaranteed top prices by Detroit Packing Co. Commission, yardage, Feed and all other expenses, except transportation—only; are cut out. Our plan opens the way to profitable beef-making, by Michigan Farmers. In no other way can as much money per cow be earned, with so little labor. If you have no beef-bred cows, we have them on hand or listed. Study our plan and be convinced. Come, wire or write. **RIGHT NOW.**

T. F. B. SOTHAM & SONS (Cattle Business Established 1835) Phone 250 Saint Clair, Michigan
RIVERVIEW HEREFORDS—FOR SALE Bulls, also few females. **WM. C. DICKEN, Smyrna, Mich.**

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows. **FINDLAY BROS., R. 5, Vassar, Mich.**

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale. **ROYSTAN STOCK FARM, Will Cottle, R. 1, West Branch, Michigan**

BROWN SWISS

BROWN SWISS BULLS FOR SALE OR EX-change for females of like quality. Don Stacie No. 8693 calved 3-8-20. Sired by Nellies Stacks Grand Champion for 1922-23. Owned by Marshall & Sons. Dam a direct descendant of College Barvera world's champion Swiss cow. Also calf dropped 2-4-22. Sire Don Stacie, dam Marybelle No. 8141. These bulls are of exceptional breeding and quality. **MAX JENNINGS, Okemos, Mich.**

FOR SALE—REGISTERED BROWN SWISS bull Grit No. 8919 born Sept. 14, 1921. Won first place as a senior calf at the State Fair. Also bulls, cows and heifers of equal merit. Herd federal accredited. **ERWIN R. MOORE, Osseo, Mich., R. 3.**

Auction Sale of Registered Brown Swiss Cattle Cows, heifers and bulls. All tuberculin tested. Sale on the 17th day of Jan. 1923. Farm located 3 miles south of Imlay City, Mich. **John Ulrich, Prop.**

FOR SALE—REGISTERED BROWN SWISS heifers and cows, also one bull. Herd federal accredited. **ELMWOOD FARMS, Sebawaing, Mich.**

SWINE

DUROCS

DUROC JERSEYS

NELLS LITTER; Sired by LIVINGSTONS PRIDE farrowed July 24, these pigs cannot be beat. Nels has farrowed 59 pigs in four litters. **PRODUCTION** is the big word of today, better get a boar out of this litter, and start on production. **LAPHAM FARMS, Pinckney, Mich.**

SENSATION MARSI Our new herd boar. Sired by "Marsi". Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar. **SCHAFER BROS., Route 4, Oxford, Mich.**

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us. **INWOOD BROS., Romeo, Mich.**

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION Yearling, spring and fall boars. **NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.**

FOR SALE—FOUR CHOICE DUROC JERSEYS boars from Agriculture College herd. Just right for December service. Prices reasonable. **HUGH REID, Clifford, Mich.**

O. I. C.

REGISTERED O. I. C. SERVICE BOARS AND Bred Gilts, priced to sell. **J. R. VAN ETEN, Clifford, Mich.**

(Other Livestock on Page 23.)

BABY CHICKS

Bargain Prices—Write Quick. Best paying, highest quality, Pure Bred Tom Barron and Hollywood White Leghorns—Egg Records 270 to 300 eggs in one year—Brown Leghorns, Anconas, Barred Rocks, Rhode Island Reds, White Wyandottes. Book orders now—get liberal discount. Valuable catalog free.

We guarantee to save you money—give you strong, healthy, perfect chicks, the best that money can buy, guarantee live delivery, and absolute satisfaction. **Write today sure.**

SUPERIOR POULTRY FARMS
Box 104 Zeeland, Michigan



CHICKS

THAT GROW, LAY AND PAY
Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288, Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.



from Michigan Certified Stock. Heavy Laying Strains of English White Leghorns, Brown Leghorns and Anconas. Ask for our interesting catalog describing our strain also showing you the advantages of buying chicks direct from our large poultry farm which is located in the heart of the famous poultry district. **LIBERAL DISCOUNT** allowed on all chick orders booked now but you must ACT QUICKLY. Get your order in now at this low price and avoid the usual costly delay. 100% live arrival guaranteed. Rural Poultry Farm, Dept. B, R. 1, Zeeland, Mich.

Barred Rocks
White Rocks
Rhode I. Reds
Wyandottes
Orpingtons
Leghorns
Wh., Br., Buff
Anconas
Minorcas

BABY CHICKS

Hardy free range stock—a Pure Bred Practical Poultry especially adapted to the farmer poultryman's stock that has proved of exceptional practical value on Michigan farms.

PULLETS

A limited number of S. C. White and R. C. Brown Leghorns, and White Rocks. Write for quotations. **STATE FARMS ASSOCIATION**
202 Chase Block, Kalamazoo, Michigan

LOOK—75,000 CHIX 12c and UP. Ten purebred certified egg-tested varieties. Hatching eggs, circular free. **LAWRENCE POULTRY FARM, R. 7, Grand Rapids, Mich.**

CHICKS—SINGLE COMB BUFF LEGHORNS only Strong healthy chicks from good laying stock. **J. W. WEBSTER, Bath, Mich.**

WHITTAKER'S R. I. REDS—Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. Interlakes Farm, Box 4, Lawrence, Mich.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.

LAPHAM FARMS, Pinckney, Mich.

FOR SALE—PRIZE WINNING BIG BLACK Langshans. A few cockerels and pens. Won 1st pullet, 1st hen, 1st and 2nd pen at Monroe Co. Poultry Show. Eggs in season. Write for prices. **MRS. ETHEL BURGET, Maybee, Mich.**

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets \$2.50 each; cockerels \$3.00 to \$5.00 each. Show birds a matter of correspondence. **LAPHAM FARMS, Pinckney, Mich.**

FOR SALE—R. C. BROWN LEGHORN cockerels, the big kind. These are extra good. \$2.00 each, one or more. **E. HIMEBAUGH, 462 Marshall St., Coldwater, Mich.**

PEDIGREED ENGLISH W. L. COCKERELS 275 to 300 egg records. Price \$2.00. **JOHN W. MORGAN, Yalo, Mich.**

WYANDOTTES

WHITE WYANDOTTES—MARTIN STRAIN Michigan State Fair winners, 1922. Cockerels and pullets, \$3 to \$7. **WAYNE CHIPMAN, Washington, Mich., Route 2.**

FOR SALE—HIGH GRADE WHITE WYANDOTTES and R. C. Rhode Island Red cockerels—\$3.00 each until January 1. **C. W. HEIMBACH, R. 1, Big Rapids, Mich.**

PLYMOUTH ROCK

BUFF ROCK COCKERELS—BIG HUSKY, uniform color, the result of years of careful breeding. **J. C. CLIPP & SONS, Box M, Safford, Ind.**

THOMPSON STRAIN BARRED ROCKS—DARK pullets \$1.50. Light and dark cockerels \$3.00. **MRS. FRED KLOMP, St. Charles, Mich.**

BARRED ROCK COCKERELS. Sired by Detroit and Grand Rapids 1st and 2nd prize winners. **W. C. Coffman, Benton Harbor, Mich., R. 3.**

Chicks World's Champion Layers



Tom Barron Imported White Leghorns

Sheppard Famous Anconas Direct

From grand selected flocks on full range. Strong vigorous chicks that will prove great layers. Culled and certified by poultry expert. Fine catalog free.

SILVER WARD HATCHERY
Box 420, Zeeland, Mich.

DAY OLD CHICKS

Strong, sturdy, S. C. White Leghorns (English strain) from large, vigorous, yearling hens, raised on our own farms. That lay and pay. Barred Rocks and Rhode Island Reds, from best laying strains. Send for our illustrated catalog, free.

Hillcrest Poultry Farms and Hatchery
R. R. 2 Holland, Michigan.

GUARANTEED BABY CHICKS



TOM BARRON ENGLISH S. C. WHITE LEGHORNS

1,500 breeders on our farm. Hatch every Tuesday starting March 1st. Write at once for new catalog and prices. 100% delivery guaranteed, shipped postpaid.

DOWNES POULTRY FARM
R. F. D. 1, Washington, Mich.

WOLVERINE BABY CHICKS

ARE CHICKS THAT SATISFY

Bred for egg production 13 years. We hatch and ship chicks for 12 years. This assures you success. **ENGLISH TYPE WHITE AND BROWN LEGHORNS** 100% safe arrival guaranteed. Write for catalogue. It's free. **WOLVERINE HATCHERY, R. 2, Zeeland, Mich.**

QUALITY CHICKS



GET THE PROFITABLE AND LAYING KIND

They will pay you big. Free range. Selected. Hogan test. Orpingtons, W. & Sil. Wyandottes, 50, \$9.25; 100, \$18. Rocks, Reds, Minorcas, 50, \$8.25; 100, \$16. Anconas, heavy broilers, 50, \$7.25; 100, \$14. Leghorns, 50, \$7; 100, \$13. Mixed, all varieties, \$11 per 100 straight. Post paid. Circular free. Bank reference. **Middlepoint Hatchery, Middlepoint, Ohio, Dept. B.**

BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list. **H. H. PIERCE, Jerome, Mich.**

RHODE ISLAND REDS

RHODE ISLAND REDS, TOMPKINS STRAIN Both combs. Stock for sale after September 15th. **WM. H. FROMM, New Baltimore, Mich. R. 1.**

SINGLE COMB REDS, DARK RICH COLORED cockerels \$2.50 each. Heims strain. **LOUIS MORRIS, Mt. Morris, Mich., R. 1.**

TURKEYS—DUCKS—GESE

WHITE HOLLAND TURKEYS OF QUALITY Toms, \$15.00; hens \$10.00; trios \$30.00. Toulouse geese \$8.00, gander \$10.00, trios \$20.00. Order direct from this ad to insure filling order. We ship nothing but No. 1 stock. **ALDEN WHITCOMB, Byron Center, Mich.**

We Specialize in White Holland Turkeys and have birds of best breeding to offer of Northern Grown Stock. Toms \$10 to \$12. Hens \$8 to \$9. Birds will be well crated and satisfaction guaranteed. **Foot's Turkey Farm, Garden, Delta Co., Mich.**

PURE-BRED BOURBON RED TURKEYS **MRS. RENA MEEKS, Belmont, Mich.**

BOURBON RED TURKEYS UNRELATED STOCK Eggs in season. **THOS. G. CALLAGHAN, Fenwick, Mich.**

MICHIGAN'S BEST GIANT BRONZE TURKEYS Large, vigorous birds of splendid color from world's best strains. Unrelated stock furnished. **N. EVALYN RAMSDALL, Ionia, Mich.**

BOURBON RED TURKEYS READY FOR shipment, for prices, etc., address **R. W. ROBOTHAM, Hesperia, Mich.**

FOR SALE—GIANT BRONZE TURKEYS FROM Michigan's best strains. Large healthy birds. **MRS. LAVERNE BROWNELL, R. 1, Belmont, Mich.**

MAMMOTH BRONZE TURKEYS. START right by buying strong, vigorous, pure bred stock. Write for prices. **MRS. PERRY STEBBINS, Saranac, Michigan.**

FOR SALE CHOICE WHITE PEKIN DUCKS and drakes and mallards. **CEDAR BEND FARM, Okemos, Mich.**

TOULOUSE GESE ARE MONEY MAKERS. Two pounds cost less to raise than one of pork. Water not necessary. Every farmer should raise a few. **ALDEN WHITCOMB, Byron Center, Mich.** Breeder Giant Toulouse Geese, White Holland Turkeys.

POULTRY

FEEDING VALUE OF MEAT SCRAPS

I have a flock of Barred Rocks which I am anxious to have lay thru the winter. I can get the meat scraps from one of the local meat markets free. How would you prepare them for the chickens? Some say just throw them out as they are, but seems as though there would be a better way. The use of these scraps will save the buying of commercial meat scraps and cut down expenses. Are the commercial scraps that come in big cakes cooked or raw?—Mrs. F. E., Flushing, Mich.

—Meat scraps are extremely palatable and stimulating. The common method, however, of feeding the green bone is to run them through a regular bone grinder which reduces the bone to smaller particles all of which can always be taken into the digestive tract. There is a high feeding value to the bone which, of course, is lost, unless the bone can be finely ground. There are a number of commercial bone grinders on the market and frequently the butcher will install one if sufficient people will show interest in purchasing the green bone. The green cut bone is used to advantage in forcing early maturity, or heavy production. This has an extremely stimulant effect on the entire digestive tract and causes ovarium activity. It should not be fed in quantities above ½ ounce per bird daily. One should be rather cautious in feeding it during warm weather. It is frequently unsafe to feed the regular commercial beef scraps because I have noted numerous cases of cannibalism where feeding of raw bone was practiced and suddenly this ply was curtailed. The commercial scraps that comes in large cakes referred to are undoubtedly pork cracklings. These have not the feeding value of the beef scrap and are rather inferior for poultry feeding. The beef bones and scraps are more palatable and have a higher feeding value.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

TURKEYS AND CALVES IN SAME BUILDING

What do you think of housing calves and turkeys in the same building with just a light partition between? Is it harmful to either one? **J. W., Levering, Michigan.**

—I believe you could house the calves and turkeys in the same building if partitioned off. Turkeys do not require a particularly warm building as long as it is airy and well ventilated. I do not believe there will be any dangers arise from this house combination. Turkeys can not, however, be housed with poultry very successfully. I have noted in practically every case where chickens and turkeys are housed together that the turkey stock is low in vitality and rather a high death rate occurs in every case. It seems to me as long as the turkeys are housed separate adjoining the calf pen that they could be maintained in a healthy vigorous condition.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

MONROE COUNTY POULTRY AND PET STOCK SHOW

DURING the week that closed December 23rd the Monroe County Poultry Association held its first show. The exhibits were of high class and there was a plentiful showing in all classes. The majority of the winners were located in and around Monroe but the show attracted breeders from Ohio and Illinois, and exhibits from those two states carried away some of the prizes. Other Michigan winners were located at Ida, LaSalle, Maybee, Strasberg and Royal Oak. Awards included over 100 ribbons besides several offers by individuals, companies and banks. Attendance at the show was rather disappointing to many but as a whole the members of the association feel well satisfied with their first attempt.

"BEST IN THE HOME"

"I don't want to miss a single copy of the M. B. F. I want to keep it up. It is the best paper in the home."—James C. Bell, Montcalm County.

A New Discovery Makes Hens Lay

Any poultry raiser can easily and quickly double his profits by doubling his egg yield through the remarkable discovery of M. B. Smith, a Kansas City chemist.



Working along entirely original lines Mr. Smith discovered why hens lay less in winter than in summer, and perfected a formula that turns loafers into layers and profit makers.

Within five or six days this discovery, which is called Ditto Egg Tablets, will rejuvenate your flock. Your hens will go strutting and cackling about with red combs and full of life and pep. Every nest will yield an egg nearly every day in the week, which means a lot, since eggs are certain to sell for 60 cents or more. This is not guess work as over 100,000 successful poultry raisers testify to the value of Mr. Smith's products.

Although different from anything you ever heard of, Ditto Egg Tablets are easily administered by simply dropping in drinking water.

So confident is Mr. Smith you can double or triple your egg yield, that he offers to send two large \$1 packages of Ditto Egg Tablets (enough for a season) to any reader who will write for them. If you are satisfied they cost only \$1 on this introductory offer, otherwise, nothing.

Send no money—just your name and address to M. B. Smith, 1261 Coca Cola Building, Kansas City, Mo. The two \$1 packages will be mailed immediately. When they arrive, pay the postman only \$1 and postage. Use the tablets 10 days. If you are not getting more eggs or are not satisfied for any reason, simply return unused tablets and your money will be returned immediately without question. A big Kansas City bank guarantees the reliability of this offer. Write today before this introductory offer is withdrawn, as you can sell one package to a friend and thus get your own free.

PRICES WAY DOWN On Radio Round Hatchers

Cut prices now on the famous Radio-Round Incubators of all sizes. Cost no more than cheap incubators. Radio-Round has 16 wonderful patented features making it practically self-operating. 3 minutes a day takes care of everything.



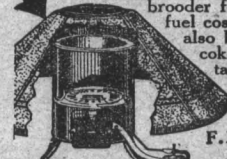
Hatch Eggs New Way

Radio-Round is built round like hen's nest; no cold corners. Fill with only one, 1-1/2 gallons oil to a hatch. Powerful Center Heater, Self-operation Flame Controller, Self-regulating, Vaporizing self-operating. Attachment. Don't miss free 36-page book. **Book Free** Mail card NOW for free book, telling all about patented features and giving rock bottom new low Factory Prices. Write **Radio-Round Incubator Co., 321 Wood St., Wayne, Neb.**

BOWERS Colony Brooder

More Chicks—Less Cost

This brooder is a chick-saver and a money maker. It raises more and better chicks, at less cost than other brooders. Stove is best in the world to hold fire—air-tight and self-regulating. It burns soft coal—the cheapest brooder fuel—perfectly. Cuts fuel costs in half. Stove will also burn hard coal, wood, coke, etc. Regulator maintains even heat night and day. No trouble. Sizes for 500 or 1000 chicks. Low priced Write TODAY.



F. M. Bowers & Sons Co., 1416 W. Wash. St., INDIANAPOLIS, IND.

140 Egg Incubator \$13.30 30 Days Trial

Freight Paid east of the Rockies. Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at \$13.35. Shipped complete, set up ready to use.

140 Egg Incubator and Brooder - \$17.75
180 Egg Incubator Alone - 15.75
180 Egg Incubator and Brooder - 22.00
250 Egg Incubator Alone - 22.75
250 Egg Incubator and Brooder - 31.00

Made of California Redwood—lasts a lifetime. Positively the best value on the market today. Order the size you want direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our new 1923 catalog. (3)

WISCONSIN INCUBATOR CO., Dept. 138, Racine, Wis.

Detroit Incubator \$12.45

140-Egg Size—Guaranteed—has double walls, copper tank, full-size nursery, automatic regulation thermometer held so that chicks cannot break it when hatching. Detroit Brooders, too. Double walled, hot water heated. Write for special low price on both machines.

Detroit Incubator Co., PRE-PAID, Dept. 10, Merritt St., Detroit, Mich.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs, Rabbits. A square deal always. C. E. McNEILL & CO., 325 W. 50. Water St., Chicago, Ill.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

An understanding of the figures on this page as they are revised and presented each month, enables the farmer to see the position of the important factors which indicate the trend of business and prices and give a basis for judgment concerning future agricultural operations.

SUMMARY:

For the United States as a whole, the agricultural outlook is encouraging. The purchasing power of agriculture is 20 per cent stronger than a year ago, although still over 25 per cent under 1913. The rising price of English drafts is a factor in favor of higher prices for exports. Farmers are reducing their short-time borrowings. In spite of big crops, the present price ratio shows a slight gain for farm commodities over the low point in December, 1921.

I. PRODUCTION AND TRADE:

Combined sales of Montgomery Ward and Sears Roebuck for the five months ending November 30, 1922, are 16 per cent more than for the corresponding period in 1921.

The number of building contracts awarded in 27 states is 40 per cent greater for the first eleven months of 1922 than for the same months in 1921. On a value basis the increase in 1922 is 45 per cent. November, 1922, contracts show a 32 per cent gain in number over November, 1921, while October, 1922, showed an 18 per cent advance over October, 1921.

II. FOREIGN TRADE:

Encouragement in the outlook for foreign trade is found in the rise in price of drafts on British merchants and banks. Great Britain is the outstanding purchaser of American exports. Exporters, knowing that the drafts which they draw will sell for more dollars, are able to offer higher prices for goods which they buy to send abroad. Agriculture as the leading export interest shares largely in this advance.

A draft on a London business man or bank to pay 1 pound sterling sold

for \$4.49 November 20, and for \$4.61 December 19, a gain of 12 cents in one month. It has 26 cents yet to go to reach par, namely \$4.87. The price of London drafts has shown a gradual recovery since the low of \$3.38 in February, 1920.

III. MONEY AND CREDIT:

The Federal Reserve Bulletin for November says: "From the peak of credit expansion in November, 1920, up to July 26, 1922, member banks in leading cities liquidated their indebtedness to the federal reserve banks much more rapidly and completely than did member banks outside of the leading cities. During recent weeks (namely, up to October 25) the resumption of borrowing from the reserve banks has been almost entirely by the city banks, the country banks in all districts except St. Louis reporting further liquidation."

IV. PRICES:

From their low point in December, 1921, prices of farm products increased much faster than prices of other commodities up to March, 1922. At this peak farmers had least to sell. From March until the present time other prices have advanced much more rapidly than farm prices. For the whole period, from December, 1921, to the present, farm prices show a slightly bigger increase, the purchasing power of farm products figure, representing the relationship of the two sets of prices, having advanced from 62 to 66. This ratio was maintained in face of the third largest crop output ever produced in the United States. The estimated total value of farm crops for 1922 is 32 per cent higher than for 1921. The figure for purchasing power of farm products, on total value instead of price basis, computed on December crop estimates and prices, and prices of other commodities in November, is 73. This is over 25 per cent under 1913 but 20 per cent better than last year.

On December 19, compared with the month previous, 15 out of 24 farm products advanced in price, 8 declined and 1 remained unchanged. Compared with a year ago there are 19 advances and 4 declines while 1 remains stationary.

I. Production and Trade

1. Agriculture:

U. S. Production—000,000 omitted.

	Dec. 1st 1922	Estimate Preliminary	1921	Average 1916-1920	Estimate Preliminary Dec. 1st 1922	1921
Corn, bu.	2891	3069	2831	102	3069	2831
Wheat, bu.	856	815	799	107	815	799
Oats, bu.	1215	1078	1413	85	1078	1413
Barley, bu.	186	155	197	94	155	197
Rye, bu.	95	62	68	139	62	68
Buckwheat, bu.	15	14	14	107	14	14
Potatoes, bu.	451	362	373	123	362	373
Sweet Potatoes, bu.	110	99	89	123	99	89
Hay, all, tons.	113	98	102	111	98	102
Cotton, bales	10	8	12	83	8	12
Tobacco, lbs.	1325	1070	1378	96	1070	1378
Flaxseed, bu.	12	8	11	109	8	11
Rice, bu.	42	38	42	100	38	42
Peaches, bu.	57	33	44	129	33	44
Pears, bu.	19	11	14	136	11	14
Apples, total, bu.	204	99	179	114	99	179
Apples, com'l, bbls.	31	22	27	115	22	27
Sugar Beets, tons.	5	8	7	71	8	7
Cranberries, bbls.	6	4	4	150	4	4
Beans, bu.	12	9	13	90	9	13
Onions, bu.	18	14	17	105	14	17
Cabbage, tons.	1	6	7	143	6	7
Sorghum, gal.	37	46	40	93	46	40
Cloverseed, bu.	1.9	1.5	1.5	127	1.5	1.5
Peanuts, lb.	624	299	1043	59	299	1043
Hops, lb.	26	29	32	81	29	32

*As percentage of average 1916-1920.

World Production—000,000 omitted.

	1922	1921	Average 1909-13
Wheat, bu. (1)	3,058	3,069	2,890
Corn, bu. (2)	3,450	3,781	3,572
Rye, bu. (3)	185	773	5,008
Oats, bu. (4)	3,003	2,759	882
Barley, bu. (5)	833	818	3,066
Potatoes, bu. (6)	3,123	2,445	19.6
Cotton, bales (7)	16	14.1	19.6

(1) Russia and Mexico excluded. (2) 17 countries. (3) 18 countries. (4) 27 countries. (5) 25 countries. (6) 16 countries. (7) 500 pounds net, lintless excluded.

2. Mining:

Figures express production as a per cent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Oct., 1922	Sept., 1922	Oct., 1921
Anthracite coal	94	61	85
Bituminous coal	75	72	75
Copper	84	80	20
Petroleum	112	111	91

3. Manufacturing:

	1922	1921	1920
Wheat flour	109	112	111
Meat	103	105	87
Sugar	108	110	114
Cotton	95	92	89
Pig Iron	83	68	40
Steel Ingot	85	74	50
Lumber	106	106	80
Wood Pulp	102	102	77
Gasoline	104	104	92
Cement	126	123	110

* Not available.

4. Building:

	November 1922	November 1921	Eleven Months 1922	Eleven Months 1921
Contracts awarded in 27 States:				
(F. W. Dodge Co.)				
Number	9,079	6,981	100,558	72,042
Value (000,000 omitted)	\$ 244	\$ 192	\$ 3,131	\$ 2,162

5. Transportation:

	Week Ending Dec. 9, 1922	Same Week Month Ago	* Same Week Year Ago	Week Ending Dec. 9, 1921
Freight Car Loadings:				
Total	919,828	953,909	742,926	114
Grain and grain products	55,608	52,501	48,680	124
Livestock	38,170	38,001	32,159	119
Coal	200,505	188,312	137,836	146
Coke	13,051	12,273	6,638	197
Forest products	63,195	60,392	49,744	127
Ore	9,879	39,383	6,128	160
Merchandise & Misc.	539,420	563,047	461,741	117

* As percentage of week year ago.

6. Employment:

	October, 1922	September, 1922	August, 1922
Out of 65 Industrial centers employment			
Increased over previous month in	56	48	39
Decreased from previous month in	9	17	26

7. Bank Clearings:

	Nov., 1922	Oct., 1922	Nov., 1921
New York City	\$17.33	\$19.67	\$16.82
Outside New York City	15.80	16.96	13.64

8. Mail Order Sales:

	November 1922	November 1921	Eleven Months 1922	Eleven Months 1921
Montgomery Ward	\$11,003,750	\$7,581,069	\$80,844,890	\$68,531,523
Sears Roebuck	20,196,559	15,186,495	161,409,528	159,934,008

II. Foreign Trade

1. Exports:

	1922	1921	1922	1921
Commodity.				
Grand total, all exports	\$366,177	\$336,949	\$3,051,177	\$3,978,511
Beef and veal, lb.	2,978	2,844	28,224	36,544
Pork, lb.	57,621	41,116	563,888	659,715
Lard, lb.	66,332	56,885	626,032	752,544
Neutral lard, lb.	1,762	1,184	16,503	21,699
Butter, lb.	524	464	10,012	7,095
Cheese, lb.	308	389	4,367	10,832
Hides and skins	379	324	3,278	3,118
Corn, bu.	10,149	9,217	151,330	114,189
Meal and flour, bbl.	41	63	534	703
Wheat, bu.	18,282	18,206	144,438	255,651
Flour, bbl.	1,510	1,557	11,968	14,541
Oats, bu.	3,042	520	17,066	2,994
Meal and rolled, lb.	13,036	6,277	88,686	85,673
Fruits and nuts	10,162	8,593	53,772	54,764
Veg. oils and fats	1,023	1,302	10,898	25,505
Sugar, lb.	13,200	38,664	1,822,041	824,648
Leaf tobacco, lb.	58,353	43,465	354,167	447,345
Cotton, bale	799	875	4,648	5,186

2. Imports:

	September 1922	September 1921	Nine Months 1922	Nine Months 1921
Grand total, all imports	\$228,795	\$179,292	\$2,181,386	\$1,872,696
Beef and veal, lbs.	10,533	2,066	26,998	22,033
Pork, lbs.	76	56	435	582
Butter, lbs.	89	398	2,735	12,173
Cheese, lbs.	3,037	2,571	26,241	15,535
Hides and skins	50,587	32,806	358,765	268,980
Corn, bu.	2	3	97	156
Oats, bu.	37	62	1,271	3,081
Wheat, bu.	782	81	14,321	19,171
Flour, bbl.	42	4	552	780
Fruits and nuts	3,864	5,268	55,489	48,529
Veg. oils and fats	2,990	3,822	44,079	26,474
Sugar, lbs.	390,150	315,999	8,434,011	4,747,517
Leaf tobacco, lbs.	2,780	2,600	51,556	36,914
Cotton, lbs.	2,506	3,181	113,724	67,091
Wool, lbs.	27,892	14,592	278,527	288,114

3. Prices of Foreign Drafts:

	Nominal Gold Value	Dec. 19, 1922	Nov. 20, 1922	Dec. 16, 1921
Par of Exchange		1922	1922	1921
England	\$4.87 to 1£ Sterling	\$4.61	\$4.49	\$4.16
France	19.3c to 1 franc	7.45c	7.4c	7.78c
Germany	23.8c to 1 mark	.015c	.015c	.050c
Belgium	19.3c to 1 franc	6.83c	6.96c	7.48c
Italy	19.3c to 1 lire	5.08c	4.75c	4.50c
Spain	19.3c to 1 peseta	15.70c	15.38c	14.54c
Austria	20.3c to 1 crown	.0014c	.0014c	.04c
Denmark	26.8c to 1 crown	20.70c	20.18c	19.55c
Norway	26.8c to 1 crown	19.05c	18.33c	15.37c
Sweden	26.8c to 1 crown	26.89c	26.78c	24.50c
Holland	40.2c to 1 florin	39.82c	39.35c	36.32c
Argentina	42.5c to 1 peso	37.90c	36.6c	33.25c
Brazil	32.4c to 1 milreis	12.15c	12.6c	12.88c
India	48.7c to 1 rupee	30.95c	29.95c	17.75c
Japan	49.9c to 1 yen	48.95c	48.35c	47.88c
Canada	100 c to 1 dollar	99.43c	100.00c	92.7c

4. Discount Rate of the Bank of England:

	Dec. 13, 1922	Month Ago	Year Ago
3%		3%	5%

III. Money and Credit

1. Gold, Currency and Bank Deposits:

	Nov. 1, 1922	Oct. 1, 1922	Nov. 1, 1921
Stocks of monetary gold in the United States	\$3,902	\$3,874	\$3,505
Total supply of currency in the United States	4,570	4,521	4,610
Total deposits in National Banks	\$16,599	\$16,321	\$14,561
Deposits in New York City Banks	\$3,830	\$3,910	\$3,800

2. Gold Movement:

	1922	1921	1922	1921
Exports of gold	\$17,591	\$7,576	\$30,735	\$21,122
Imports of gold	20,866	47,106	230,422	608,283

3. Federal Reserve Ratio:

	Dec. 13, 1922	Nov. 15, 1922	Dec. 14, 1921
Ratio of total reserves to deposit and Federal Reserve note liabilities combined	75.1%	75.2%	72.6%

4. Interest Rates:

	Nov., 1922	Oct., 1922	Nov., 1921
4-6 mo. commercial paper	4.83%	4.62%	5.45%
60-90 day commercial paper	4.62%	4.40%	5.18%

5. Discount Rates of the Federal Reserve Banks:

	Dec. 1, 1922	Nov. 1, 1922	Dec. 1, 1921
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4-4½%	4-4½%	4½-5½%

6. Stock and Bond Prices:

	Dec. 8, 1922	Nov. 10, 1922	Dec. 8, 1921
Average price—			
20 Industrial Stocks	\$97.88	\$97.50	\$79.60
20 Railroad Stocks	84.56	89.50	74.35
40 Bonds	89.06	89.30	83.99

7. Business Failures:

	Dec. 8, 1922	Nov. 10, 1922	Dec. 8, 1921
Bradstreets	462	374	591
Duns	484	387	587

IV. Prices

1. Wholesale Prices of Farm Commodities:

Wholesale Prices of Farm Commodities.			
Quotations at Chicago except as noted.			
	Dec. 19,	Month	Year
	1922	Ago	Ago
Fat hogs, cwt., average.....	\$ 8.05	\$ 7.70	\$ 6.65
Beef, steers, good native, cwt., av.....	9.60	9.85	6.40
Fat lambs, cwt., average.....	13.85	14.45	10.25
Fat sheep, cwt., average.....	7.20	7.40	4.10
Wool, Ohio delaine unwashed, lb. (Boston).....	.565	.565	.39
Butter, 92 score, lb.....	.53	.505	.425
Cheese, No. 1 twins, lb.....	.2675	.2425	.2075
Eggs, fresh firsts, doz.....	.51	.525	.49
Poultry, hens, lb.....	.175	.18	.23
Wheat, No. 2 hard, bu.....	1.28	1.20	1.115
Corn, No. 2 mixed, bu.....	.7875	.725	.4775
Oats, No. 2 white, bu.....	.475	.4475	.37
Rye, No. 2, bu.....	.915	.89	.86
Barley, bu.....	.6725	.67	.595
Kafr, No. 2 white, cwt. (K. C.).....	1.68	1.89	.93
Hay, No. 1 timothy, ton.....	21.00	23.00	21.00
Flax, No. 1, bu. (Minneapolis).....	2.72	2.45	1.935
Cotton, middling, lb. (New York).....	.262	.254	.188
Beans, white, cwt. (f. o. b. Michigan).....	7.75	6.90	4.30
Potatoes, northern whites, cwt.....	1.00	.95	1.70
Onions, midwest yellow, cwt.....	2.50	1.90	5.00
Apples, winter varieties, bbl.....	5.25	5.00	8.25
Hides, No. 1 native heavy, lb.....	.2025	.23	.165
Sugar, fine granulated, lb. (N. Y.).....	.0705	.07	.051



MARKET FLASHES



FOOTES MARKET REVIEW— ANOTHER NEW FEATURE

WITH this issue we introduce to readers of *The Business Farmer*, Mr. W. W. Foote, of Chicago, who will have a letter direct from the Chicago markets each issue on general financial conditions, world grain markets, and most important, a direct review of the Chicago live stock markets from a man who has been in intimate, daily contact with that market for more than thirty years. Mr. Foote has volunteered to answer any questions from our readers addressed in care of *The Business Farmer*. We want the best that can be had served on these tables for the consumption of our folks, so we editorial cooks are glad to move over one place to make room for Mr. Foote, who will hereafter be responsible for a very important course in the *Business Farmer's* bi-weekly banquet!—Editor.

IMPROVED BUSINESS OUTLOOK

BRINGING about a return to normal financial conditions in the war-stricken countries of Europe is not as rapid as might be wished, but the outlook is at least better than it has been, under the prevailing sentiment is more optimistic than a year ago. Even under present unsettled conditions, we are exporting large amounts of commodities across the Atlantic, these consisting mainly of grains and meats. As soon as it becomes definitely settled how to establish credit in Germany and other countries it may be taken for granted that our foreign commerce will show marked improvement. The United States is now by far the richest country in the world, and we are large importers, while our home trade is extremely large. Nearly everybody in the middle west is at work, and more money is being spent than a few months ago, while savings deposits in the bank are ahead of a year ago. Farmers are buying more foods than for months, and the Chicago mail order houses have closed the year with net gains in sales over 1921, the gain of a leading firm being around 20 per cent. Labor is actively employed as unusually high wages throughout the country, and the high wages offered in the cities are responsible for many farm helpers leaving for the cities, thereby creating a scarcity of agricultural workers. Farmers are obtaining high prices for most of their products, including grains, live stock, etc., and these are selling much above values of a year ago. Country banks generally are doing their part in helping farmers needing assistance in carrying their crops, and the reserve banks are accomplishing great things, reasonable rates of interest being asked. The railroads are doing a much larger business than a year ago, and enormous shipments of grain have taken place during the month of December. Two important events are the burning of the Live Stock Exchange Building in Chicago and the merger of Armour and Morris packing companies in progress. The Exchange Building is to be replaced by a fine eight story building in the spring.

Large Demand for Wheat

The large domestic and foreign demand for wheat which began to develop several months ago has been gaining in volume, and recent sales have reached extremely liberal proportions. There is pretty unanimous agreement that all the wheat we can spare is going to be wanted by the importing countries of Europe, and it is estimated by the best authorities that Europe will require approximately 400,000,000 bushels from exporting countries during the first half of this year. The wheat crop of the United States has been marketed freely, and it has gone into consumption at home and abroad so rapidly that it was found a few days ago that the stock held in Chicago, Kansas City, St. Louis, Omaha and St. Joseph aggregated only one-half of such holdings twelve months ago.

The weekly exports of wheat and flour from our shores have been for many weeks far heavier than a year earlier, and rye has been exported with unusual freedom because of its relative cheapness, Germany taking especially large supplies. A short time ago it was reported that Greece wanted immediately three million bushels of wheat from this country, and on the same day sales were announced of 600,000 bushels of Manitoba wheat for export. A great deal of corn and oats are exported from this country in the course of a year but for some time past such exports have fallen off in volume. Corn is being largely fed to cattle and hogs on the farms at the present time, some 27 per cent more cattle being held in feeding districts, it is estimated, than a year ago, while hogs are known to be in large supply. The visible wheat supply in this country is unusually small, while that of corn is placed at 14,788,000 bushels, comparing with 21,586,000 bushels a year ago. Quite recently sales were made on the Chicago market of wheat for December delivery at \$1.27, comparing with \$1.125-8 a year ago; corn at 73 1-2 cents, comparing with 48 cents a year ago; oats at 43 1-2 cents, comparing with 34 1-2 cents last year; rye at 91 1-4 cents and barley at 63 to 74 cents. Clover seed sells at \$15.50 to \$20.50 per 100 pounds, timothy at \$6 to \$6.75 per 100 pounds and flax seed at \$2.61 a bushel.

Decline in Cattle Prices

Early sales of beef cattle on the Chicago market during the two days following the Christmas holiday on Monday was very slow, and despite much smaller receipts than usual, prices declined from 50 to 75 cents below the low time of the previous week. Recent supplies were mainly short fed offerings, having been fed from 75 to 100 days, and on most days there was a lack of prime heavy steers. By Thursday there was a rally of about 25 cents under small offerings and a better demand, and some 900-pound yearlings brought \$10.50. Choice heavy cattle have been selling at \$11 to \$11.90, with strictly prime beefs pretty much nominal at \$12 to \$12.50. A pretty good class of steers which averaged 1,500 pounds brought \$8.50, and medium grade lots sold at \$7.50 and over, with sales of common to fair light steers at \$6.10 to \$7.25, and a few inferior little steers at \$3.60 to \$6. Butcher stock had a better demand at higher average prices, cows and heifers going at \$3.75 to \$9.50, while canner and cutter cows sold at \$2.25 to \$3.60, bulls at \$3 to \$7.50 and calves at \$3 to \$11.50, light vealers selling at \$9 and over mostly. A limited trade is going on in stockers and feeders, sales being mostly at \$5 to \$7.25. Dairy cows have sold at \$40 to \$60 per head mostly, a few Holsteins being salable up to \$75. A year ago the best steers sold for \$9. Beef steers sell mainly at \$7.50 to \$10.40. Prices broke 25 cents on Friday, no cattle selling above \$10.25.

The Hog Market

Prices in the Chicago market broke from 5 to 15 cents on Thursday last week, when the receipts mounted up to about 60,000 hogs, but prior to that they advanced on moderate receipts, Monday being a holiday. The Thursday receipts were among the largest of the year. Eastern shippers are most of the time very good buyers, and at times speculators take a hand. Hogs are

coming to market in good quality, and the bulk sell within a range of only 15 cents, prime light bacon and heavy butchers selling the highest. Recent receipts have averaged 232 pounds, comparing with 226 pounds a year ago. A good demand for fresh pork prevails, pork being much cheaper than beef, and provisions are exported much more freely than a year ago. Hogs are selling around \$7.60 to \$8.60, comparing with \$5.90 to \$8.25 a year ago.

Big Prices for Lambs

These are times when farmers who have stuck to raising flocks of sheep thank their lucky stars that they remained in when others were abandoning the industry because of the unsatisfactory returns. A short time ago a young Michigan farmer who is in the habit of buying feeding lambs in the Chicago markets said he had fed lambs for thirteen years, and in all that time he had lost money only once. Lambs are coming largely clipped at this time, and the packers prefer the woolled flocks, the latter selling at \$13.25 to \$15.40, while feeder lambs sell at \$14 to \$14.75, with few offered. Lambs averaging 90 pounds and over have to sell at a discount, and sheep are marketed sparingly. Breeders are scarce too, owners keeping them for breeding yearlings are selling at \$10 to \$13, ewes at \$2.50 to \$8.25, wethers at \$7.50 to \$9.35 and bucks at \$3.50 to \$4.25. A year ago prime lambs sold at \$11.75 and nine years ago at \$6.60.—W. W. Foote.

WHEAT

The market closed last week with the bears in charge and holiday dullness prevailed. Receipts have been large and declines in the price plentiful. Every decline brought out many buyers but not enough to cause prices to advance to their previous level. The Detroit market lost 2 1-2 cents for the week. Milling demand was slow but a few inquiries were received from seaboard and some business was reported from that source. European demand for American grain is curtailed owing to the financial conditions. If Europe's credit is improved through giving her more time to pay her debts demand will improve. Heavy receipts are expected this week and the tone of the market will be about the same or easier, dealers believe.

Prices

Detroit—Cash, No. 2, \$1.36½; No. 2 white and No. 2 mixed, \$1.34½.
Chicago—No. 2 hard, \$1.25½ @ \$1.26½.
Prices one year ago—Detroit, No. 2 red, \$1.17; No. 2 white, \$1.14.

CORN

Corn followed the trend of wheat last week the greater part of the time although the tone was stronger at the close in corn than in the later grain. Corn lost only 1c on the Detroit market during the past couple of weeks. Indications point to a good export demand in the near future. Foreigners are trying to buy on the basis of 70c for May corn. Receipts at Chicago last week aggregated 3,667 cars compared with 1,411 last year.

Prices

Detroit—Cash No. 2, 79c; No. 3, 78c; No. 4, 77c; No. 5, 75c.
Chicago—No. 2 yellow, 74½ @ 75c; No. 3, 71 @ 73c; No. 4, 70 @ 71c.
Prices one year ago—Detroit, No. 3 yellow, 53c; No. 4, 49c.

MARKET SUMMARY

Wheat quiet. Corn and oats steady with some grain going to seaboard. Rye inactive. Beans firm. Demand for potatoes improves. Butter and eggs easy with demand fair. Poultry in demand and receipts small. Large receipts weaken cattle market. Hogs strong to higher. Sheep easy.

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

OATS

The oat market is in about the same condition as it was when our last report was made. Commission houses and large elevator interests continue to support the market. Shipping demand is better than it has been for some time past, with reports coming from Chicago of shipping sales of 340,000 bushels.

Prices

Detroit—No. 2, white, 51½c; No. 3, 50c; No. 4, 48½c.
Chicago—No. 2 white, 44 @ 45½c; No. 3, 42½ @ 43½c.
Prices one year ago—Detroit, No. 2 white, 40c; No. 3, 38c; No. 4, 35c.

RYE

Rye also followed the trend other grains the past fortnight and the price is slightly under that quoted in our last issue. The market is steady in tone with nothing to indicate any immediate change.

Prices

Detroit—Cash No. 2, 93c.
Chicago—Cash No. 2, 88½ @ 89½c.
Prices one year ago—Detroit, Cash No. 2, 90c.

BEANS

A decline of 10c took place in the Detroit bean market during the past fortnight. The decline was not due apparently to any decrease in consumption or heavy receipts but was a result of the holiday dullness in the grain market. The tone remains firm.

Prices

Detroit—C. H. P., \$7.40 per cwt.
Chicago—C. H. P., \$5.50 @ \$9.00 per cwt.
Prices one year ago—Detroit, C. H. P., \$4.30 per cwt.

POTATOES

The condition of the potato market shows further improvement. This commodity is steady on the leading markets of the country but continues to show some weakness at northern points. Supplies are moderate and demand is on the gain.

Prices

Detroit—Michigan, \$1.00 @ \$1.10.
Chicago—Northern Whites, 79 @ 90c.
Prices one year ago—Detroit, \$2.25.

HAY

A quiet tone prevails in the hay market. Receipts are generally light and country loading is nearly at a standstill. Prices are practically unchanged and demand is for current needs only.

Prices

Detroit—No. 1 timothy, \$16.50 @ \$17; standard, \$16 @ \$16.50; light mixed, \$16 @ \$16.50; No. 1 clover, \$14.50 @ \$15.
Chicago—No. 1 timothy, \$20 @ \$22; No. 1 light clover mixed, \$19 @ \$20; No. 1 clover, \$16 @ \$18.
Prices one year ago—Detroit, No. 1 timothy, \$19 @ \$20; Standard timothy, \$18 @ \$19; No. 2 timothy, \$17 @ \$18.

OFFICIAL U. S. MARKETGRAM U. S. Bureau of Agricultural Economics

Washington, D. C.,—For the week ending December 30, 1922.

FEED—Western markets report a slight improvement in the demand but eastern markets continue dull. The interior demand in light and stocks in hands of dealers appear ample for present needs. Production of most feeds is fairly good and storage stocks appear burdensome in a few sections. Linseed and cottonseed meal hold firm. Hominy feed on increased production and light demand is offered at lower prices. Other quotations generally steady. Receipts and movement good. Dec. 29 quotations, Bran \$25; Middlings \$25; Flour Middlings \$27; Rye Middlings \$23 Minneapolis; Gluten feed \$40.35 Chicago; Thirty four per cent mixed meal \$52 Minneapolis; \$52.50 Buffalo; Thirty six per cent cottonseed meal \$42.50 Memphis, \$43 At-

lanta, White Hominy feed \$30 St. Louis, \$31.50 Chicago, No. 1 Alfalfa meal \$28.50 St. Louis.

DAIRY PRODUCTS—Butter markets—barely steady; dull demand has followed holidays. Dealers have been free sellers and in some cases granted concessions to keep floors cleared of accumulation. Arrivals at New York included fairly good shipments of Danish butter. Closing prices, 92 score butter: New York 53½c; Phila 55c; Boston 54c; Chicago 50c. Cheese markets steady although trading is very quiet. Better demand looked for after first of year. Cheese prices at Wisconsin Primary markets, December 29; Flats 27½; twins 26½.

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MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, Jan. 2nd

BUTTER—Best creamery, in tubs, 46@48c per lb.

EGGS—Fresh, according to quality, 40@43c per doz; refrigerators, 26@28½c per doz.

APPLES—Greenings, \$.50½ @ 1.75; Balwins, \$1.25@1.50; Spy, \$2 @2.50; Jonathan, \$1.75@2; other varieties, \$1@1.50 per bu.; western boxes, \$2 @2.

POPCORN—4@4½c; Little Buster, 7½@8c per lb.

ONIONS—\$2.75 per sack of 100 lbs; Spanish, \$2@2.15 per crate.

DRESSED HOGS—90 to 130 lbs, 11@12c; 130 to 160 lbs, 9@10c; heavy, 5@8c per lb.

DRESSED CALVES—Choice, 15 @16c; medium, 12@14c; large coarse, 5@10c per lb.

LIVE POULTRY—Best spring, 22 @23c; leghorns, 15@16c; large fat hens, 23@24c; medium hens, 20 @22c; small hens, 14@15c; old roosters, 14c; geese, 18@20c; large ducks, 23@24; small ducks, 20@21; heavy turkeys, 35c; light turkeys, 25c per lb.

HONEY—Comb, 23@25c per lb.

CELERY—Michigan, 40@75c per doz.; square, \$1.25@1.75; California celery, Jumbo, 75c; extra Jumbo, 80@1; mammoth, \$1.10@1.25 per doz.

WOOL

The mid-western wool trade closed the year 1922 with a firm tone prevailing, recent sales being reported at top quotations in several of the leading lines, and with dealers showing a feeling of optimism in regard to the future business. An increase in inquiry from mills is reported, tending to help the tone of the market, though prices are quoted unchanged.



THE average temperature in Michigan, beginning January 7th is expected to range below normal. Temperatures for the first half of the month will also average with a downward trend but more moderate conditions will occur during latter half.

At the beginning of this week temperatures will be cold with little variation, especially on the upward movement.

About Tuesday or Wednesday increasing cloudiness, snow flurries and winds will affect Michigan and continue in the state over the middle days of the week. About Thursday strong west and north winds will sweep over Lakes Superior and Michigan into the lower peninsula of the Mitten state sending the mercury in the thermometer way down. Temperatures in this state will remain cold for the season during the balance of the week.

Week of January 14

Average weather conditions for week beginning January 14 will be windy with precipitation about or above normal. Weather conditions may be expected to be full of extremes, more especially in temperatures rather than precipitation. In the latter case, rain or snow fall is expected to be as heavy and possibly heavier than during the first week of January.

During the early part of week temperatures will rise in Michigan and during this same period some rain or snow will fall in most sections of the state while during middle days of week we expect a greater amount of rain or snow. The last half of week will be free of moisture with clear skies and colder temperatures.

About Saturday of this week we are expecting a great moderation of temperature in this state.

Less Moisture Last Half Month

We do not look for as much general precipitation or as severe stormy weather in Michigan during last half of January as during first half. In fact, we believe the state will show quite an uneven distribution of rain or snow during this and next month.

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BREEDERS' DIRECTORY (Continued from page 19)

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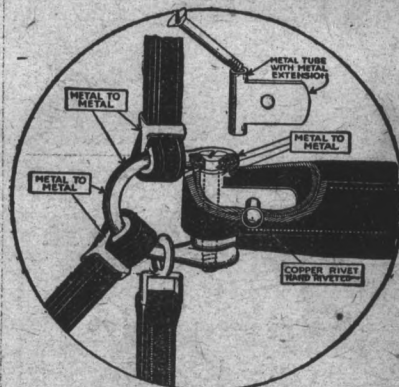
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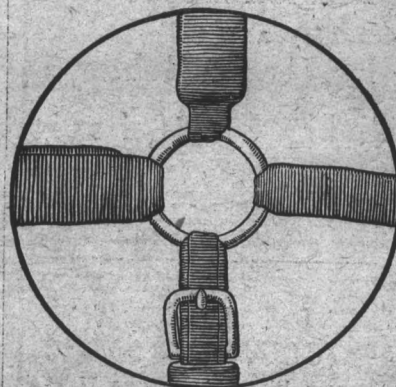
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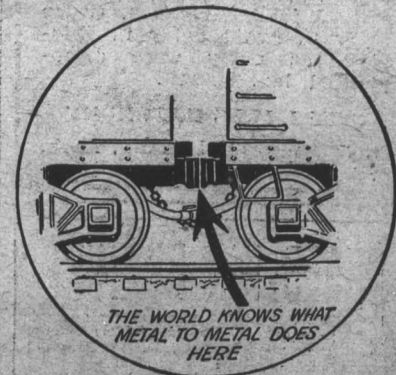
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