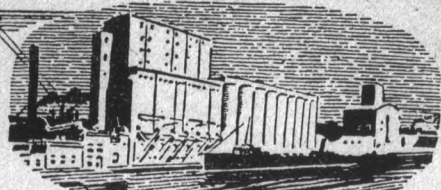


The Michigan BUSINESS FARMER



An Independent
Farm Magazine Owned and
Edited in Michigan



VOL. XI, No. 2

SATURDAY, SEPTEMBER 15, 1923

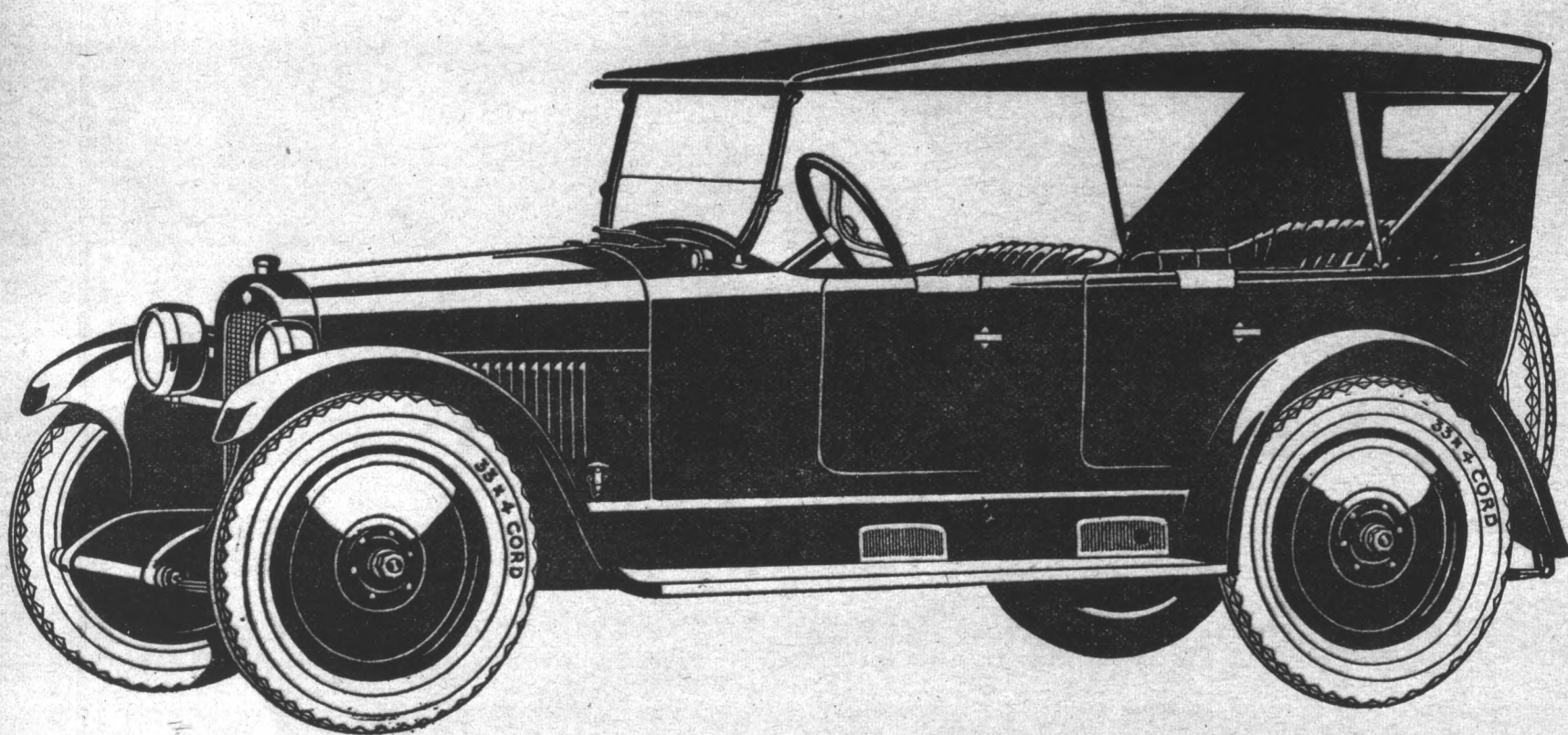
TERMS: TWO YEARS \$1
60c PER YEAR—5 YRS. \$2



When Michigan Dons the Royal Purple!

In this issue: A page of pictures showing Michigan convicts building roads and an article, "Prison Labor May Solve the Good Roads Riddle"—"Shall We Hand Pick Our Beans on the Farm?"—"M. A. C. Attacks Helme's Stand on Tuberculin Test of Dairy Cattle"—and many other interesting articles.

NASH



P R E S E N T S

The New Four-Cylinder Touring Car

In the development of this new Four touring car Nash focused engineering effort directly upon those elements of performance of most vital importance to the farmer.

So you find in this car a structural ruggedness and solidity well calculated to accept the sternest kind of employment without faltering or weakening.

And so aptly and scientifically is the car sprung and balanced; so ably has the motor and carburetor been refined; that upkeep figures kept from week to week will show clearly that Nash Four economy in gas and oil is a very considerable saving.

The braking system has been given even greater sureness, power, and efficiency by reason of a special Nash application of time-tried and positively proved braking principles.

In addition, Nash has included in the extensive equipment a number of new and practical features that serve to give the car even broader value as an investment.

The Nash Motors Company, Kenosha, Wis.

SATURDAY
September 15th,
1923

VOL. XI, NO. 2

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!"

The Michigan BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS \$1

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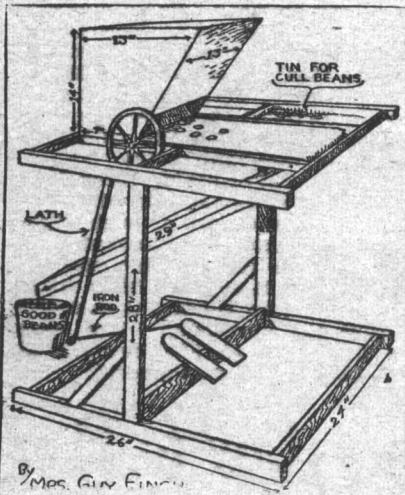
Shall We Hand Pick Our Beans On the Farm?

Readers Offer Plans for Making Home Bean-Picking Machines and Reasons For and Against
Saving of Present High Cost at Elevator. More Plans and Letters from Readers Wanted

MOST women and girls on the farm would like to find some sort of work to make pin money. The manufacturers of home knitting outfits and other so-called home working machinery are flooded with business and yet we know that few of those who buy expensive outfits, costing in the neighborhood of \$50 to \$75, ever make even a fraction of this first cost from the material they make for re-sale to the manufacturer.

It has been our opinion for some time that beans should be hand-picked on the farm and sold by the farmer as choice, hand-picked, cutting out the expensive labor employed in the town or city elevators and keeping this money on the farm in the hands of the farm women.

There are many idle hours for all hands on the farm that could be employed in hand-picking the season's bean crop and it would result in a better controlled marketing because



the beans would be more evenly fed to the markets during the winter months.

With this in mind The Business Farmer offered a prize of five dollars for the best plan of making a home bean picking machine, and several plans have already been submitted,

PICKING BEANS AT HOME CONTEST

IN the August 25th issue The Business Farmer offered five dollars for the most practical description of a bean picking machine that could be built by any farmer at home. Two of those sent in are illustrated on this page.

Remember it is not necessary to be an artist, simply explain how you made the outfit and draw it as simply as possible. Our own artist will make the finished drawing.

Benjamin Gerks, of Rochester, has added five dollars to the prize, making it ten dollars for the best plan and description submitted. We also offer a year's subscription, new or renewal, for every letter published, either illustrating a machine or giving experience with hand picking beans at home.

two of which we have illustrated and appear below.

No less an authority on this subject than Benjamin Gerks, of Rochester, N. Y., says the grower can profitably hand-pick his own beans and Mr. Gerks doubles our original prize offer in order to stimulate our readers to give us their plans and their experience.

Keep Culled Beans

It goes without saying that keeping the culled beans on the farm for profitable use in feeding stock would alone repay the labor and it would seem that there is every good reason why farmers should adopt this plan, and do it this year with the 1923 crop of beans, which, if properly marketed, is sure to bring a good price.

In reading the description of the machines illustrated, kindly remember that they could be changed to meet the requirements of the material you have on hand, and there is no reason why any man who is handy with tools cannot make one of the simple sets illustrated. We hope to have many more to offer in the September 29th issue.

Plan from Mrs. Guy Finch

Having noticed your request for a simple home-made bean picker, in the August 18th issue of The Business Farmer, thought I would take a chance toward winning the \$5.00 you are giving for a description of one. Am sending a rough sketch of

the one my husband made about five years ago, and which has proven very satisfactory to us, and also our neighbors. It is very simple to make and can be made of any material strong enough, that is on hand. The legs of our were of an old bedstead, the balance wheel from an old cream separator, the belt from a grain bag cut in a strip 5 inches wide and sewed together. The rollers for canvas are cut from a broom handle. The hopper and other parts from thin material. The pans for the poor beans, on either side of canvas are square cake pans of the right size to fit. The hopper has a wide hinge arranged on back so it may be tipped back if necessary. A tin is fitted into the bottom part of hopper, above the bottom board, in a slanting position, to be adjusted as desired, to let the beans run out, fast or slow.

As the dimensions are given on the sketch, this will be as plain as I can make it. If it is not plain enough will be glad to answer any questions concerning same. Hoping this will be what you are looking for and satisfactory to you, am sending it in. My husband was too busy to do this, so left the job for me. A reader of Michigan Business Farmer, Mrs. Guy Finch, Berville, Michigan.

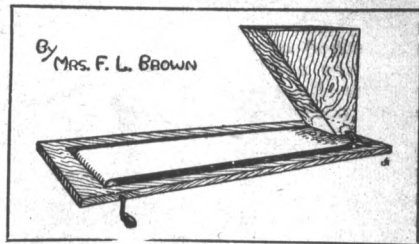
Mrs. Brown's Simple Plan

Here are directions for hand bean picker that my father made, and used to pick 50 bushels of beans one

winter. A hopper holding about 2 bushels had a corrugated roller in the bottom and was elevated above and at one end of a rolling canvas table, 12 to 14 inches wide and 5 or six feet long. The hopper roller was connected with one of the end rollers of canvas table by a narrow belt and a crank on the other end roller of the table operated the whole machine. We used heavy factory double for canvas table.—Mrs. F. L. Brown, Gobles, R No. 1, Michigan.

Hand Picking Hard Job

Have been reading Mr. Gerks' articles on bean picking on the farm and am going to give my experience. Two years ago I took samples of my beans to the elevator and found they would pick 10 to 12 per cent. Realizing what a loss this meant I started to hand pick them. I soon found out what a job I had. It was impossible to work with a hand picking machine until they were cleaned through a fanning mill to remove pods and the fine particles of clay. After doing this I made better headway but the job still proved too slow and tedious and I gave it up as a bad job. I noticed that a great number of culls were flat or irregular shaped and would not roll like the perfect beans so started doing a little



experimenting. I soon had a crude machine that seemed to be removing a great many culls and after taking a sample of these beans run through this machine to the elevator discovered that it reduced them from 10 per cent to 4 1/2 per cent or a little over 50 per cent. That year I had 460 bushels and by reducing them from 10 and 12 per cent to 5 per cent which they averaged it is easy to figure what I made and cleaned them at the rate of 4 bushels an

(Continued on Page 25)

M. A. C. Attacks Helme's Stand on Tuberculin Test of Dairy Cattle

ACCORDING to a press report under date of August 26th Mr. James W. Helme addressed a group of farmers at Jackson on the previous day in opposition to tuberculin testing of cattle. Many of his statements concerning the nature of the disease were so erroneous, misleading and at variance with the findings of present day investigators that the writer feels they should not be contradicted. Following, therefore are several statements concerning tuberculosis which should set the right in regard to his knowledge concerning this disease in case Mr. Helme's remarks have bewildered him.

First, there are three types of germs producing this disease, namely, human, bovine and avian.

1. The human type may be transmitted from tuberculous persons to other persons but is transmitted with difficulty to farm animals.

2. The bovine type is quite easily transmitted from tuberculous cattle to other cattle, to hogs, to people, especially children drinking infected milk, and possibly also to poultry.

3. The avian type is readily trans-

mitted from infected fowls to other fowls, but not easily transmitted to farm animals or people.

Second, in making statements regarding the percentage of tuberculosis in human beings caused by the bovine type, most students of the disease quote Park and Krumwiede in America who made bacteriological analyses of 1511 cases and report as follows:

75 percent of gland cases in children is bovine.

66 percent of generalized tuberculosis in children is bovine.

18.2 percent to 26 percent of deaths from tuberculosis in children are caused by the bovine germ.

Often, too, the findings of the British Royal Commission are cited, which are to the effect that

37.5 percent of tuberculosis in children under 5 years of age is bovine.

29.5 percent of tuberculosis in children between 5 and 10 years of age is bovine.

Milk Unsafe, Meat O. K.

Third, the milk from an infected cow may be unsafe to drink but her carcass may be fit for food. Milk

from a cow with tubercles in the udder is unsafe for human consumption because the germs probably will be present in the milk. Milk from a cow with no tubercles in the udder but which has tuberculous nodules in the digestive, respiratory or genito-urinary organs may be just as badly contaminated with the germs, not because they pass out of the udder in the milk, but because they get into the milk pail during the process of milking. It is difficult to keep the exterior of the body of a cow 100 percent free from the infectious discharges that may come from any one or all of the three above-mentioned body tracts. But if the hypothetical cow just mentioned were slaughtered and upon examination it was found that the tubercles in her body were not numerous, were slight in extent, walled off or calcified, and there was no evidence of the germs having gained entrance to the blood stream, her carcass could safely be consumed for food after cutting out the affected areas. The same logic would be applied as is applied by one wishing to eat an apple with a bad spot

or a bunch of grapes containing a few spoiled grapes—cut out the bad spot, or throw away the spoiled grapes, and eat the remainder. Of course if the tubercles in a cow are numerous, extensive, shows evidence of acute inflammation or liquefaction, the whole carcass is condemned and rendered into fertilizer.

Tests 96% Efficient

Fourth, the tuberculin tests used in the testing of cattle are reliable. They are considered to be about 96 percent efficient when run separately, and a trifle higher when run in combination. When it is stated that the tests are 96 percent efficient it means that 96 out of every 100 reactors show visible lesions. The other 4, however, could quite possibly have invisible lesions or minute lesions located in remote parts of the body that can not be examined or detected at the time of slaughter. Any person having any experience at all in the examination of carcasses for tuberculosis must admit that there are a thousand and one places in the animal's body that he never examines.—R. A. Runnells, Assistant Prof. of Animal Pathology, M. A. C.

Prison Labor May Solve the Good Roads Riddle

Experiment Now in Full Operation Seems to Prove Success of Plan---480 Men Now Employed
---Will Mean 500 Miles of New Roads in 1924 Says Governor Groesbeck

THE Sphinx gazing over the sands of the Sahara never faced a greater problem than the riddle which confronted the officials of the state of Michigan when the 1923 legislature adjourned without providing adequately for the construction and maintenance of the good roads program which the people of the state of Michigan had in 1919 given their approval at the polls.

No one blamed the legislature for keeping "hands off" this problem. On one side was the great popular sentiment, both from rural and city owners of automobiles and trucks, for a carrying out of the paved road program, while on the other side stood the overwhelming sentiment of the people that taxes must be lowered.

The politicians did not know which way to jump, and no one was there to tell them. Even the gasoline tax which was offered as a possible solution because it taxed the man who used the roads according to the use he gave them, went down to an inglorious defeat when it was vetoed by the governor.

Then in the midst of the black clouds which seemed to overhang the whole road building program in Michigan came forward a ray of light in the suggestion that the state's great prisons, already overcrowded, be called upon for their wasting labor to work directly in the interests of the people of the state, who were being taxed that these men might be properly confined, during their period of reconstruction.

Employing Convict Labor

All manner of plans have been perfected for employing the labor of the thousands of men who are serving their terms in the state prisons. Contract labor, usually employed in manufacturing work for which the prisoners found little call when they left the prison walls, was once a favorite method of employing this labor. It was neither profitable to the state nor beneficial to anyone except the profiteering contractors who secured the contracts through political connivance.

Several of the southern states have employed convict labor on the roads, and at least ten years ago the

writer recalls having visited a prison camp in Florida where practically all of the prisoners were colored men and he vividly remembers the surly overseers with their black-snake whips and rifles slung across their shoulders, watching the men, many of whom were working on the roads with a huge ball of iron and a chain around their leg. This picture of modern slavery recalled "Uncle Tom's Cabin" and from recent developments it would appear that the conditions in these southern prison camps can scarcely be called better today. How different is the present experiment of employing prison labor on the roads being constructed by the State Highway Commission of the State of Michigan!

Michigan's Experiment

At the present time there are 460 prisoners engaged in road-building on the following state highways: At the new Hudson camp on Grand River Avenue, State Highway Route M-16, there are 145 prisoners engaged in the work of grading, laying concrete, running all machinery, and caring for the needs of the camp.

At the Grand Blanc camp on the Dixie Highway, in Genesee County, the work is being done entirely with prison labor, and early in this month there were 285 men employed on the nine miles of which two and one half miles have already been completed, and will compare favorably with the best contract road construction in the state.

A small group of thirty-eight prisoners are engaged at Galesburg on the Camp Custer road where they are completing two and one half miles.

This marks only the beginning of construction work by prison labor on the roads of this state. Already the state has found it possible to increase the pay of these trusty prisoners from \$1 to \$1.25 per day and yet this compares with the \$5 to \$7 per day which contractors have had to pay for similar labor, and for which the state has been charged plus a profit to the contractor.

Prisoners Like it

A visit to any of the convict camps above will surprise and delight anyone who is interested in the

reconstruction of men during their period of confinement.

It is obvious that any prisoner is anxious to leave the gray walls of the prison confines such as at Jackson, Ionia or Marquette, and join a group of men in a military camp doing construction work and moving on from time to time in God's open country.

When you consider that the larger proportion of the men now confined in Michigan's state prisons are from the larger cities, principally Detroit, it is not hard to understand how these men are softened and receive a new perspective on life from the open country in which road building is done. It makes for better discipline in the state institutions, because it is a mark of honor to be allowed to go out and work in one of the prison road camps.

Practically every man employed in the work is a trusty, although the camps are guarded and the men checked in night and morning, which procedure is hardly different than is employed in the United States army or navy.

Every convenience is afforded the men and the efficient management of the camp is largely in the hands of men with army experience, so that the camp takes on all the appearance of a military post and they are swarming hives of industry.

Governor Pleased With Results

Although the plan of prison labor did not get well under way until early in August, sufficient progress has been made to date to prove that the plan is a practical one and most of the tax payers of Michigan are glad to see it adopted and are commending Governor Groesbeck for his distinct interest in it, because there have arisen any number of discouragements connected with it which would have weakened a less determined man in his desire to see it made a success.

Expansion of the highway construction program to 500 miles of new pavement to be completed during 1924 is now being planned by Governor Groesbeck and Frank F. Rogers, state highway commission. Such a mileage of new pavement will

be double that ever contemplated in the past.

Included in this paving program will be M-29, from Lansing to Charlotte, and M-14, from Lansing to Mason. These are two of the most congested trunk line highways leading to and from the state capitol.

The biggest job to be included in the 500-mile program for next year will be the Grand River road, known as M-16. When paving work now in progress along this route is completed this year there will be left unpaved about 80 miles, of which approximately 30 will be between Lansing and Detroit, and 50 between Lansing and Grand Rapids. This highway will have some relocations between Lansing and Grand Rapids which it is said will shorten the distance between the two cities at least 12 miles. This entire state boulevard, which will run from Detroit across the state to points on the east Shore of Lake Michigan, will have a right-of-way 100 feet wide with a 20 foot pavement in the middle. It is said all the needed right-of-way has been obtained for this work.

Another one of the longer stretches to be paved next year will be about 30 miles running through Lenawee and Washtenaw counties. The remainder of this huge program will consist of shorter gaps to connect present pavements and improved state trunk line and federal aid roads.

A Thousand Prisoners for Road Work

At least a thousand state convicts will be put to work on this highway construction next year. The governor and state highway commissioner estimate that the state can build at least 200 miles of paving next year with the prisoners and its own organization. The other 300 miles will be let to private contractors.

That the cost of paving being done this year by state convicts will radically reduce the cost of such highways to the state, will be shown conclusively when the repaving now being done on M-10, the Dixie highway, in Genesee county, is completed, says the governor. The state now has close to 500 convicts at (Continued on Page 27)

Why the "Farm Hand" and His Family Are Going Back to City to Live

By THE "FARM HAND'S" WIFE

MY HUSBAND returned to a farm in March of the present year, after working four years in a factory. He returned joyously, as one coming home after an enforced absence, for farming is to him the profession above all others; the profession that combines interest and pleasure and profit and health; in short the profession in which one lives a full and delightful life while earning a good living. I will admit that I believe the definition is correct, in theory. A farm should combine all these things, and life on a farm should be a delightful life.

We do not own a farm but we continue to hope that we shall sometime own one. We even dare to hope that our farm will be a sample of the nearest thing to paradise that an earthly home can be.

In the meantime, however, until we can squeeze from the amount of money which the high cost of living demands enough to somehow start for ourselves, we have come back to a farm as members of that class, now all too scarce, called farm labor. Perhaps I may be able, in this short article, to tell to the farmers who read it some of the many reasons why farm labor is scarce and dissatisfied and unreliable; why it does not stay put.

My husband is a man who loves his family and desires their comfort and happiness. He does not want his wife to get along with a house which has no sink and no bath and no heating or lighting systems. He does not want our three children to grow up without good advantages for education and the ability to associate with refined people. Still less does he want any other man to

THERE are thousands of "farm hands" like this one throughout the country. He is going back to the city this fall and so are many of the others, some will return at a later day and others will not. No doubt his employer had to "count his pennies" but if this farmer had followed the rules laid out in the agreement to the best of his ability his "farm hand" would have stayed by him and done his part. "Encourage them into taking a real interest in your business by showing them that you are interested in them," is the motto of some of our most successful farmers and it seems to be a pretty good rule to go by. If the "hired help" is the valuable kind they will soon show it under this kind of treatment. If they aren't the right kind you don't want them. What's your idea?

give himself or his family the things they should have.

He wants a bank account made from the surplus of money he earns, not the uncertain bonus his employer hands him as a gift but which would never be given unless earned. He wants to start his two sons and his daughter with chickens, or pigs, or lambs, himself; not to have his employer give them something from those owned on the farm. He desires to put all his interest and his work into his employer's farm and he feels that if he does that his employers can afford to pay him enough so that nothing we receive from the farm will be in the form of charity and we shall be as independent as the owner himself. He does not want his employer to "give" him a vacation, or take him "on a trip."

He feels that he earns a vacation, which he is perfectly willing to take at the time when the farm can spare him without suffering for need of his services.

There are on the farm where we are now living, and on which the owner also lives, ninety head of stock, cattle, horses, swine; and numerous fowl, chickens, ducks, geese, and turkeys. None of these are ours, nor do we want them. They belong to the owner of the farm. If, however, by his care and feeding and forethought, my husband saves more of the young pigs or chickens than the owner has been able to save before; if he works constantly and intelligently to improve the dairy stock and to cull out the unprofitable ones; if he makes feed carriers and other devices hitherto

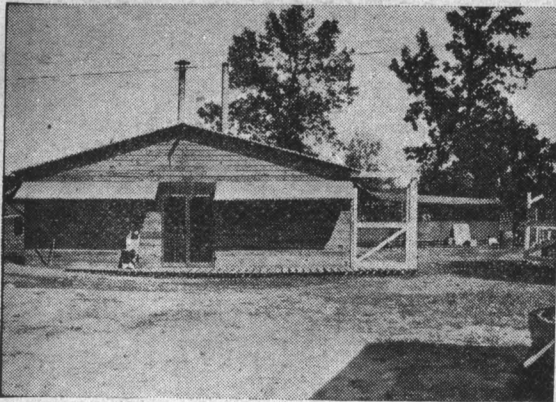
not used; all these things should make him a more valuable man, and, when he has proved himself capable and willing to increase the profits of the owner, the owner should, in turn, increase his salary or pay him a commission, and also let him know that his interest is noticed and appreciated.

The agreement when we came to this farm was that we were to have the use of a horse and buggy, the privilege of attending church services in the village two miles away on Sundays, house rent and milk free, feed for our hens, and in the fall 200 pounds of meat. All needed repairs on the house were to be begun at once. The money salary was \$100 per month. It sounded good. Rent in town was high, food was high, the houses we were able to afford were few and offered very limited opportunity for gardens or for raising poultry; two things we have always had.

So we came to the farm. I shall never forget that March day. My husband left at about ten o'clock in the morning after we had packed most of the goods, to fetch a team from the farm to haul the goods out there. At twelve, when I was still gathering up things, the gas man came and took out the meter. From then until after three the children and I waited in the house with no heat except that furnished by a small kerosene heater. As I was obliged to go to other rooms for things not yet put up, the doors could not be kept shut and the room was uncomfortably cold. When the teams came, for the employer came too and drove the second one, they took (Continued on Page 23)

Where Michigan Convicts Are Building Roads

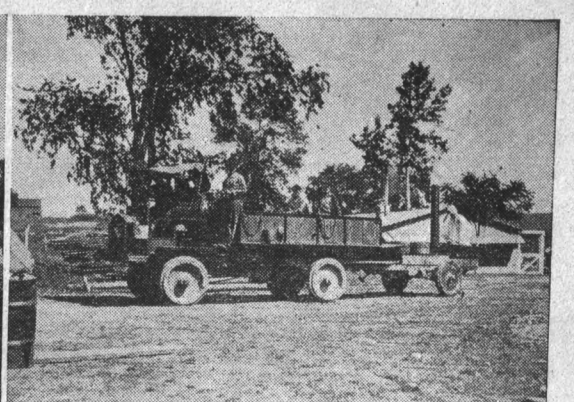
Actual Photographs Here Tell Story of Building of Concrete Roads on Michigan State Highways by Trusted Prisoners From State Penal Institutions. See Complete Story on Preceding Page.



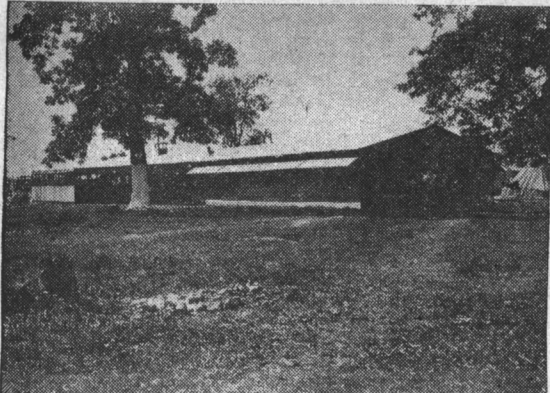
Front view of the prisoners mess hall, with kitchen shown in back. Prison Camp on Grand Blanc road.



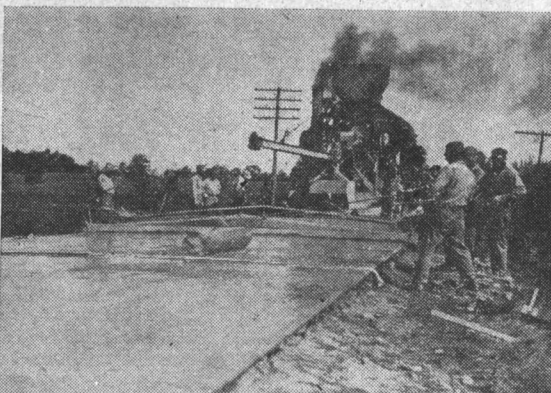
General view of prison camp on Grand Blanc Road, laid out in regulation army camp style.



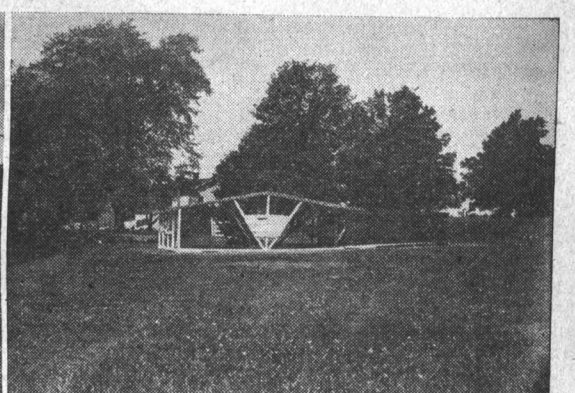
Field kitchen leaving camp with dinner for 250 men who are fed on the job.



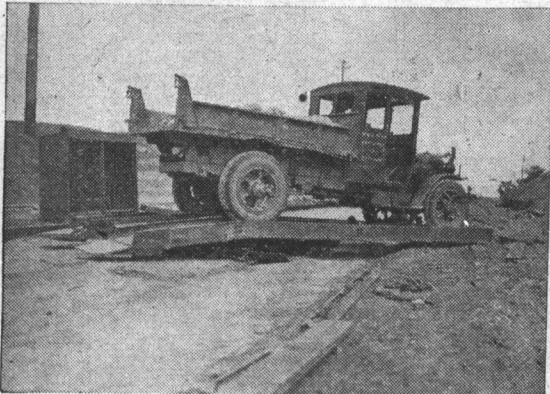
Rear view of the open-air mess room and kitchen at the camp on the Grand Blanc road.



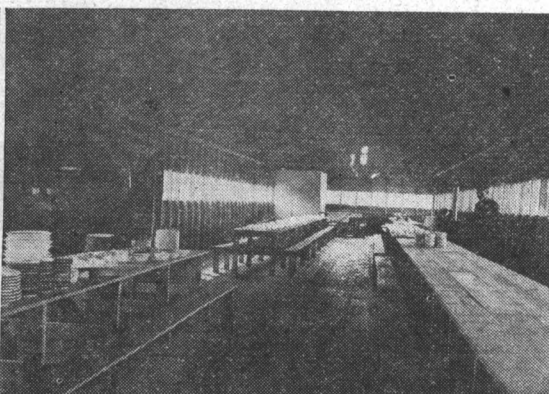
Concrete laying gang at work with roller for smoothing surface.



View of stables for horses used in construction work at the prison camp on the Grand Blanc road.



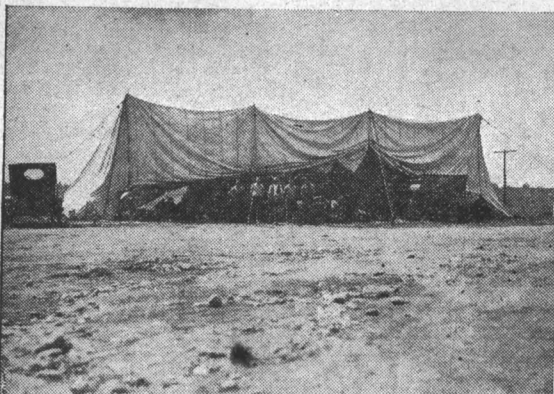
Turntable for trucks which allows the truck to proceed to the job and be turned within narrow cuts.



Interior of the prisoners dining hall at Novi, where three hundred men can be seated at meal times without crowding.



General view of a stretch of concrete road near Grand Blanc on Dixie highway which shows the high class of work the prisoners are doing.



Portable repair shop for trucks and machinery used in the construction camps. Good mechanics are always available among the prisoners.



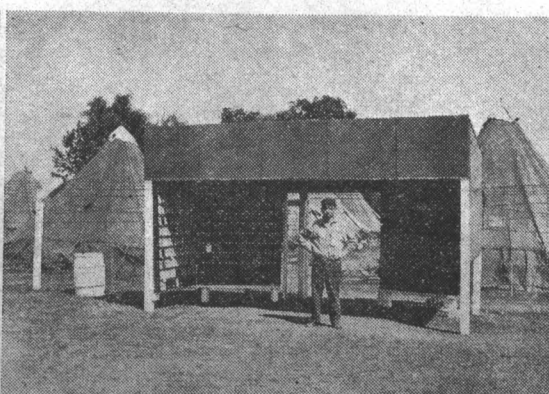
Covering the newly laid concrete with canvas to protect it from the hot sun. The best engineering practices are employed by the state.



Roads are carefully graded by prison labor using the latest types of grading machinery and often progressing at a surprising rate.



The open-air military tents are a contrast to the stuffy cell-block of the prison and the men appreciate its advantages.



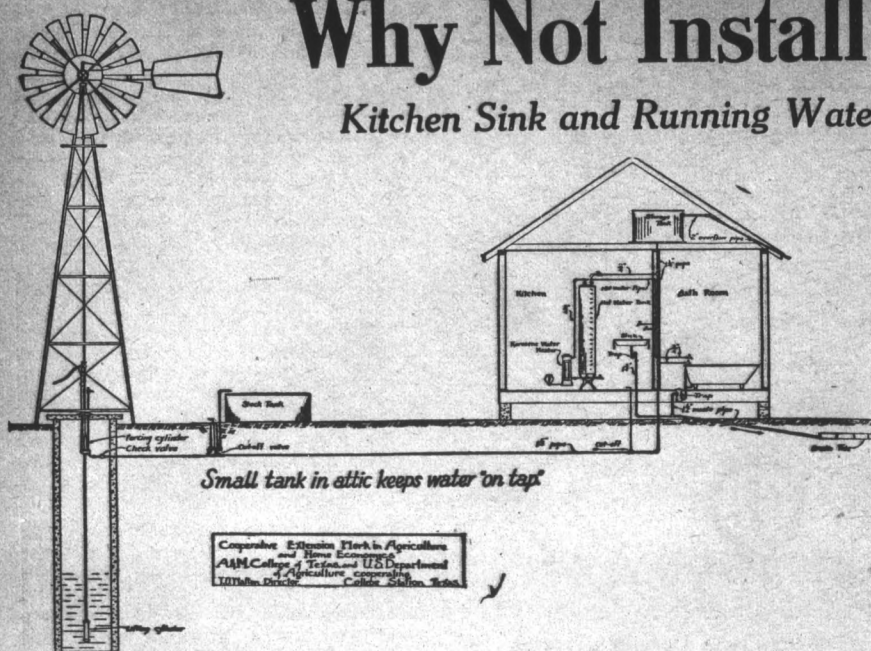
Gate for checking prisoners in and out of camp, showing the rack of photographs of each prisoner, which prevents deception.



Sketch of partially completed highway at Farmington on the state highway, M-16, showing the detachable steel curbing which is removed.

Why Not Install a Home Water System?

Kitchen Sink and Running Water Saves Many Steps and Cost of Installing is Small



MANY folks do not think of a farm home water system as a means of increasing the efficiency of the housekeeper, but are inclined to think of it as a luxury, if they think of it at all.

A kitchen sink with a waste pipe and running water at the faucet will save more work than a seat on the cultivator, and in many instances will not cost any more.

Probably the carrying in of fresh water and the carrying out of waste water is the most burdensome task the average farm woman has. A little discussion of a few of the simple ways of developing a water system may give some folks ideas that will put them at this important job.

Many farmers have a windmill, or a gas engine, and an elevated tank to supply water at the barn and have never thought of piping the water into the house. It is a comparatively easy matter for them to lay a pipe to the house and run water into a kitchen sink. It is surprising how much this one convenience will lighten the house work.

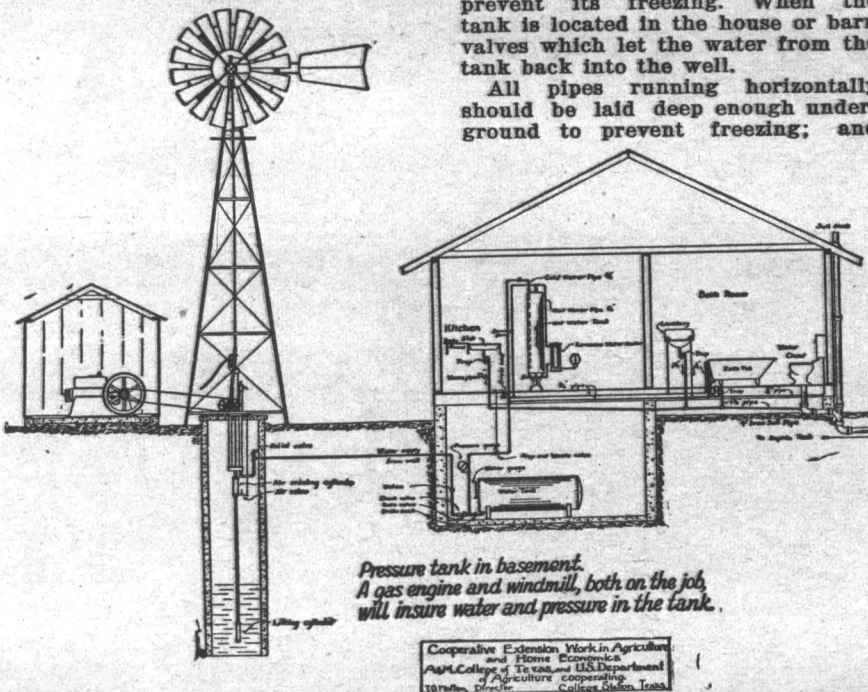
For those who do not have an elevated supply tank a few of the numerous ways of arranging one will be mentioned. The most common, probably, is the galvanized iron tank on a wooden tower. A more permanent tank can be built of concrete. A concrete tank to hold water from the ground up makes a very good reservoir if properly constructed. The supply may enter from the bottom and eliminate danger of freezing. Such tanks should have a good foundation, that is, should start 18 to 24 inches below the ground level, and should be well reinforced. The water from some wells in the State seems to destroy poor concrete. It is therefore well to use nothing but good concrete for this kind of work, such as one part cement, two parts of sand, four parts of gravel or crushed stone.

Utilizing Nearby Hill

A concrete tank built underground on a hill high enough to give adequate pressure makes an excellent reservoir. It tends to keep the water warm in winter and cool in summer. Where there is a conven-

ient hill a wooden or metal tank may be placed on it also, and save the expense of a tower. A very useful reservoir for use near the house is one of concrete with a cooling room and milk-cooling trough below the tank; with the water fresh from the well running around the milk pails and thence to the hogs or horses.

A tank may be placed on top of a concrete or masonry silo so as to



give a good pressure, unless the house is on higher ground than the silo. In order to keep the cost low, sometimes the elevated tank is put in the attic of a one-story house. This does not give as much pressure as is desirable, but is far better than not having running water. It has an advantage over the outdoor tank in that there is very little danger of its freezing. Only a small tank of two to four barrels capacity should be put in an attic, on account of the

weight. It should be placed over a partition so it will be well supported. It should have an overflow large enough to keep the tank from running over.

A good arrangement to have rain-water handy is obtained by placing a good big tank under the eaves of the house as high as possible, and piping the water to the kitchen. For piping water from an elevated tank into the house a $\frac{3}{4}$ -inch pipe is generally used. It gives a good flow if the tank is 10 feet or more above the faucet in the house and not too far away. Under some conditions it will pay to use a 1-inch pipe.

The pipe from the pump to the tank is usually 1 $\frac{1}{4}$ -inch where the ordinary size pump is used. Sometimes to keep the cost of pipe down on a pipe line 1,000 feet or so in length, 1-inch pipe is used by pumping the water slowly through it. In running water from the well to the tank it is just as well to pump the water in and let it out through the one pipe in the bottom of the tank and this usually saves some pipe. A check valve should be used at the well to prevent the water from leaking back. Some prefer to run the supply pipe over the top of the tank to avoid trouble with leaky check. The tank is sometimes put in the barn loft and covered with hay to prevent its freezing. When the tank is located in the house or barn valves which let the water from the tank back into the well.

All pipes running horizontally should be laid deep enough underground to prevent freezing; and

the tank and attach a shut-off valve operated by a lever with a wire from it. When the section of the pipe where it attaches to the tank may be drained and prevent troublesome freezing there.

A water system without a reservoir may be had at a very small cost where the water in the well or cistern is not more than 14 or 16 feet below the floor of the house. A pitcher pump may be placed at the kitchen sink and a pipe run from it to the water in the well or cistern. If the lift is rather high the pump cylinder may be placed under the floor of the house to decrease the suction lift. When the well is not near the house and the water must be drawn through a long horizontal pipe, the possible vertical suction lift will be correspondingly less on account of the increase of friction by the long pipe.

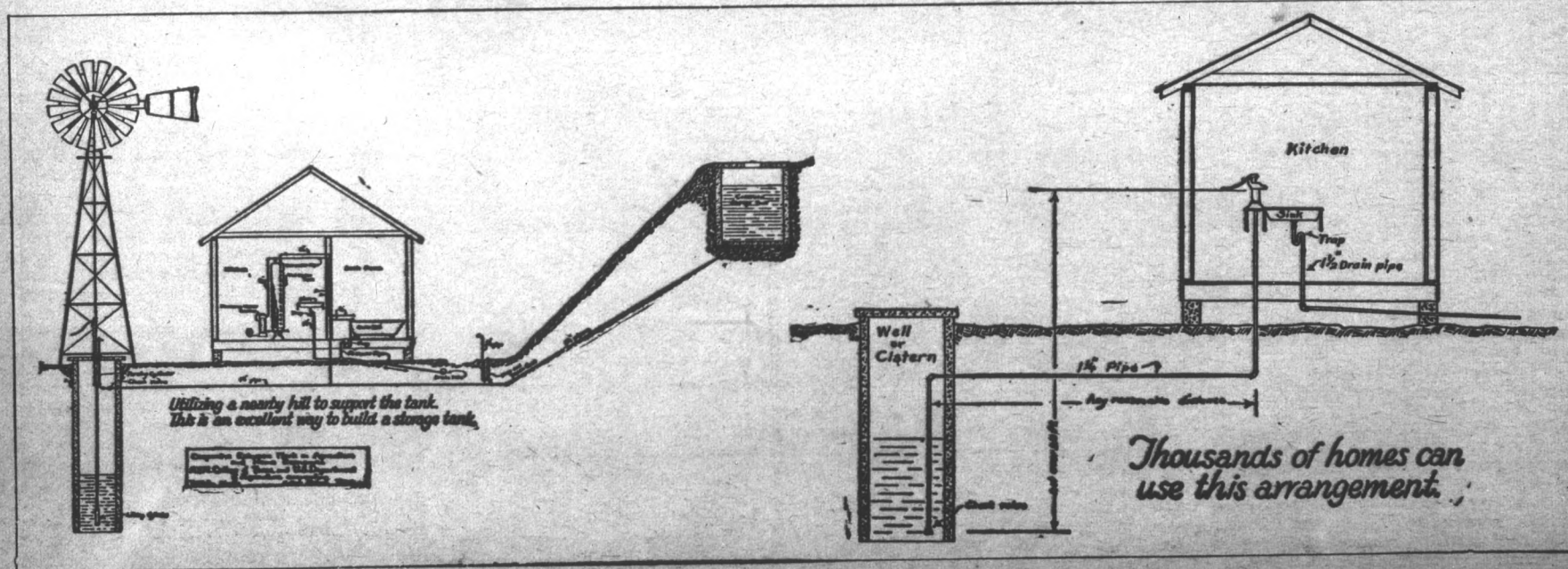
Disposal of Waste Water

The waste water from a kitchen sink may be handled in any way that dish water is disposed of; however, it is better to run it into an underground drain so it will not keep a wet spot in the yard. The waste pipe should be 1 $\frac{1}{4}$ inches in diameter and should have a trap in it just below the sink. The trap consists of an S-shaped bend in the pipe which holds a little water and prevents obnoxious odors coming from the waste pipe. The waste water should be carried 20 or 30 feet from the house in a tight-jointed pipe. It may then be emptied into open jointed drain tile and used for sub-irrigation a garden. Where only the water from a kitchen sink is emptied into the underground tile about 50 or 100 feet of 4-inch tile will be enough; the larger amount being necessary in tight soil.

When a complete set of plumbing fixtures are used, including a water closet, a septic tank must be used for the disposal of the sewage. A septic tank sewage disposal system is not expensive, and should not block the installation of a complete set of fixtures in the house.

A good feature of any water system is a hot-water heater. This usually includes a 30 to 50-gallon galvanized iron tank capable of withstanding a high pressure. Where natural gas is available the tank is omitted. The heater may be used with almost any kind of fuel. Where a wood or coal cook stove is used regularly a water front may be placed in it to heat the water in the tank. In this climate, where the cooking is done on a kerosene or gasoline stove most of the year, it is better to have a kerosene or gasoline heater for the hot-water system, separate from the cook stove.

If you do not now have running water in your house, the installation of some of the systems mentioned may keep your boys and girls from moving to town at the first opportunity, and will certainly leave the housewife more strength and time for work in the garden, milking the cows, and her various other regular duties.—Farm and Ranch.



PAY TUITION

In this district the parents have had to pay tuition for the year of 1921-1922. The tuition for 1921 was \$60, district paying \$50 and parents \$10; for the year 1922-1923 the district paid \$60 and the parents \$15. We have read that the district is supposed to pay all. Our director informed us that he had looked up the school law and that the district was supposed to pay up to \$60 and no more. I want to know if there is any way we can compel this district to reimburse us for the tuition money we have already paid out? There are seven children from this district attending high school.—W. V. B., Plainwell, Mich.

—The non high school districts must pay the tuition up to the actual cost of the same in high school districts but not to exceed sixty dollars a year. This applies to eighth grade graduates.—T. E. Johnson, Superintendent of Public Instruction.

GROUNDS FOR SUIT

On March 23, 1922, my husband bought a team for \$235 paying \$100 down and giving a note for balance with article purchased written on the face of note. When the note came due, December 1, 1922, he asked to have it renewed, he paying the accrued interest. The bank refused to accept the interest. The man who sold us the team wanted his money or the team. He took the team and also kept the \$100 we paid down. We would like to know if he can legally do this as we are just starting farming and we cannot afford to lose this money if we can possibly recover it? When the team went we had no means of traveling except on foot, nor any way to get our winter's wood to the house.—Mrs. C. C. W., Sandusky, Mich.

—The man who sold you the team could not recover the team and also keep the \$100. I think you had better consult a lawyer, with a view to starting suit for the recovery of your \$100.—Asst. Legal Editor.

SELLING VINEGAR

Can you tell me how to test vinegar so as to know when it is right to sell? How do you color vinegar to make it a nice color? Ours is too light?—A. I., Mt. Pleasant, Michigan.

—We presume you refer to cider vinegar. "Cider vinegar" is construed to mean vinegar derived by the alcoholic and subsequent acetous fermentation of the expressed juice of apples, the acidity, solids and ash of which have been derived exclusively from apples and which contains not less than 4 per cent of absolute acetic acid. Cider vinegar which, during the course of manufacture, develops in excess of 4 per cent acetic acid, may be reduced to a strength of not less than 4 per cent and sold as "cider vinegar" without having the product regarded as adulterated. Before selling, every manufacturer or producer of cider vinegar must brand each cask, barrel or keg, or other container, with his name, place of business and the words "Fermented Cider Vinegar."

In order to determine the acetic acid content it is necessary that a representative sample be taken and the usual chemical method employed for the determination of acetic acid. Without standard glassware and standardized chemical reagents it is impossible to make this test. Ordinarily the home is not equipped with sufficient apparatus or chemicals to do the work. There are on the market so-called hydrometers which indicate the strength of vinegar; however, they are not sufficiently accurate to be depended upon.

This Department in the past has endeavored to give this service when individuals submit home made vinegar and ask for the acetic acid content. We shall be glad to do the work for you.

The color of vinegar ordinarily is dependent upon raw material and manufacturing processes. In other words, in the average vinegar establishment color can be obtained by varying the details of manufacture and either light or dark vinegar be produced. When produced in the home this is difficult to control and usually home made vinegar is lighter colored than that manu-



Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

factured in vinegar factories. For use in the home, vinegar may be colored any desired color. Sugar coloring or caramel coloring may be used to produce the desired shade. However, section 6 of the vinegar law, C. L. 6463, reads as follows:

"No vinegar shall be sold or exposed for sale in which foreign substances, drugs or acids shall have been introduced. No vinegar shall contain and artificial coloring matter, and all vinegar shall have an acidity of not less than four per cent by weight of absolute acetic acid. If vinegar contains any artificial matter, or less than the required amount of acidity, it shall be deemed to be adulterated."

Under this section, it is illegal to color vinegar for sale in this State and it is one of the duties of this Department to prevent such practice and to enforce this particular section of the vinegar law.—W. C. Geagley, State Analyst.

ESTATE SHOULD BE PROBATED

I am a reader of the M. B. F. and sure think it a grand paper. I wouldn't think of being without it and as I know you have a Service Bureau for your readers and answer all kinds of questions I would be very much pleased if you would answer the questions I am going to ask you.

My mother-in-law died 2 years ago July 16th leaving no will and six sons as her only heirs, and at the

time of her death she had her farm rented on shares to her oldest son until April 1, 1922. The mother was to have done the general housework for her son and what help he hired to help him on the farm. After the mother died the son hired a housekeeper and went on farming, in the fall harvested the crop and continued staying on the farm keeping the housekeeper all winter. Can the son make the heirs pay this housekeeper or must he pay her himself as long as he hired her? After April 1, 1922, the son made no arrangements with the other heirs in regards to renting the farm for another year but went on farming just as though the mother was alive, using everything about the farm as he pleased and planting crops wherever he liked selling the cream, the returns from which he used for keeping the house. The cows belonged to the mother, the furniture in the house all belonged to the mother, which the son has used ever since her death. The home being furnished complete by the mother. Now as long as he made no arrangements to stay and work the farm and use everything can he do so as long as the rest of the heirs allow him to? Can't they collect rent for a furnished house since April 1, 1922? There is about five acres of woods on mother's farm.

At the time of the mother's death there was wood enough on hand cut which has lasted until about December 1, 1922. How about wood he

cuts for his own use? Can he cut wood for his own domestic use or cut any green wood without consent from the other heirs? I also understand that the son made arrangements with his brother, one of the heirs, a year ago and the two worked the mother's farm together the son getting a certain share. Can the son do this without consent from the other four heirs? What share could the brother hold in such a case? The son also gave the housekeeper what chickens she raised there on the farm and sold the chickens belonging to the mother. The son never gave account of what has been raised or sold on the farm since mother died. The property has never been probated yet. The housekeeper married one of the sons and they continued staying on the farm.—Mrs. H. B., Williamsburg, Mich.

—The rights and obligations of the mother under the lease would become, upon her death, the rights and obligations of her estate, or heirs. Her agreement to do the general housework would have to be carried out by the heirs, and if the son hired a housekeeper, all the heirs, himself included, would have to pay their share of what was a reasonable amount for such services, up until the termination of the lease, April 1st, 1922. After that he would have to pay her himself. The heirs would be entitled to the rent due the mother under the lease.

So long as the other heirs do not object, he could stay on the farm after April 1st and cultivate the land, but would be liable to the others to pay a reasonable rental for the use of such farm and house. The wood cut for his own domestic use would be taken care of in the rent. For any wood cut above that amount, he would have to account to the rest of the heirs. The son and his brother could work the farm under an arrangement of their own, so long as the other heirs did not object, and in that case would both be liable for the rent.

The estate should be probated as soon as possible so the rights of the respective heirs could be legally determined.—Asst. Legal Editor.

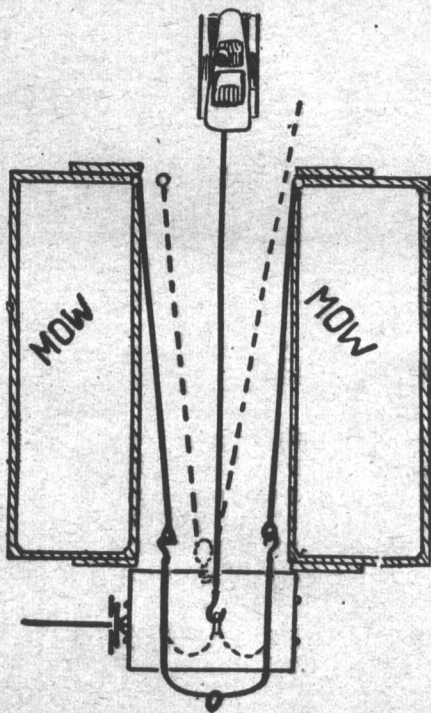
HAVE WILL PRODUCED AT ONCE

I saw by your paper where you help people. I would like to know, does a will ever outlaw? When my father died seven years ago he left my mother a joint deed of their farm. She sold the farm and moved to town. She died, it will be four years the 23rd of next August. She left a will to my only brother for all her property. My only sister and myself didn't get a thing. The will has never been read only as I went to see if she had a will. Their lawyer has the will. He told me he didn't have any will or papers of hers. He told me that twice, and I had been told by my cousin that she saw it in his office. I told him what she said and he finally went and got it and cut it open and read it just to me. I didn't see what it said, but he read it this way. Her property and personal had all been left to my brother, she said she had not forgotten the girls but wanted my brother to have it because he had always lived with her. Now the will has never been read in public, nor been probated. The farm she sold was sold on contract and isn't paid for yet and it isn't on record in my brother's name. I have thought it over a lot and just thought I would drop you a line and see what you had to say. If this outlaws, how is it then?—Reader from Southern Michigan.

—Complied Laws of 1915, Sections 13776 and 13778 provide that every person, other than the judge of probate, having custody of any will, shall within 30 days after he has knowledge of the death of the testator, deliver it to the probate court or to the executor, and that every person who shall neglect to do this, without reasonable cause, shall be liable to each and every person interested in such will in the sum of \$10 damages for each and every month that he shall neglect to deliver the will, after 30 days from the death of the testator. I would petition the probate judge to notify the person having custody of the will to produce it at once so it may be properly probated.—Asst. Legal Editor.

How To Save Time When Unloading Hay

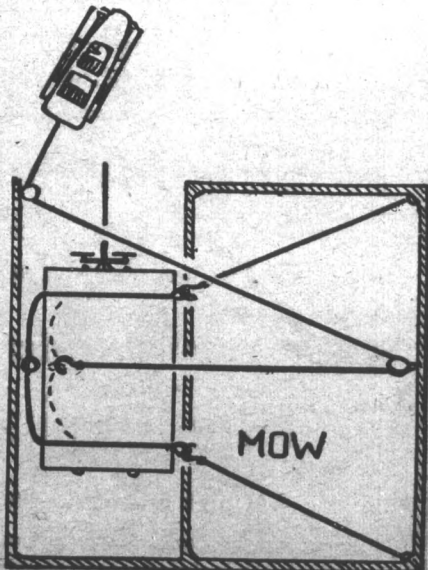
TAKE a piece of three-quarter inch rope long enough to lay across your wagon twice. Place one end across the front end of the wagon about three feet from the end if you use a loader and four feet if you do not. Have the two ends extend over the side of the rack about three feet while the center of the rope which is on the other side of rack should extend over at least five feet. You have a large ring in the center of the rope and one on each



end. This makes your sling. Then get two ropes long enough to reach to the farthest posts from the side of your wagon over which the two rope ends hang (see drawing). Put a grab hook on one end. This hook is to hook into the ring in the center of your sling over the top of your load in the drawing. When you drive in to unload hook the two long ropes, which have been fastened to the posts, to the ends of your sling, fasten the hook of the hay rope into the ring in the center of the sling and hitch your team, tractor or auto to the other end and roll the load off the wagon. You then unhook the slings from the long ropes, unfasten the long ropes from the post and draw them out. They come very easily if you do not place knots in

the ropes. Your second load rolls off next to the first and so on until you reach the back of the now, then roll the next loads clear back. If you are filling the driveway of your barn a straight haul will do, if filling the sides fasten your ropes as shown in the drawing. On the straight haul when the hay is piled too high for you to haul load off with success you can fasten one end of the pull rope high up in the barn and use a pulley in the center (see dotted line in drawing).

I used by automobile to do the hauling in place of team as it was so much faster. From the time the team stopped at the barn until they were ready to start for the field again it has taken us less than two minutes; that is to fasten the ropes, unload the hay and place the slings back on the wagon again ready to start, or less than one minute to place the load in the barn after the ropes were fastened. We timed ourselves on four loads—they were short hauls—and we made four trips in one hour, with one team and two men loading. We placed over two hundred tons of hay in one barn by this method. Use a third man in the mow. When you get the idea, by a little practice you can change the ropes about and place the hay most anywhere, providing the openings are large enough to let full load through.—W. H. Caple, Clare County, Mich.



JEFF PETERS has been engaged in as many schemes for making money as there are recipes for cooking rice in Charleston, S. C.

Best of all I like to hear him tell of his earlier days when he sold liniments and cough cures on street corners, living hand to mouth, heart to heart with the people, throwing heads or tails with fortune for his last coin.

"I struck Fisher Hill, Arkansas," said he "in a buckskin suit, moccasins, long hair and a thirty-carat diamond ring that I got from an actor in Texarkana. I don't know what he ever did with the pocket knife I swapped him for it.

"I was Dr. Waugh-hoo, the celebrated Indian medicine man. I carried only one best bet just then, and that was Resurrection Bitters. It was made of life-giving plants and herbs accidentally discovered by Ta-quah-la, the beautiful wife of the chief of the Choctaw Nation, while gathering truck to garnish a platter of boiled dog for the annual corn dance.

"Business hadn't been good at the last town, so I only had five dollars. I went to the Fisher Hill druggist and he credited me for half a gross of eight ounce bottles and corks. I had the labels and ingredients in my valise left over from the last town. Life began to look rosy again after I got in my hotel room with the water running from the tap, and the Resurrection Bitters lining up on the table by the dozen.

"Fake? No, sir. There was two dollars' worth of fluid extract of cinchona and a dime's worth of aniline in that half-gross of bitters. I've gone through towns years afterwards and had folks ask for 'em again.

"I hired a wagon that night and commenced selling the bitters on Main Street. Fisher Hill was a low, malarial town; and a compound hypothetical pneumo-cardiac anti-scorbutic tonic was just what I diagnosed the crowd as needing. The bitters started off like sweet-breads-on-toast at a vegetarian dinner. I had sold two dozen at fifty cents apiece when I felt somebody pull my coat tail. I knew what that meant; so I climbed down and sneaked a five-dollar bill into the hand of a man with a German silver star on his lapel.

"'Constable,' says I, 'it's a fine night.'

"'Have you got a city license,' he asks, 'to sell this illegitimate essence of spooju that you flatter by the name of medicine?'"

"'I have not,' say I. 'I didn't know you had a city. If I can find it tomorrow I'll take one out if it's necessary.'

"'I'll have to close you up till you do,' says the constable.

"I quit selling and went back to the hotel. I was talking to the landlord about it.

"'Oh, you don't stand no show in Fisher Hill,' says he. 'Dr. Hoskins, the only doctor here, is a brother-in-law of the Mayor, and he won't allow no fake doctor to practice in town.'

"'I don't practice medicine,' says I, 'I've got a State peddler's license, and I take out a city one whenever they demand it.'

"I went to the Mayor's office the next morning and they told me he hadn't showed up yet. They didn't know when he'd be down. So Doc Waugh-poo hunches down again in a hotel chair and lights a jumpson-weed regalia, and waits.

"By and by a young man in a blue necktie slips into the chair next to me and asks the time.

"Half-past ten, says I, 'and you are Andy Tucker. I've seen you work. Wasn't it you that put the Great Cupid Combination package on the Southern States? Let's see, it was a Chilian diamond engagement ring, a wedding ring, a potato masher, a bottle of soothing syrup nad Dorothy Vernon—all for fifty cents.'

"Andy was pleased to hear that I remembered him. He was a good street man; and he was more than that—he respected his profession, and he was satisfied with 300 per cent profit. He had plenty of offers to go into the illegitimate drug and garden seed business; but he was never to be tempted off the straight path.

"I wanted a partner, so Andy and me agreed to go out together. I told him about the situation in Fisher Hill and how finances were low on account of the local mixture of politics and japal. Andy had just got in on the train that morning. He was pretty low himself, and was going to canvass the town for a few dollars to build a new battleship by popular subscription at Eureka Springs. So we went out and sat on the porch and talked it over.

"The next morning at eleven o'clock when I was sitting there alone, an Uncle Tom shuffles into the hotel and asked for the doctor to come and see Judge Banks, who was the Mayor and a mighty sick man.

"'I'm no doctor,' says I. 'Why don't you go and get the doctor?'"

"'Boss,' says he. 'Doc Hoskins am done gone twenty miles in de country to see some sick persons. He's de only doctor in de town, and Massa Banks am powerful bad off. He sent me to ax you to please, sub, come.'

"'As man to man,' says I, 'I'll go and look him over.' So I put a bottle of Resurrection Bitters in my pocket and goes up on the hill to the mayor's mansion, the finest house in town, with mansard roof and two cast iron dogs on the lawn.

"This Mayor Banks was in bed all but his whiskers and feet. He was making internal noises that would have had everybody in San Francisco hiking for



Jeff Peters As A Personal Magnet

A Complete Short Story by O. HENRY America's Greatest Short Story Writer

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the parks. A young man was standing by the bed holding a cup of water.

"'Doc,' says the Mayor, 'I'm awful sick. I'm about to die. Can't you do nothing for me?'"

"'Mr. Mayor,' says I, 'I'm not a regular preordained disciple of S. Q. Lapius. I never took a course in a medical college,' says I. 'I've just come as a fellow man to see if I could be of assistance.'

"'I'm deeply obliged,' says he. 'Doc Waugh-hoo, this is my nephew, Mr. Biddle. He has tried to alleviate my distress, but without success. Oh, Lordy! Ow-ow-ow!' he sings out.

"I nods at Mr. Biddle and sets down by the bed and feels the Mayor's pulse. 'Let me see your liver—your tongue, I mean,' says I. Then I turns up the lids of his eyes and looks close at the pupils of 'em.

"'How long have you been sick?' I asked.

"'I was taken down—ow-ouch—last night,' says the mayor. 'Gimme something for it, doc, won't you?'"

"'Mr. Biddle,' says I, 'raise the window shade a bit, will you?'"

"'Biddle,' says the young man. 'Do you feel like you could eat some ham and eggs, Uncle James?'"

"'Mr. Mayor,' says I, after laying my ear to his right shoulder blade and listening, 'you've got a bad attack of super-inflammation of the right clavicle of the harpschord!'"

"'Good Lord!' says he, with a groan. 'Can't you rub something on it, or set it or anything?'"

"'I picks up my hat and starts for the door.

"'You ain't going, doc?' says the Mayor with a howl. 'You ain't going away and leave me to die with this superfluity of the clapboards, are you?'"

"'Common humanity, Dr. Whoa-ha,' says Mr. Biddle, 'ought to prevent your deserting a fellow-human in distress.'

"'Dr. Waugh-hoo, when you get thru plowing,' says I. And then I walks back to the bed and throws back my long hair.

"'Mr. Mayor,' says I, 'there is only one hope for you. Drugs will do you no good. But there is another power higher yet, although drugs are high enough,' says I.

"'And what is that?' says he.

"'Scientific demonstrations,' says I. 'The triumph of mind over sarsaparilli. The belief that there is no pain and sickness except what is produced when we

ain't feeling well. Declare yourself in arrears. Demonstrate.'

"'What is this paraphernalia you speak of, Doc?' says the Mayor. 'You ain't a Socialist, are you?'"



"YOU'RE UNDER ARREST, DR. WAUGH-HOO, ALIAS PETERS," SAYS HE.

"'I am speaking,' says I, 'of the great doctrine of psychic financing—of the enlightened school of long-distance, sub-conscious treatment of fallacies and meningitis—of that wonderful in-door sport known as personal magnetism.'

"'Can you work it, doc?' asks the Mayor.

"'I'm one of the Sole Sanhedrims and Ostensible Hooplas of the Inner Pulpit,' says I. 'The lame talk and the blind rubber whenever I make a pass at 'em. I am a medium, a coloratura hypnotist and a spiritous control. It was only thru me at the recent seances at Ann Arbor that the late president of the Vinegar Bitters Company could revisit the earth to communicate with his sister Jane. You see me peddling medicine on

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the streets,' says I, 'to the poor. I don't practice personal magnetism on them. I do not drag it in the dust,' says I, 'because they haven't got the dust.'

"'Will you treat my case?' asks the Mayor."

"'Listen,' says I. 'I've had a good deal of trouble with medical societies everywhere I've been. I don't practice medicine. But, to save your life, I'll give you the psychic treatment if you'll agree as mayor not to push the license question.'

"'Of course I will,' says he. 'And now get to work, doc, for them pains are coming on again.'

"'My fee will be \$250.00, cure guaranteed in two treatments,' says I.

"'Alright,' says the Mayor. 'I'll pay it. I guess my life's worth that much.'

"I sat down by the bed and looked him straight in the eye.

"'Now,' says I, 'get your mind off the disease. You ain't sick. You haven't got a heart or a clavicle or a funny bone or brains or anything. You haven't got any pain. Declare error. Now you feel that pain that you didn't have leaving, don't you?'"

"'I do feel some little better, doc,' says the Mayor, 'darned if I don't. Now state a few lies about my not having this swelling in my left side, and I think I could be propped up and have some sausage and buckwheat cakes.'

"'I made a few passes with my hands. 'Now,' says I, 'the inflammation's gone. The right lobe of the perihelion has subsided. You're getting sleepy. You can't hold your eyes open any longer. For the present the disease is checked. Now, you are asleep.'

"The Mayor shut his eyes slowly and began to snore.

"'You observe, Mr. Tiddle,' says I 'the wonders of modern science.'

"'Biddle,' says he, 'when will you give uncle the rest of the treatment, Dr. Pooh-pooh?'"

"'Waugh-hoo,' says I. 'I'll come back at eleven tomorrow. When he wakes up give him eight drops of turpentine and three pounds of steak. Good morning.' 'The next morning I went back on time. 'Well, Mr. Biddle,' says I, 'when he opened the bedroom door, 'and how is uncle this morning?'"

"'He seems much better,' says the young man.

"'The mayor's color and pulse was fine. I gave him another treatment, and he said the last of the pain left him.

"'Now,' says I, 'you'd better stay in bed for a day or two, and you'll be all right. It's a good thing I happened to be in Fisher Hill, Mr. Mayor,' says I, 'for all the remedies in the cornucopia that the regular schools of medicine use couldn't have saved you. And now that error has flew and pain proved a pur-jurer, let's allude to a cheerfuller subject—say the fee of \$250. No checks, please, I hate to write my name on the back of a check almost as bad as I do on the front.'

"'I've got the cash here,' says the mayor, pulling a pocket book from under his pillow.

"He counts out five fifty-dollar notes and holds 'em in his hand.

"'Bring the receipt,' he says to Biddle.

"'I signed the receipt and the mayor handed me the money. I put it in my inside pocket careful.

"'Now do your duty, officer,' says the mayor, grinning much unlike a sick man.

"'Mr. Biddle lays his hand on my arm.

"'You're under arrest, Dr. Waugh-hoo, alias Peters,' says he, 'for practising medicine without authority under the State law.'

"'Who are you?' I asks.

"'I'll tell you who he is,' says Mr. Mayor, sitting up in bed. 'He's a detective employed by the State Medical Society. He's been following you over five counties. He came to me yesterday and we fixed up this scheme to catch you. I guess you won't do any more doctoring around these parts, Mr. Fakir. What was it you said I had, doc?' the mayor laughs, 'compound—well it wasn't softening of the brain I guess, anyway.'

"'A detective,' says I.

"'Correct,' says Biddle. 'I'll have to turn you over to the sheriff.'

"'Let's see you do it,' says I, and I grabs Biddle by the throat and half throws him out the window, but he pulls a gun and sticks it under my chin, and I stand still. Then he puts handcuffs on me, and takes the money out of my pocket.

"'I witness,' says he, 'that they're the same bills that you and I marked, Judge Banks. I'll turn them over to the sheriff when we get to his office, and he'll send you a receipt. They'll have to be used as evidence in the case.'

"'All right, Mr. Biddle,' says the mayor. And now, Doc Waugh-hoo,' he goes on, 'why don't you demonstrate? Can't you pull the cork out of your magnetism with your teeth and hocus-pocus them handcuffs off?'"

"'Come on, officer,' says I, dignified. 'I may as well make the best of it.' And then I turns to old Banks and rattles my chains.

"'Mr. Mayor,' says I, 'the time will come when you'll believe that personal magnetism is a success. And you'll be sure that it succeeded in this case, too.'

"And I guess it did.

When we got nearly to the gate, I says: 'We might meet somebody now, Andy. I reckon you better take 'em off, and—Hey! Why, of course it was Andy Tucker. That was his scheme; and that's how we got the capital to go into business together.'

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An exceptionally attractive fine quality cotton gabardine dress for women and misses. Long roll collar in shawl effect, sleeves and belt piped in red. Entire front of blouse enhanced with exquisite all-over embroidered design in Bulgarian effect with rich harmonious colors. Two streamers at both sides and front. Wide belt embroidered to match blouse. Sizes for women, 34 to 44 bust; for misses 32 to 38 bust. State length desired. Colors, navy or brown. Order navy by No. 96E7500. Brown No. 96E7502. Send no money. Pay \$2.98 and postage on arrival for either color. State size.

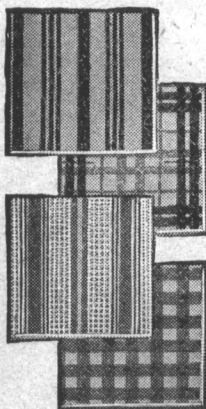
Popular Model Embroidered Gabardine for Stouts \$3.98



Sharood heartily recommends this attractive frock of good quality cotton gabardine. It is designed along slenderizing lines for stout women. The skirt is finished with two wide, loose panels attached at waist and bottom. The edges are bound in black and embroidered in contrasting color. Collar is in the new long roll shawl effect, embroidered to match panels on skirt, as are also the vestee and tabs on belt-shaped sleeves. Dress is gathered at waistline at back, and finished with tie sash. Sizes 44 to 64 bust measure. State length desired. Order Navy by No. 96E7610. Brown No. 96E7612. Send no money. Pay \$3.98 and postage on arrival. State size and length.

For Stout Women

Outing Flanne 10 Yards for Only \$1.89



Width About 27 inches. Ideal for nightgowns, petticoats, bloomers, etc. Good weight with soft fleecy nap both sides. Comes in Blue or Pink check—Pink, Blue or Gray stripe—Pink, Blue, Gray, Navy or Brown plaid. Be sure to state color and pattern wanted. Order No. 96F5642. Send no money. Pay \$1.89 and postage on arrival for 10 yards.

Standard Quality Apron Gingham

Width, about 26 inches. Fine, closely woven, fast color indigo blue apron gingham. Choice of large, medium or small check. State preference. Tremendous bargain. Order No. 96F3469. Send no money. Pay \$1.49 and postage on arrival for 10 yards. Money back if not satisfied.

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Don't send one cent. Just letter or postcard brings anything. Merely give name and number of each article you want. Also state size and write your name and address plainly. Pay nothing till goods arrive—then only the amazing bargain price and postage. If not delighted with your bargain simply return the goods and your money will be cheerfully refunded.



Novelty Cross-Strap Model in Rich Black Patent Leather. \$2.98

State Size

Everyone will admire this early fall style cross-strap pump. The vamp and quarter are of selected black patent leather with rich black suede four-bar effect cross straps. Medium pointed dress toe has imitation perforated tip. Vamp and quarter neatly perforated. Straps fasten on each side with buttons. One-piece leather sole with Baby Louis leather heel and metal plate. Sizes 2 1/2 to 8; wide widths. No. 96J12. Send no money. Pay \$2.98 and postage on arrival. State size.

Women's Classy Stitchdown Oxfords \$1.98 UP



Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of brown or patent leather. Smooth leather insoles. Flexible stitched down oak outsoles. Low rubber heels. Sizes 2 1/2 to 8. Wide widths.

Order brown by No. 96J273. Send no money. Pay only \$1.98 and postage on arrival. Order patent leather by No. 96J274. Pay only \$2.48 and postage on arrival.

Women's Patent Leather, Gunmetal or Brown Calf Finished Oxfords \$1.98



Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2 1/2 to 8, wide widths. Order patent by No. 96J121. Order gunmetal by No. 96J122. Order brown by No. 96J123. Send no money. Pay \$1.98 and postage on arrival.

Be Sure to State Size.

Blucher Work Shoe for Men and Boys \$1.79 UP



Give Size

Brown or Black work shoe of durable leather. Solid leather inner soles. Heavy double soles. Green chrome outsole. Leather heel. Sizes 6 to 12. Wide widths only. Order Brown by No. 96A758. Order Black by No. 96A760. Send no money. Pay \$1.98 and postage on arrival. Order Boys' sizes 1 to 5 1/2 by No. 96A554. Price \$1.98. Order Little Boys' sizes 9 to 13 1/2 by No. 96A555. Price \$1.79.

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Plain or Tipped Toe Style Genuine Vici Kid Shoes For Men \$2.98



An absolute rock-bottom price on men's comfort dress shoes. Have cushion soles and rubber heels. Sizes 6 to 12. Order plain toe model by No. 96A618. Order blucher cut with English toe by No. 96A617. Send no money. Pay \$2.98 and postage for either style. State size.

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Men's French toe dress shoes or oxfords in Brown mahogany calf finished leather. Have medium toes oak soles and rubber heels. Perforated on vamp, tip and eyelet stay. Sensational values. Sizes 6 to 11, wide widths. Order oxford by No. 96A658. Order shoe by No. 96A660. Send no money. Pay \$2.98 and postage on arrival for either style. State size.

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One of the most novel and attractive children's garments ever produced, and sure to be a big favorite for fall and winter. A charming two-piece middy dress, including a navy Balkan middy of all red flannel cotton warp with round collar and cuffs. The front, collar, cuffs and Balkan bottom are embroidered in exquisite contrasting colors. Rope girdle with tassels at waist. Skirt of navy blue serge in clustered plaited style hangs from a white muslin under-waist. Furnished in red blouse and blue skirt combination only. Sizes 7 to 14 years. Order No. 96G8326. Send no money. Pay \$1.98 and postage on arrival. Be sure to state size.



Popular One-Strap One-Buckle Pump, Black Patent or Brown Calf Finish \$1.98



A leading style in all the big cities for fall wear. One-strap, one buckle pump of rich black patent Colt Skin or Brown Calf finished leather. Is well made with perforated sewed tip and medallion toe. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2 1/2 to 8; wide widths. Black patent No. 96J20. Brown Calf finish, No. 96J21. Send no money. Pay \$1.98 and postage on arrival for either leather. State sizes.

Always mention size when ordering.

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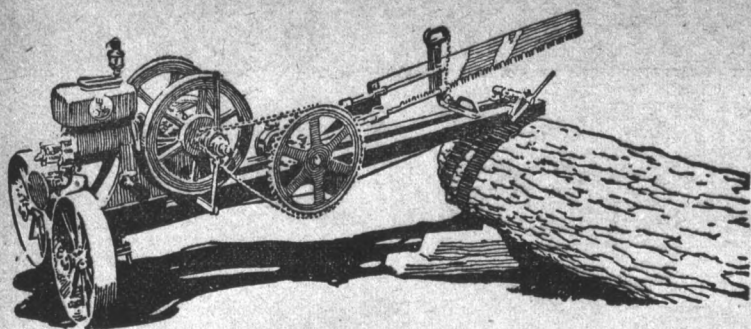
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THE PEACEMAKERS

A SERMON BY REV. DAVID F. WARNER

THE PEACEMAKERS

TEXT: "Blessed are the peacemakers: for they shall be called the children of God." Matthew 5:9.

THESE are days when our hearts are anxious and expectant; when human emotion is tense; and when our concern for world peace is so ardent as to demand our best diplomacy, editorials, sermons, and prayers. But a vicious teaching and a repudiation of human brotherhood goes wickedly on.

Some had hoped that human culture had made war intolerable; but no. It was hoped again that Socialism might provide a congenial means for propagating the "olive branch of peace;" but often, where Socialism is most at home there militarism raises her bloody head highest. Others thought that our peace propaganda, such as conventions, tribunals, and treaties—would avert any impending war. But did it? And why not? And why are they now telling us that the doorsteps of The Hague Peace Palace may yet be drenched in human blood? When are we to hear the cry for a vital Christianity as sounded by our late President and in a recent call from the heart of Woodrow Wilson? Not yet awhile when a foreign statesman of prominence is telling American leaders that Mr. Wilson's ideals are premature and we ought yet to be guided by the doctrine of self-interest and the suggestion of "America First."

But we are still to depend on Christianity to obliterate warfare. Why? Because Christianity stands for loving your neighbor as yourself, and for doing unto him as you would have him do unto you. It stands for justice, not injustice; for humanity, not inhumanity; for peace, not war.

However, we have witnessed, recently, a strange anomaly. Nations that supposedly, are enlightened and Christianized, are in deadly combat, and the Christian's God, rather than being invoked to prevent the strife, is being implored for victory. But is God at variance with himself? Impossible. And this carnal strife has robbed our Christianity of much of its life and vitality. Surely, the imps of darkness must have gloated over this gigantic exhibition of human strife and pain! Then, what is the matter with our Christianity? Just this,—it lacks "peacemakers."

Who is our beatific peacemaker? Not he who has only nature's lovely gift "to pour oil on troubled waters." Not he who is passive and does nothing to provoke resistance. These "do nothings" little know that they are giving the devil more time to mobilize and strengthen his forces. He, however, is the peacemaker of our text who has climbed the flight of the Beatitudes and has taken his redoubtable position high on the exalted table-lands of the Kingdom. Here, unentangled by the things of this world, he is given a true outlook on all its strife, and is in a position to see the way out. His new perspective gives him that unbiased instinct of brotherhood which qualifies him to bring the world a message of peace and good-will. Now, brother, you who have climbed this beatific ascent are Christ's pacific "light of the world" and Paul's "bond-servant" to work out this peace and fraternity. If you are not doing this you are giving the world a stage-play; and this is hypocrisy.

When worked out, what will this peace do? It will help to put the world into right relations with God. That we are at cross-purposes with Christian ideals is the cause of all our strife. God purposes in Christ to bless the world with love and harmony thru us. But we, in our intoxicated zeal for the promotion of our own ends, are out of joint with his divine plan of Christian brotherhood. God was in Christ reconciling the world unto himself, and he is yet as the "mind of Christ" becomes incarnated in men. Otherwise, men are too capricious.

It will give a heavenly atmosphere to church life. And God knows we need more of this fragrant spirit. War is said to be hell. But war, we

know, is selfishness. Then selfishness is hell. But is there an inferno in the church? Have we arrogant selfishness and hypocrisy there? This is a clue, follow it. What, universal peace? Never, as long as we have unfriendly rivalry and strife in and among the churches; and in your heart and mine. Never mind Balaklava, Waterloo, Gettysburg, and the Argonne. Study well the battle-ground of your own heart. There you may win your greatest laurels.

It will neutralize the spirit of literal warfare. "Do you want to know the cause of war,—the cause of the murder in Europe, the cause that will bring war to America if it ever comes? It is capitalism, greed, the dirty hunger for dollars. Take away the capitalist and you will sweep war from the earth. Take it away today and the war in Europe will stop to-morrow. Take it away and the world will have seen the end of barbarism." These were the reported words of Henry Ford a few years ago. But a recent reporter represents Mr. Ford as having had a change of mind. If this be true whence comes this spirit? Out of the essence of self-interest and unholy profit in the instance of war; and out of the poisoned thought and vicious propaganda that the American soldier is our "greatest pacifist." We know better. The verdict of history and the teaching of experience is, that carnal soldiery kills and crumbles nations. But the Kingdom of Heaven is yet at hand, and some day God will show what he can do with nations as he is showing today what he can do with individuals.

Mr. Bryan asks, "Why do not nations as well as individuals apply the law of love brought to us by the Man of Nazareth?" And Mr. Bryan knows. Because many individuals are not applying it. A nation is but an aggregation of individuals politically organized. The writer believes that most individual soldier combatants would fraternize and become brothers if let alone. But other individuals (political rulers) will not let them. So, peace and brotherhood, traced to their deepest and lasting dependence, are only found in the heart of the individual.

The world has never been able to work out the problems of right and wrong nor to keep out of the wrong. In the recent war there has been a colossal and practical acknowledgment of this. Then what an appeal to Christianity! The Christian only has had committed to him the duty and glory of bearing to the world the law of love, the message of justice, fraternity, and peace. And, methinks if Christians had done their duty, that long ere this the night of war might have given way to the bright, new day. Yet, now, the peace movement is stronger than ever before, notwithstanding a pose of "preparedness," a "citizen soldiery," and other "big stick" signs of the times. And let peacemakers keep busy that Christianity may be vindicated for the sake of now and eternity.

What is the reward of peacemaking? We shall be called the "sons of God." No, not by the world. By it we shall be called impractical, and even "degrading" and "silly." But this is only the judgement of man. That does not matter so long as God says we are his sons. To enter the sonship of God, and enjoy eternal harmony and peace, is ours thru becoming a peacemaker in all the areas of life. Blessed are those who enter into the spirit and temper of the Great Peacemaker.

LIKES SERMONS

I note among the many good articles in the Business Farmer the excellent sermons now being published.—J. T. Daniels, Clinton County, Michigan.

THANK YOU!

...We can always rely on your paper to guide us in selling our farm produce and when to sell. Thanking you for the good work of your paper, I remain yours truly, Chas. Arnold, Delta County, Mich.

UNCLE RUBE SPINACH SAYS

MORAL SWASION—AS SHE IS

YOU know, friends, I don't never hardly like to enter into any kind o' argiment. I'd ruther keep out of it 'cause I'm a peaceable minded sort of old cuss 'at don't like to squabble aroun' an' make a fuss—kinda like quietness an' ever'thing but jest the same—while I didn't intend or expect to say much 'bout the lickker bis'ness an' would of kept my jaw shut if preachers of the gospel hadn't took a notion to shoot into the gen'ral mess. "Cut out the Volstead Act" sez one noted Divine. "It's humullatin' an' debasin' men can not have laws to correct their brothers' appetites"—or words to that effect. Give them Moral swasion," says this angel-like minister. "Moral Swasion"—course I don't know jest what he means by it—"is the only way to reach men's souls" (soles might be better). An' then this here feller goes on an' tells how alcohol is a sort of a necessity. Tommyrot and then some—Mr. Senator Couzens notwithstanding the preacher, reformers an' every other class of would-be reformers, have had five hundred years an' more to work the Moral Swasion Act. Five hundred years folks, to make people quit wantin' drinks with 5 per cent alcohol into it. If moral swasion has been worth a darn nobody be hollerin' for 5 per cent stuff. Now after five hundred years of preachin' an' everything that human mind could do to stop the awful curse of liquor.

Take it in any shape, watch the affects of it, in fact, jest see what the stuff'll do to a home an' send me the man that'll say't 5 per cent beer, wine, anything 'at contains alcohol is good for the human system.

Dear, good friends, sometime I may go down to the depths of that region of eternal darkness—none of us know jest where we're goin' to land when we ship from here but this I know—if I do land down in that awful place it will not be 'cause I've advocated 5 per cent beer nor any other drink containin' alcohol.

An' more'n that if I do take a jump down there I ain't goin' to be alone. I'll meet a whole lot of the 5 per-centers, preachers included. An' why should'nt they be there?

To make it a perfect place we've got to have all kinds of folks. 5 per cent preachers'll be jest as good as any to start things goin' 'cause there'll always be enough of others for the preachers to try the moral swasion act on. Allus has been an' allus will be.

Now good folks, jest look'it here for a minuit. If the preachers of this great land of ours believe in moral swasion why don't they try it on bandits, hold-up men, murderers—male an' female—graffers, loan sharks, prize fighters an' anything besides the lickker business.

Five hundred years of moral swasion an' yet folks hanker for alcohol! Now five hundred years is a long time, aint it folks? An' its been more'n five hundred years, too.

Preachers may preach, talkers'll talk an' th world'll go on. But folks, when any 5 per cent drink is sold out on market openly—well then the devil'll laugh.—Cordially
UNCLE RUBE.

TO THE FARMER BOY

Father and son how grand they look.
Planning and working together,
They're farmers too and give to the world
The best of their life's labor.

What would we do in this grand world
of ours,
If the farmers, the ones who feed us,
Would follow the course, the trend of
the times
And hie to the city and leave us.

We bow and kow tow to the Earl and
Duke,
Assumed nobility of the race,
But I'll take off my hat to the farmer
and son
When I meet them face to face.

Then let us wake up to the truths of life,
And place honor where honor is due,
Or the broad shouldered boy who is fol-
lowing the plow
Will not deign to notice you.

What then would become of the lives
that live,
When the strengthening arm is gone,
Then take off your hat in reverence
And keep the farmer boys at home.

L. Baker, a subscriber.



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Transportation is the big problem of today in manufacturing, merchandising and farming.

No matter what you make, grow or stock, it brings no profit until moved to the place of sale.

Modern, progressive farmers, being also business men, now depend on fast economical motor transportation to save time, save products and get the money.

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Prices f. o. b. Flint, Michigan

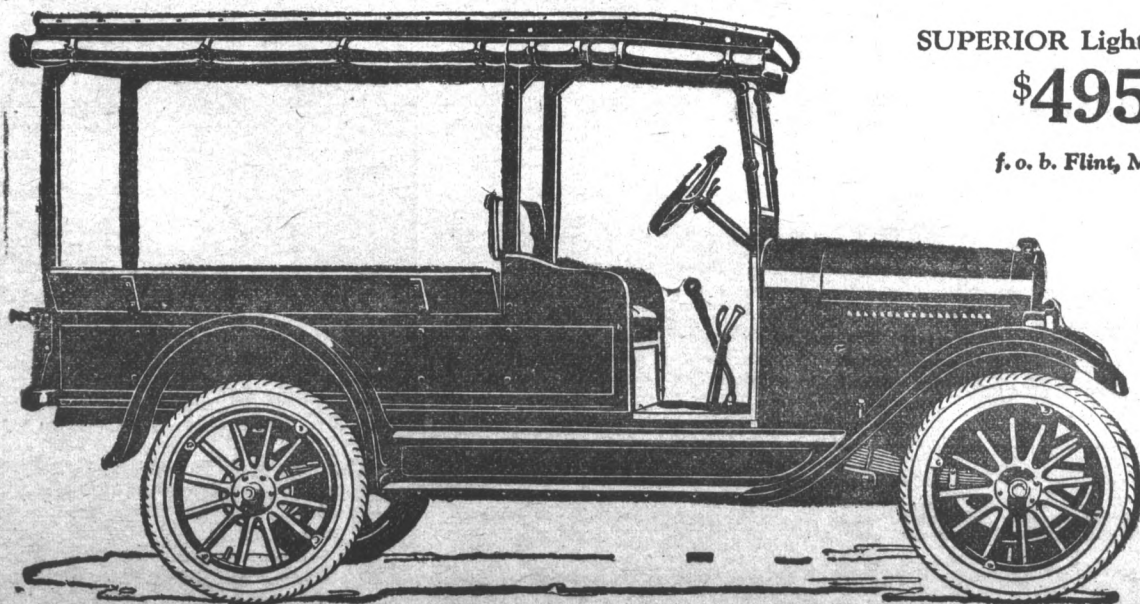
Superior 2-Pass. Roadster	-	\$490	Superior 5-Pass. Sedan	-	\$795
Superior 5-Pass. Touring	-	495	Superior Light Delivery	-	495
Superior 2-Pass. Utility Coupe	-	640	Superior Commercial Chassis	-	395
Utility Express Truck Chassis			\$550		

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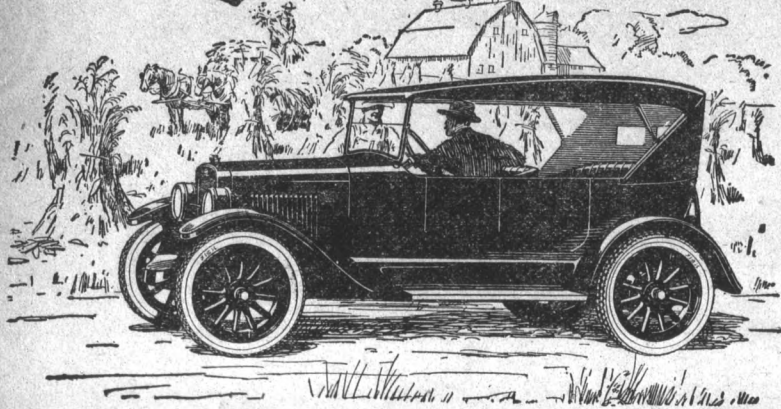
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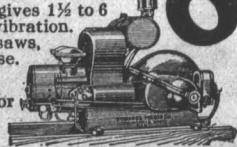


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Michigan has a Bountiful Fruit Crop

FRUIT AND ORCHARD

Edited by FRANK D. WELLS

THE FUTURE FOR THE GRAPE

DURING the past three years the high prices received by grape growers for the fruit has resulted in a large increase in the area devoted to vineyards. Nurserymen have been unable to supply the demand at times. And the end is not yet.

A trip through what is known as the Michigan grape belt, shows that many acres will next spring be added to the already large number planted to vines. In this district, which may be rather roughly located as extending from Grand Rapids to Indiana and from about Kalamazoo to Lake Michigan the grape is rapidly becoming the leading product. The peach which made these counties famous has taken a secondary place. Raspberries are losing in favor compared with the vine. This does not mean that other fruits are being neglected, but the area given to them is not increasing at a ratio to equal the grape.

There are reasons for this besides the unprecedented prices for grapes. Diseases among raspberries have been causing considerable loss, besides no little anxiety and uncertainty regarding the future. Will it be possible to control these troubles or will the growers meet the fate of those in Ohio and New York, where many have given up raising this fruit? The labor problem, too, is serious. It is difficult to get pickers enough during the hot days of June and July. Then there is the transportation and the marketing. These have been discouraging factors in berry growing, till now the comment heard everywhere is that "There's no money in berries!"

Grapes offer some advantages over raspberries. More time is required to get a vineyard into bearing, but it continues profitable much longer. Work among the vines is less disagreeable than among the brambles. The harvest is in the cool days of autumn. The wages are more attractive since skilled labor is at a premium. Grapes are not as perishable as strawberries and raspberries, so can be handled and sold at smaller loss. All of which appeals strongly to the producer.

To be sure the grape has its enemies. There are insects and diseases. But those known to the grape belt are kept fairly under control. There are others that may some day come, among them the much dreaded phylloxera, but they are still in the future.

There is a revival of interest in the peach, but the diseases and the winters are discouraging factors. The land suitable for this tree is limited and much less in area than that which can profitably be used for the grape. So the vineyard is encroaching upon the orchard.

East of the grape belt the number and size of vineyards have increased somewhat, but have probably not kept pace with the orchards. Nevertheless, a large addition to the yield of this fruit may be expected in a year or two, though at that it will be insignificant as compared to West Michigan.

Now what about the future?

That is the question which the prospective vine grower is asking. Is there too much planting? Will there soon be an overproduction? An important point, deserving careful attention.

Unless some potent enemy arises, some insect or disease, there will be a larger increase in production, and that within two or three years. Will the demand be large enough for the supply?

First of all let it be asserted that Michigan grapes are as good as any in America and better than most. (The California man will not agree to this, but then he will not admit that his state ever had an earthquake.) The market for Michigan grapes is extending. A letter received this summer by a fruit buyer in West Michigan from a broker in Scranton, Pa., may be taken as illustration. Formerly it was stated the market there wanted California and New York grapes, but now it was not satisfied with anything except Michigan fruit. So he wanted to be supplied with it. This is only one. How many more such markets there may be east of the Rockies no one knows. But the country should be full of them.

As a wine grape Michigan fruit is claimed to be better than that from California. However objectionable the use of wine may be, the fact remains that thousands of tons of grapes will every year go to the press. Will the product cause more harm than the poison of pre-war days?

The use of pure, unfermented grape juice is increasing. There seems to be no reason why it should soon decrease. Juice factories are numerous in the grape belt, and there is also the home product. In thousands of families it is a part of the regular canning, as well as the regular plums or peaches.

As a dessert fruit the grape has not begun to be appreciated. Where is there a better table grape than the Michigan grape, grown anywhere between Port Huron and Muskegon?

There are enough who want grapes to eat up all that Michigan will grow for years to come. If the fruit becomes too cheap for profit it will be because producer and consumer are not brought near enough together. Here is the real problem. Isn't it the real problem with all the fruits? Not overproduction, but underconsumption. O, well, that is the hardest nut of all to crack.

WILL SPRAY TREE NEXT TIME

IN your Aug. 4th paper, page 18, column 4, is a little article, "Blight in Apple Trees." Well, I had a tree that acted that way and I nearly cut it to nothing, then one day I discovered some bugs and I started to pick them off and then the blight quit spreading. If I have any more trees that blight or bug as I call it I will spray instead of prune.—E. B. S., Woodville, Mich.

The constable of Milk Corners received by post six Rogues' Gallery photographs, taken in different positions, of an old offender wanted by the police of the big city. Two weeks later he sent this message to the city chief of police:

"Got five of the men. Am going after the sixth tonight. Hold reward."

What the Neighbors Say

THAT GAS TAX AGAIN

THE M. B. F. for August 4th contained a letter by Mr. Ralph H. Jones under the heading "Gas Tax Unjust," also you had an editorial on the same subject headed "17 States Have Gas Tax." Now I do not see how Mr. Jones as a farmer can take the stand that he does. His test of machines that use gasoline indicates that he is the operator of a good fair sized farm, provided that he has not other business that is responsible for the machines.

The gas tax law that the Governor vetoed may not have been a good one in its make-up but that does not seem to be the point with Mr. Jones for he clearly indicates that he is against the gas tax in principle.

Means of communication and means of transportation have had a very large part in the progress of civilization. Most changes were slow in motion and no great changes took place in the life of one generation of men. But the automobile has come up in fifteen years from being a rich man's plaything to a universal means of transport.

Canals and railroads at the time of their building received much help from public sources. But their operation expenses have been paid as well as the profits from the receipts of the office. The operating expense includes the up-keep and replacements on tracks, road beds, canalways, locks and so forth.

As it stands today automobile traffic is heavily subsidized as such. Certainly Mr. Jones will not dispute the statement that the automobile should pay its way and not live off of other business. Probably there is now not a single state in the union in which there is not now some long distance bus lines operating in many cases in competition with the railroads. An advertisement in a late date popular weekly says in part, "Three billion people traveled one billion miles last year in fifty thousand motor busses. Though still an infant, bus transportation already boasts an invested capital of one hundred million dollars." That hundred million dollars does not include one dollar for cost of right of way or road bed or tracks. True license fees are a feeble attempt to tax according to probable wear upon the roads.

Mr. Editor, your list of states having gas tax included seventeen, among them Florida, Idaho, Oregon and South Carolina have a three cent tax. A few days ago I saw in a carefully prepared article the statement that the estimated income from auto license taxes and gas taxes for 1923 would be about half the estimated road expenditures for this year. Our road laws enacted up until the last few years have nearly all been clearly based on the theory that the public roads were a community necessity and mostly an asset or liability, depending upon their quality. Public roads were a social institution built and kept up by taxes levied more or less pro rate according to property values and nearness to the improvement. Some roads were built and maintained at state expense wholly or in part as a social benefit to the state as a state.

Present road building programs in many cases bear but slight relation to the primary needs of the inhabitants of the section through which the road runs. People always have, and especially so since the war, been more interested in trying to push the tax off onto the other fellow, rather than to have any just tax system devised and put into working order. The farmer has largely by his own help had the value of farm land increased out of all proportion to its earning power. Just as truly "watered" as the stock value of the railroads and many industrials. But the difference is that the other fellow's "water" helps him making rates for service, that is increasing the earnings while the only net result of the water in farm values is to increase the farmers' tax. For a while it sort of fed his vanity and increased the size of his air castles and enhanced their colors, but the cold facts of the "morning after" show but little beyond increased

taxes, while the market situation is entirely beyond his control.

The farmer has sweat his old shirt till the color is most gone but he has to let go of some of that rare product which we all possess more or less of but are great misers for sometimes called mental sweat. You can always tell the community that sweats very much mentally. They have co-operative enterprises that are supported. A little politics will help. But when it gains too large a place it gets worthless.—H. C. Matheson, Box 597, West Palm Beach, Florida.

THE FARMERS ARE GETTING READY

DEAR EDITOR—Sometimes it takes considerable preparation in getting started. This preparation work is now pretty well under way. We have had several years in observing corporate greed in the political saddle, using its wealth, lobbies and kept press, to secure legislation favorable to their interests, but correspondingly detrimental to the people in general and the farmers in particular.

The Esch-Cummins law, the Fordney-McCumber law and other measures were passed at the request of exploiters, and for their benefit.

They tell us that our government cannot help the farmers in a legislative way. The exploiters of the people have got too much the upper hand for that. The sad affair of the Federal Reserve Board is still fresh in our mind, and the millions that the privileged class made through the deflation of the farmer class will not soon be forgotten.

The law of supply and demand is being more and more set aside through the constantly increasing power of monopoly. Illustrations of this we have in the manipulations of the markets by the bond and oil companies, the packers, the steel trust and other concerns of the same class.

Thus we have to buy in a market that is high and sell in a market that is low. Monopolies have been built up by preferential tariffs, concessions and other special privileges to such an extent that they can not tell us at what prices we must buy and sell. No government can change such a situation as long as it is controlled by monopoly. The child cannot dictate to the father.

We must have a government responsive to the people and not only to a privileged few. The farmers, the laborers and the people in general are entitled to a hearing in the halls of Congress just as well as the moneyed class.

Sometimes we have been sleeping when important public questions were decided, but as a matter of self-preservation we must hereafter keep awake and go at the matter in dead earnest. We are going to stir as a class in a movement which is right. We can get along without flattery, but we cannot get along without justice. Those who so long have been interfering with our welfare, better show forth fruits, meet for repentance before it is too late.

Although special interests yet control the daily press with but a few exceptions, it no longer holds true that the majority of the people are reactionaries. On the other hand the rank and file of the voters are now fairly well informed as to the leading issues of the day.—A. J. Raftshol, Leelanau County, Mich.

ROAD WORK

DEAR EDITOR—I would like to know how the people in general feel about the way the county road commissioners expend the county money. Everyone knows the men they hire to work on the road don't do one day's work in four days, yet they draw their five and one-half dollars or more a day and laugh at how much time they can get in, doing little and still draw full pay. I don't doubt but they do as much for this money as the commissioners, but isn't their some way of making them all earn at least half what they get? One man with a tractor and truck would do more work in one day than the man with a team does in a week.—D. T., Williamston.

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter, bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

USING PRISON LABOR TO BUILD ROADS

IT behooves every thinking reader to digest the facts and figures given in the article on the employment of convict labor on the state roads of Michigan in this issue.

It may be that a solution has to this dilemma been reached of such far reaching effect that the road problem in Michigan will eventually be solved by it.

For countless years prisoners in our state penal institutions have been employed on labor, most of which, up to recent years, was in competition with the labor employed on the outside or was of such a nature that it taught the prisoner little and was thus of little value to anyone, except the profiteering contractor who played politics to get it.

Good roads are of greater general benefit to all people, than any other single expense of government, unless it be that of education. The employment therefor of the thousands of prisoners who would be confined at less profitable work, means the release of common labor to the farms and other channels where it is much more needed. It means that without taxing unmercifully the property of the state, a paved road system may be maintained which will link every corner of Michigan.

If the plan works as successfully as it apparently has started out in Michigan it will doubtless be extended into other states and may mean a solution to the whole national problem of good roads and their maintenance.

It is, in any event, an interesting experiment and Governor Groesbeck and the state highway commissioner, Frank Rogers, are to be congratulated on the deep interest they have taken in the subject and the zest which they have shown in making it a success against the usual number of obstacles and discouragements which have presented themselves in making the theory work out on a practical basis.

Only a Chinaman does not believe in good roads! Good roads mean increased property value, better education, a means of keeping the young folks in the rural communities, and uniting all corners of the commonwealth into one.

Particularly will the farmers of the state of Michigan watch this plan because they have been most interested in knowing the solution of this problem which means so much to them, and which, while beneficial from the standpoint of bringing them nearer to market and increasing their enjoyment of the better things of life, still had arrived at a point where they must seriously consider the cost.

As we recall it, the Appian Way was built with prison labor, but that can hardly be held against it inasmuch as it is still standing, some 5000 years later!

THEY WHO ARE THE GOVERNMENT

WE get accustomed to thinking of the Government as something at Washington or Lansing, which taxes us unmercifully, gives us too much protection, watches too closely our morality and sits generally as a parent or a policeman, in our daily lives.

President Coolidge, when he was officially notified, at Northampton, Mass., of his nomination as the candidate of his party for the office of Vice President, used the following words in closing his speech of acceptance, July 27, 1920:

"We have been making counsel together concerning the welfare of America. We have spent much time discussing the affairs of government yet most of the great concourse of people around me hold no public office, expect to hold no public

office. Still in solemn truth they are the government, they are America. We shall search in vain in legislative halls, executive mansions, and the chambers of the judiciary for the greatness or the government of our country. We shall behold there but a reflection, not a reality; successful in proportion to its accuracy. In a free republic a great government is the product of a great people. They will look to themselves rather than government for success. The destiny, the greatness of America lies around the hearthstone. If thrift and industry are taught there, and the example of self sacrifice oft appears, if honor abide there, and high class ideals, if there the building of fortune be subordinate to the building of character, America will live in security, rejoicing in an abundant prosperity and good government at home, and in peace, confidence and respect abroad. If these virtues be absent there is no power that can supply these blessings. Look well then to the hearthstone, therein all hope for America lies."

Mr. Coolidge was visualizing humble homes, but filled with simple faith and love and respect and honor—homes representing the common people of this great country; the people who are the government.

"At night returning, every labor sped,
He sits him down, the monarch of a shed;
Smiles by his cheerful fire, and round surveys
His children's looks, that brighten at the blaze;
While his loved partner, boastful of her hoard,
Displays her cleanly platter on the board."

—Goldsmith.

COMMON FOLKS

LINCOLN once said, "God must have loved the common folks,—he made so many of them."

Sometimes we get to thinking that the rich in worldly goods are those who receive the greater share of the world's blessings, and yet very often when we visit the home of a neighbor we see how little he has to envy the city man of wealth.

Recently we visited a farm which borders the shores of Lake Huron. It is only a small farm of forty acres, and the family who operate it are anything but rich in the sense of gold and silver, but in those things which go to make for contentment and happiness, Henry Ford himself might envy them their possessions!

From their front porch one can see the green water of Lake Huron sparkling in the morning sun, and at night they are lulled to sleep by the wash of its waves along the graveled shore.

We sat down to their table heaped with good things to eat and watched them enjoy it because it was seasoned with a sauce for which John D. Rockefeller would gladly pay them a thousand dollars a bottle if he could pour it over the food that is served him on silver plates. The name of that sauce is "Hunger sauce" and it cannot be obtained in the most expensive food shops, but our friends enjoy it at every meal and yet their supply of it never seems to diminish.

Emerson once wrote an essay on "Compensation." When all is said and done, we sometimes wonder that men will struggle and strive as they do to surpass each other when the God of compensation must sit back and smile at their fallacy.

Have you ever envied Henry Ford? You shouldn't. Because I know he must often envy the things you possess!

A FRIEND IN NEED

PROSPERITY and peace may bring arrogance and the other products of greed which lead to embroilments and finally to war. The sight of even an enemy in great distress will, in contrast, bring forth the best in human nature and those characteristics which we commonly express as "Christian."

Japan, which the jingoist would have us believe is our mortal enemy, waiting only for the opportunity to jump at our throat, was within the past two weeks visited by what will undoubtedly prove the greatest catastrophe in our time. The greatest cities in Japan laid low by an earthquake and how many thousands of lives were swept into the chasms or burned in the fallen cities is yet to be told. Navigators report that a whole island has sunk into the sea and at another point a volcanic island has risen from it. Nature is proving what puny things men and the things of men are after all.

The news of the catastrophe to Japan had no more than reached our shores before the American Red Cross and similar agencies were sending relief ships and contributions were being accepted in every city in the United States for the suffering Japanese.

Misery thus brings sympathy and sympathy is after all the greatest pacifier in the world!

We, of this generation, witnessed a human earthquake in Europe, the awfulness of which is not yet wiped away and rumblings of its possible recurrence still haunt us. Better would it have been if some nations could have been swept by the natural catastrophe which visited

Japan. They would have lost no more property, probably no more lives and they would have received the sympathy of the world which would have brought peace and contentment.

And after all what is there in the world for either men or nations than peace and contentment, which means happiness,—the supreme goal of all!

HENRY FORD IS HUMAN

LAST year, at the Michigan State Fair, Mr. Ford in his splendid exhibit had a full size locomotive which must have recalled to him a keen desire of his boyhood, for what boy has not wished at some time in his life above all other things to pull the throttle of a railway locomotive?

This year, in the Ford exhibit, Mr. Ford personally supervised the installation of a standard locomotive, gay in polished Japan and nickel. It was mounted on roller bearings and from early morning until the last gate was closed at night, a never-ending stream of boys climbed the steps of their heart's desire and pulled the throttle which set the wheels of the locomotive spinning. Some even more brazen than the others who knew the inside workings of the locomotive cab, reached up and pulled the whistle, thus scaring the daylight out of envious sisters who were looking on!

We do not give Mr. Ford credit for being a super-man, but we do believe that few men in history who arose to such power as he possesses ever retained their touch with common people and common emotions.

Henry Ford is a grandfather but he remembers the desires of a boy. Perhaps that accounts for a good many of the broader principles of humanity which he has introduced into the everyday conduct of his business.

THE 1923 STATE FAIR

ALTHOUGH the figures have not yet been officially announced it is expected that the 1923 Fair at Detroit surpassed in attendance any former exposition and will thus maintain its position of having the largest attendance of any fair held in the United States.

Naturally the bulk of the attendance at the Michigan State Fair is from Detroit and its environs, which means that three-fourths of the people in attendance are not country folks, but it is probably a good thing that the city people get an idea of how their food is produced and why it costs them at least part of what it does when they go to the store to buy it.

The lottery wheels were conspicuous by their absence this year and we heard no complaints of the shows on the midway. They looked rather hopeless and helpless to us, like a rattlesnake without its fangs, or a polecat without its odor. What is the midway after all without an Egyptian dance, a wild man from Borneo, or a Scot Cardiff giant? Barnum was right when he said that the American public liked to be humbugged. So this year's State Fair must have sent a lot of folks away disappointed.

There is a continued improvement in every department of the Stat Fair, and this means something when the high standard of improvement year by year is contemplated. The State Fair as a state owned property now invests its profits entirely in its improvement and has a fine line of permanent buildings that undoubtedly will compose the finest group of state fair buildings in the world if Secretary Dickinson, the man who is largely responsible for it, lives long enough.

Taken all in all, you folks who didn't come, missed something and perhaps you had better be making plans now for next year!

THE TAX PROBLEM

WE believe the greatest problem before the American people today is the problem of taxation, says the Shenandoah, Iowa, Sentinel Post.

Two sane methods of relief are open. First discourage new government fads and fancies which add unnecessary laws to our statute books with increased numbers of employees and more government overhead. Officialism spreads like the green bay tree if left to its own course, so trim it down to essentials.

Second, see that all property pays taxes equally, which it does not do at present. Under our present existing laws any person is at liberty to convert his property into non-taxable bonds and thus escape all forms of taxation.

The necessity (if it ever existed) for tax exempt bond is past and the day is here when no such loophole as this should remain to enable those most able to pay to escape taxation.

Every dollar that tax-exempt bonds absorb cuts two-ways—it doubles the tax on other people and removes a dollar from the industries which need it for expansion and development.

PUBLISHER'S DESK

D. F. BUSH, OF MINNEAPOLIS

I AM writing to ask information in regards to the honesty of the Western Sales Agency, Phoenix Bld., Minneapolis, Minn., managed by D. F. Bush. They ask a \$7.50 fee with the description of your property and a per cent when the property is sold. Will you please inform me if they are fakers or a reliable company?—An Old Subscriber, Leveering, Mich.

—We will not accept the advertising of D. F. Bush in the Business Farmer, altho it has been offered to us many times and we see it appearing in several Michigan papers. He may be honest, but he works the old scheme of advertising under the caption "Wanted to buy a Farm," when as a matter of fact he wants to sell you, \$7.50 worth of possibilities. He gets his cash in advance, but you may be warming your hands by the stove a good many winters before you sell your farm. If this type of so-called "farm agencies" were as successful in selling farms as their advertising matter leads you to believe, they would make Henry Ford look like a piker and they would not need to ask for the \$7.50 in advance, their commissions would be plenty and then some.

Lets see—ten times \$7.50 is \$75, ten times \$75 is \$750, ten times \$750 is \$7500 and yet it ought not to be so hard to find a thousand farms for sale in the United States, had it?

AN INSURANCE SCHEME EXPOSED

DEAR Mr. Slocum.—We read in the Publisher's Desk in The Business Farmer some of the shrewd practices of unscrupulous men to defraud people and get their hard-earned money away from them. It is unnecessary to say that the farmer has hard enough sledding without being taken in by the many schemes we read about in The Business Farmer. I for one am thankful that The Business Farmer is good enough, and fearless enough to expose and publish these evil practices, for the farmers of Michigan to read. If every farmer or person who has been "bit" or has been the victim of unfair dealings, would write The Business Farmer, telling of the scheme worked upon him, perhaps others would read of it and not get taken in by the same trick.

Here is one that was worked on myself and many other farmers of this section, by an insurance agent. He meets the farmer, introduces himself as the authorized agent of the — Insurance Company of —, telling the farmer of the great advantages and saving that his company has over other companies. After a long and windy argument and most convincing talk, he gets the poor farmer whom he wishes to do something for (?), to sign an application for his insurance policy. The farmer sees no bylaws, not one in a hundred ever reads them, and he is influenced and led by the agent whom he has confidence in, that he is telling him the true facts in regard to his insurance.

This agent who wrote me up, as well as many others in this territory informed us that if we took out a five-year policy, paying for it in advance that that would be all we would be required to pay for five years, that would be absolutely all we would have to pay, the insurance costing us a good round sum. In just a little over two years, we were notified of another assessment nearly as large as the original five-year payment. We interviewed some insurance men, wrote the company, also the Commissioner of Insurance, and they informed us that the assessment must be paid. "Didn't you read your bylaws?" Why no, never saw them till the application was sent in and the policy sent to me, then we never read them. Who does?

Can The Business Farmer give its readers any rule to go by so that they won't get "bit"? I had some correspondence with Mr. McRae, with whom we have made our acquaintance thru the good old Business Farmer. Wishing to sell my farm, I answered his ad but did not

remit the \$10 listing fee. It pays to read the Business Farmer. Please find enclosed one dollar to apply on my subscription.—H. E. Root, Van Buren County.

OLIVER OIL-GAS BURNER

DO you or any of your readers know anything about the Oliver Oil-Gas Burner, manufactured by The Oliver Oil-Gas Burner & Machine Co., 21st & Pine St., St. Louis, Mo.? They have a burner which you put either in a cook stove, heating stove or furnace using coal oil. Their advertising matter surely recommends them but before buying one I should like to know what others have found out about them.

Another thing I wonder if you could find out for me is this: In 1902 we bought of the Detroit Engineering Co. a sewing machine called "The Matron." With it came a repair list and guarantee for five years, but no address of maker anywhere. The machine is in fine condition yet but I cannot just find the right needles to fit it and nowhere can I find "The Matron" machine listed.

—We have had several inquiries lately regarding oil burners for stoves and furnaces. Our readers ought to form a pool and give others the benefit of their experience. I will gladly reprint them on this page and will use neither name nor address.

The Detroit Engineering Company is not listed in the Detroit telephone directory so we have no way of finding out where you can buy parts for "The Matron."

THE OLD CONTEST WINNER SCHEME

I AM enclosing a letter which I received from the Radio Message and by the reading of it I am at a loss to know the meaning of it, as I have entered no contest to my knowledge that is connected with the Radio Message, so think it a "fake" way to get subscriptions to the Radio Message. If it is all right, and I have won as a contestant would like the benefit of the radio set so I am asking your advice on the matter as I have but 10 days to send the remittance of \$3.00 for the Radio Message."

Here is the letter our reader received, I am giving space to it, because it is a scheme with which I would like to make the readers of my desk familiar:

Dear Friend:

This must be your "Lucky Day" for we have taken over the names of Prize Contestants and you get the offer of a radio set.

The Radio Set will be sent you upon receipt of the enclosed memorandum signed by you with your present address and your yearly subscription to the Radio Message. No further obligation on your part.

It will be necessary for you to claim the Radio Set within ten days from the time you receive this final notification or you will have no further claim on same. If you are not satisfied we will return the remittance in full.

Congratulations you upon the pleasures you will enjoy from "Listening in" every day and evening to the World's Greatest Music, Bands, Orchestras, Songs, Lectures, Plays and Entertainments on your own Radio, we remain Yours very truly, The Radio Message.

—Of course, it is just a catch-penny scheme. Our reader was in no contest or if she was, the prize was to have cost her nothing. The last time we heard of this scheme it was being worked up in Montreal, Canada, and that time it was for a beautiful set of silverware for which the victim was asked to send 99 cents, simply to pay the postage and packing on the wonderful prize they had won. The U. S. post-office authorities issued a fraud order which stopped some of the mail at the border, but thousands of dollars poured into the office, even after the Canadian inspectors had closed it up and the schemer had flown to parts unknown with his ill-gotten gains.

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Experiments in Indiana by Purdue University in ten counties resulted in an increase of 11.6 bushels of wheat per acre, showing a profit of nearly 200 per cent. on the money invested in fertilizer. Fertilizer differs like seed potatoes differ. Insist upon Royster's to get the utmost satisfaction. F. S. Royster Guano Company, Toledo, Ohio.

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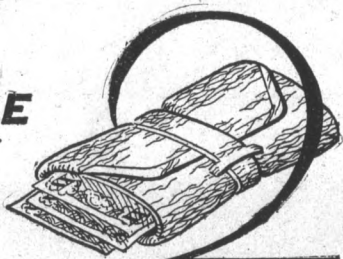
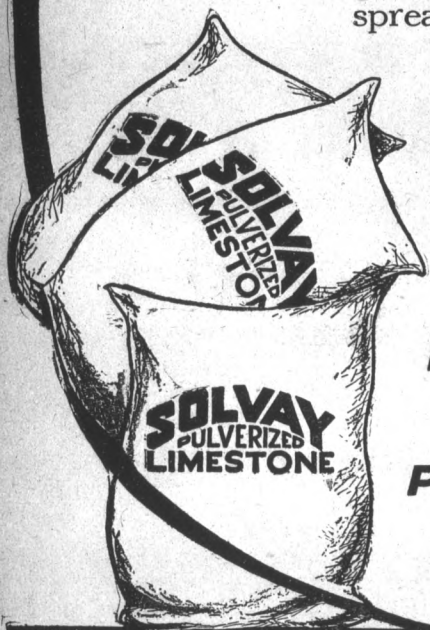
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MOON FOX FARM, BRUNSWICK, MICH.

The Hunted Woman

By James Oliver Curwood

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

Copyright by James Oliver Curwood

(Continued from August 18th)

In his eagerness Aldous was again trying to sit up when Joanne appeared in the doorway. With a little cry she darted to him, forced him gently back, and brushed old Donald off the edge of the bunk.

"Go out and watch the broth, Donald," she commanded firmly. Then she said to Aldous, stroking back his hair, "I forbade you to talk. John, dear, aren't you going to mind me?"

"Did Quade get me with the knife?" he asked.

"No, no."

"Am I shot?"

"No, dear."

"Any bones broken?"

"Donald says not."

"Then please give me my pipe, Joanne—and let me get up. Why do you want me to lie here when I'm strong like an ox, as Donald says?"

Joanne laughed happily.

"You are getting better every minute," she cried joyously. "But you were terribly beaten by the rocks, John. If you will wait until you have the broth I will let you sit up."

A few minutes later, when he had swallowed his broth, Joanne kept her promise. Only then did he realize that there was not a bone or bruise in his body that did not have its own particular ache. He grinned when Joanne and Donald bolstered him up with blankets at his back. But he was happy. Twilight was coming swiftly, and as Joanne gave the final pats and turns to the blankets and pillows, MacDonald was lighting half a dozen candles placed around the room.

"Any watch to-night, Donald?" asked Aldous.

"No, Johnny, there ain't no watch to-night," replied the old mountaineer.

He came and seated himself on a bench with Joanne. For half an hour after that Aldous listened to a recital of the strange things that had happened—how poor marksmanship had saved MacDonald on the mountainside, and how at last the duel had ended with the old hunter killing those who had come to slay him. When they came to speak to DeBar, Joanne leaned nearer to Aldous.

"It is wonderful what love will sometimes do," she spoke softly. "In the last few hours Marie has bared her soul to me, John. What she has been she has not tried to hide from me, nor even from the man she loves. She was one of Mortimer FitzHugh's tools. DeBar saw her and loved her, and she sold herself to him in exchange for the secret of the gold. When they came into the North the wonderful thing happened. She loved DeBar—not in the way of her kind, but as a woman in whom had been born a new heart and a new soul and a new joy. She defied FitzHugh; she told DeBar how she had tricked him.

"This morning FitzHugh attempted his old familiarity with her, and DeBar struck him down. The act gave them excuse for what they had planned to do. Before her eyes Marie thought they had killed the man she loved. She flung herself on his breast, and she said she could not feel his heart beat, and his blood flowed warm against her hands and face. Both she and DeBar had determined to warn us if they could. Only a few minutes before DeBar was stabbed he left off his rifle—an accident, he said. But it was not an accident. It was the shot Donald heard in the cavern. It saved us, John! And Marie, waiting her opportunity, fled to us in the plain. DeBar was not killed. He says my screams brought him back to life. He came out—and killed Quade with his knife. Then he fell at our feet. A few minutes later Donald came. DeBar is in another cabin. He is not fatally hurt, and Marie is happy."

She was stroking his hand when she finished. The curious rumbling came softly in MacDonald's beard and his eyes were bright with a whimsical humour.

"I pretty near bored a hole through poor Joe when I come up," he chuckled. "But you bet I hugged him when I found what he'd done, Johnny! Joe says their camp was just over the range from us that night FitzHugh looked us up, an' Joanne thought she'd been dreamin'. He didn't have any help, but his intention was to finish us alone—murder us asleep—when Joanne cried out. Joe says it was just a devil's freak that took 'im to the top of the mountain alone that night. He

saw our fire an' came down to investigate."

A low voice was calling outside the door. It was Marie. As Joanne went to her a quick gleam came into old Donald's eyes. He looked behind him cautiously to see that she had disappeared, then he bent over Aldous, and whispered hoarsely:

"Johnny, I had a most curious word with Rann—or FitzHugh—before he died! He wasn't dead when I went to him. But he knew he was dyin'; an' Johnny, he was smilin' an' cool to the end. I wanted to ask 'im a question, Johnny. I was dead curious to know why the grave were empty! But he asked for Joanne, an' I couldn't break in on his last breath. I brought her. The first thing he asked her was how the people took it when they found out he'd poisoned his father! When Joanne told him no one had ever thought he'd killed his father, FitzHugh sat leanin' against the saddles for a minute so white an' still I thought he'd died with his eyes open. Then it came out Johnny. He was smilin' as he told it. He killed his father with poison to get his money. Later he came to America. He didn't have time to tell us how he come to think they'd discovered his crime. He was dyin' as he talked. It came out slobberingly, Johnny. He thought they'd found 'im out. He changed his name an' sent out the report that Mortimer FitzHugh had died in the mount'ins. But Johnny, he died afore I could ask him about the grave!"

There was a final note of disappointment in old Donald's voice that was almost pathetic.

"It was such a curious grave," he said, "an' the clothes were laid out so prim an' nice."

Aldous laid his hand on MacDonald's.

"It's easy, Mac," he said, and he wanted to laugh at the disappointment that was still in the other's face. "Don't you see? He never expected any one to dig into the grave. And he put the clothes and the watch and the ring in there to get rid of them. They might have revealed his identity. Why, Donald!"

Joanne was coming to them again. She laid a cool hand on his forehead and held up a warning finger to MacDonald.

"Hush!" she said gently. "Your head is very hot, dear, and there must be no more talking. You must lie down and sleep. Tell John good-night, Donald!"

Like a boy MacDonald did as she had told him, and disappeared through the cabin door. Joanne levelled the pillows and lowered John's head.

"I can't sleep, Joanne," he protested.

"I will sit here close at your side and stroke your face and hair," she said gently.

"And you will talk to me?"

"No, I must not talk. But, John—"

"Yes, dear."

"If you will promise to be very, very quiet, and let me be very quiet—"

"Yes."

"I will make you a pillow of my hair."

"I—will be quiet," he whispered.

She unbound her hair, and leaned over so that it fell in a flood on his pillow. With a sigh of contentment he buried his face in the rich, sweet masses of it. Gently, like the cooling breeze that had come to him in the hours of darkness, her hand caressed him. He closed his eyes; he drank in the intoxicating perfume of her tresses; and after a little he slept.

For many hours Joanne sat at his bedside, sleepless, and rejoicing.

When Aldous awoke it was dawn in the cabin. Joanne was gone. For a few minutes he continued to lie with his face toward the window. He knew that he had slept a long time, and that the day was breaking. Slowly he raised himself. The terrible ache in his body was gone; he was still lame, but no longer helpless. He drew himself cautiously to the edge of the bunk and sat there for a time, testing himself before he got up. He was delighted at the result of the experiments. He rose to his feet. His clothes were hanging against the wall, and he dressed himself. Then he opened the door and walked out into the morning, limping a little as he went. MacDonald was up. Joanne's tepee was close to the cabin. The two men greeted each other quietly, and they talked in low voices, but Joanne heard them, and a few minutes later she ran out with her hair streaming





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about her and went straight into the arms of John Aldous.

This was the beginning of the three wonderful days that yet remained for Joanne and John Aldous in Donald MacDonald's little valley of gold and sunshine and blue skies. They were strange and beautiful days, filled with a great peace and a great happiness, and in them wonderful changes were at work. On the second day Joanne and Marie rode alone to the cavern where Jane lay, and when they returned in the golden sun of the afternoon they were leading their horses, and walking hand in hand. And when they came down to where DeBar and Aldous and Donald MacDonald were testing the richness of the black sand along the stream there was a light in Marie's eyes and a reliance in Joanne's face which told again that world-old story of a Mary Magdalene and the dawn of another Day. And now, Aldous thought, Marie had become beautiful; and Joanne laughed softly and happily that night while Marie and DeBar talked for a long time alone out under the stars, and came back at last hand in hand, like two children. Before they went to bed Marie whispered something to Joanne, and a little later Joanne whispered it to Aldous.

"They want to know if they can be married with us, John," she said. "That is, if you haven't grown tired of trying to marry me, dear," she added with a happy laugh. "Have you?"

His answer satisfied her. And when she told a small part of it to Marie, the other woman's dark eyes grew as soft as the night, and she whispered the words to Joe.

The third and last day was the most beautiful of all. Joe's knife wound was not bad. He had suffered most from a blow on the head. Both he and Aldous were in condition to travel, and plans were made to begin the homeward journey on the fourth morning. MacDonald had unearthed another dozen sacks of the hidden gold, and he explained to Aldous what must be done to secure legal possession of the little valley. His manner of doing this was unnatural and strained. His words came haltingly. There was unhappiness in his eyes. It was in his voice. It was in the odd droop of his shoulders. And finally, when they were alone, he said to Aldous, with almost a sob in his voice:

"Johnny—Johnny, if on'y the gold were not here!"

He turned his eyes to the mountain, and Aldous took one of his big gnarled hands in both his own.

"Say it, Mac," he said gently. "I guess I know what it is."

"It ain't fair to you, Johnny," said old Donald, still with his eyes on the mountains. "It isn't fair to you. But when you take out the claims down there it'll start a rush. You know what it means, Johnny. There'll be a thousand men up here; an' mebbe you can't understand—but there's the cavern an' Jane an' the little cabin here; an' it seems like desecratin' her."

His voice choked, and as Aldous gripped the big hand harder in his own he laughed.

"It would Mac," he said. "I've been watching you while we made the plans. These cabins and the gold have been here for more than forty years without discovery. Donald—and they won't be discovered again so long as Joe DeBar and John Aldous and Donald MacDonald have a word to say about it. We'll take no claims, Mac. The valley isn't ours. It's Jane's valley and yours!"

Joanne, coming up just then, wondered what the two men had been saying that they stood as they did, with hands clasped. Aldous told her. And then old Donald confessed to them what was in his mind, and what he had kept from them. At last he had found his home, and he was not going to leave it again. He was going to stay with Jane. He was going to bring her from the cavern and bury her near the cabin, and he pointed out the spot, covered with wild hyacinths and asters, where she used to sit on the edge of the stream and watch him while he worked for gold. And they could return each year and dig for gold, and he would dig for gold while they were away, and they could have it all. All that he wanted was enough to eat, and Jane, and the little valley. And Joanne turned from him as he talked, her face streaming with tears, and in John's throat was a great lump, and he looked away from MacDonald to the mountains.

So it came to pass that on the fourth morning, when they went into the south, they stopped on the last knoll that shut out the little valley from the larger valley, and looked back. And Donald MacDonald stood alone in front of the cabin waving them good-bye.

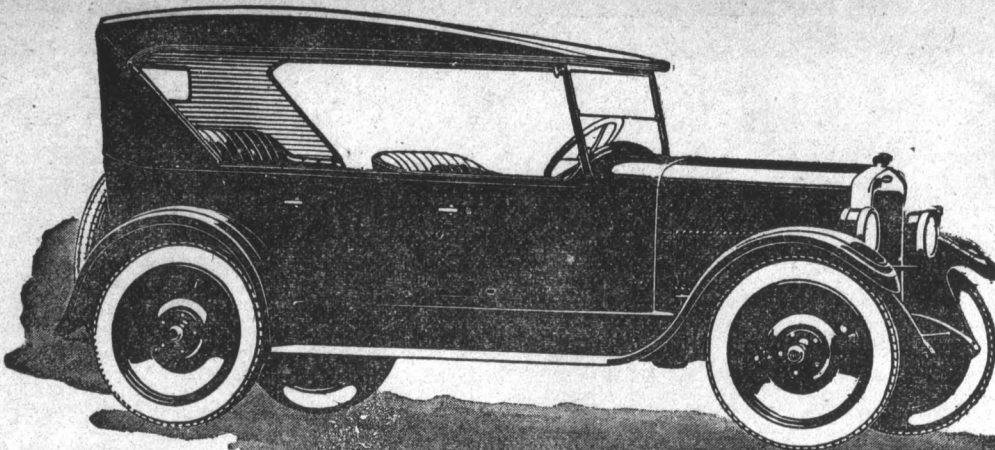
THE END.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

"Heroes of the Farthest North and Farthest South" by J. Kennedy Maclean. The romance of exploration in the ice-capped extremities of our globe has always held the imagination.

Mr. Maclean's story is not merely a chronicle of names and dates, but a story replete with heroism, adventure, and thrill. (\$1.75.) Thomas Crowell Co.



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This True Blue Oakland was deliberately planned to be the most perfectly balanced, the most accurately engineered and the finest built light-six in the world.

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From axle to axle—it's new! It embodies features of mechanical superiority—of

beauty and comfort and performance—heretofore unheard of in cars of its price! Every single part—from the new engine to the new bodies—was designed and built to fit and function in perfect harmony with every other part.

And because it has been so carefully designed, so soundly built and so thoroughly tested—Oakland places upon it, without hesitation, the same written 15,000 mile engine performance guarantee and the same Mileage-Basis gauge of value that have proved the quality and the value and the excellence of Oakland cars for years!

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in snugness and utility to the door of a closed car.

A satin-wax finish stamps the open models with an individuality never before attained in cars so moderately priced.

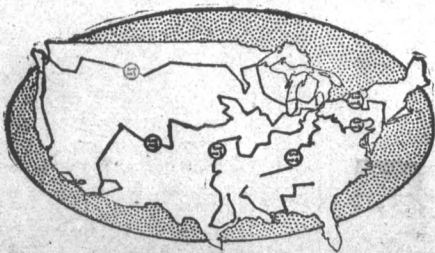
Instruments are grouped on a single glass-covered panel, indirectly lighted. Controls are centralized on the steering wheel. Disc steel wheels are standard equipment, at no added cost.

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Address all letters to the Children's Hour as follows:

UNCLE NED,
The Business Farmer,
Mt. Clemens, Mich.

Dear Uncle Ned:—I would like to join your merry circle. I like to read the Children's Hour very much. We live on the farm of 80 acres. We have three horses, thirteen pigs, thirty-eight head of cattle, many chickens and two dogs. Last year we had two kittens and they burned by the fire. Someone set fire to the barn and outer buildings. My dad had just bought a new harness and saddle for me to use with my pet pony which is called "Chief". I often ride on him. We picked fifty quarts of huckleberries last Sunday. Do you like them? Did you ever go to hunt for a deer? I will go this fall and do hope I will have good luck and get a deer. I lived in Frederick, Maryland and go to school there, but spend my summer in Michigan with my parents. I have a little sister and I am pals with mother and dad. I like Michigan very much but have to travel a great deal about 42 states as my parents are show folks and it means getting about. I am 14 years old the 12th of February. Have I a twin? Will some one of my cousins write to me? I will answer all their letters. Wish you would have a drawing contest for I would like to enter it. Will close for this time. Your nephew—John Davis, R. 1, Rose City, Michigan.

—Write and tell us about some of your travels, John. I am interested.

Dear Uncle Ned:—I have never written to you before. My father has taken the M. B. F. for a number of years and every summer when I come home from school I read them. We just came up here to upper Michigan about a year ago and as I have been home during my vacation only I have become acquainted with a few people as yet. Our home is at a summer resort on one of the most beautiful lakes in upper Michigan. There are three resorts on White Fish Lake. We live near another lake also which is much larger. It is Manistique Lake. This resort is the most beautiful place in the summer time but when winter comes the teams drive over the tops of the fence posts and mail boxes in the country, and in the forests it is even worse. I have spent one winter here and I have seen enough snow to last me the rest of my life. Altho the winters are terrible cold and there is so much snow, the beautiful summer with the picnics, fishing, swimming, boating and such sports quite overbalance the unpleasantness of winter. I am home only twice during the winter, the rest of my time until summer vacation is spent at a town about fifty miles away. I will graduate from Manistique High School next June. Manistique, as you probably know is on the north shore of Lake Michigan. I am between sixteen and twenty years of age. My hair is black and I wear it bobbed. My complexion is dark. I am five feet tall. I would like very much to hear from young people of my own age. My parents and two brothers are leaving soon for a time and I will be left alone with my little brother and younger sister to care for the home until my parents return. I shall be very lonesome indeed unless someone will spare a few minutes of their time now and then and write to me. I will close with love to Uncle Ned and all the cousins.—Pauline Painter, Curtis, Michigan.

—So you do not like the winters where you live but think that the summers more than make up for the unpleasantness of winter. Have you ever noticed that some people are like that? When you first become acquainted with them there are so many things about them that you dislike but after you know them for a while you discover they have so many good points that you forget your dislike for them. I have often had this experience, haven't you?

Dear Uncle Ned:—Altho I do not live on a farm I am interested in the farms. I used to live on a farm. This year my mother and I went to a cherry orchard to pick cherries. They had horses and one day I drove home and unhitched it. That is quite a lot for a girl living in town. I thought that was quite a treat. Of course a girl on a farm would think nothing of it, but girls in town like animals also. For pets I have a dog, his name is Flip. He will play hide-and-go-seek with my brother and I. I also have a cat but I guess she is going to die for she is sick. I think the answer to the riddle one of the cousins wrote is "kitten". The riddle was what walks like a cat, looks like a cat and acts like a cat? They said they would write a letter to the one guessing right. I hope I receive the letter. I think the answer to the riddle Doris Scott wrote is "A well". I hope I receive the card. I think the answer to Etta Bannister's riddles are: 1st. A pocket may be empty and yet have something in it when it has a hole in it. 2nd. Add the letter S to nine equals six (SIX). Well I hope to see my letter in print. Here is a hint to the girls on the farm. Invite a friend from town to come to your farm for a few days and show them the things on the farm. I'm sure they would enjoy it. Well as my letter

is getting long I will close with a riddle. The one who guesses the answer right will receive a letter from me. What has holes in it and yet holds water? My age is between ten and fifteen. The person who guesses it correctly will also receive a letter. Well I hope my letter is not too long to be printed. Love to all.—Blanche Ward, Mesick, Michigan.

—The girls and boys living in the city who do not enjoy going to the country are few and far between. Some of them say that they would not care to live in the country but we all notice they like to visit some friend or relative who lives on a farm, and my, what an appetite they get after they have been out in the open air for a few days.

Dear Uncle Ned:—Tap, Tap, Tap! May I come in? I won't stay long, not long enough to take my hat off. I have been over to the park today to see the animals. There were two wild cats there. Imagine meeting one of those savage beasts out in the jungles. I have been told they will run from a person rather than fight, but it hardly seems possible. The state has put in a park at the Cheboygan lake near here. Resorters go there during the summer to fish and hunt, also for boat riding and bathing. I am a sophomore in high school. I live on the farm during the summer vacation. That time always comes with a welcome. Not that I dislike school, but because I love to be in the country. I have often wondered who first organized the Children's Hour and who some of the first members were. If there are any left will you please write to me? Your letters will be appreciated. There is a new Uncle Ned scowl because my letter is getting long. Will some and everyone write to:—Lela Mercer, Onaway, Michigan.

—Members of the Children's Hour are boosters, not knockers, so do not stop to knock but just walk right in and make yourself to home. Drop in again some day Lela, when you can take your hat off and stay a little while.

Dear Uncle Ned:—Why hello, hello! My but it seems good to be back with you all again. I suppose you are rather surprised to hear from me again, aren't you? Well I was giving all others a chance to write. Say our school starts the fourth of September and we have nine and one-half months of school this year instead of only nine months. We are going to have a new school building here, but I do not think there will be any school in it this year as they only started working on it last Tuesday or Wednesday. We will have school in our old building during this school term. We have been having some quite cold weather, but it has been some warmer today. I only wish this weather would stay like this all winter. Say Uncle and Cousins, what do you all think about girls wearing knickers and having bobbed hair? Well, I think knickers are all right in their places, like going hiking or camping, but when it comes to wearing them on the streets I don't like them. Bobbed

hair I think is perfectly alright. Say now speak up, one and all and give your opinion of them, don't be afraid of hurting any ones feelings. Well, I guess I will give a little idea of what Sidnaw is or looks like.

Well, it is a small railroad junction where both the Duluth, South Shore and Atlantic, also the Chicago, Milwaukee, and St. Paul railroads cross each other. It is about two hundred in population. There is one hotel, one lunch room and ice cream parlor, (an ideal hotel and restaurant), one pool room, two stores, also Standard Oil station, also a handle factory. Mr. Henry Ford has camps about three miles south of Sidnaw, that run during winters, but close during the summers, although he keeps men working during the summer but they don't stay at the camps. Mr. Ford has had five special apartments made for him and his friends to stay when they come up to visit. Mr. Ford, Mr. Edison and Mr. Firestone and their wives were up here last week and stayed a day or two. This makes about the third time Mr. Ford was up here. Say, but it surely is nice out there. I guess my letter is getting rather long, and as I am lonesome, won't the girls and boys, one and all, write to me as letters sure are a lot of company. Hoping you do so, I remain as I always did and always will, Your niece—"Peggy" or Alma Powell, Sidnaw, Michigan.

—Well "Peggy", it was fine of you to tell us about Mr. Ford's camps. I quite agree with you regarding knickers and bobbed hair. Come again.

My Dear Uncle Ned:—Well here I am back again. My sister and husband from Utica, New York, were up here a week and then they took me back with them. We left here July 7th. It was about 6:30 a. m. It certainly was a lovely day for driving. You know how nice it is in the morning about six. So cool and it had rained in some places the night before, as the roads were not a bit dusty. We arrived in Detroit about a quarter to nine in the evening. We were quite tired of riding all day so just as soon as we could we went to bed. The next morning we got up early and got things ready to start for the long trip to Utica. Louis, my brother-in-law's brother took us in his car to the boat, as my brother-in-law took his car to the boat about three o'clock. While we went on about five p. m. We had a lovely stateroom on the fourth deck. We walked around on the boat until seven and then we ate our supper. We bought some cards on the boat. I sent some to my parents, and some to my nieces and nephews, and I sent one to you Uncle. Did you get it? Hope you did. There was nice music on the boat which I enjoyed very much as there is nothing I like better than music. We walked around on the boat that evening for a long time. It was about nine when we retired. We arrived in Buffalo about a quarter to ten the next morning. We certainly enjoyed the trip from Buffalo

Teaching Your Dog To Carry

CARRYING is one of the most popular accomplishments of every trained dog. It is useful too. Canine messengers were of great value during the war, and every year many lives are saved in remote places by dogs that have been taught by their owners to carry letters, etc.

Puppies learn more readily than mature dogs. For that reason begin training early. Begin when he is teething; his gums are sore, and he gets considerable relief from holding things in his mouth. At this period of life he will often "mouth" hard objects, for no other purpose than to help nature develop his teeth. It is instinct. Certainly dogs will learn carrying at any age, but it is far easier to teach them when they are teething.

A glove is the very best thing to begin with. Drawing it through his mouth makes his gums feel better, and secondly, the scent of his master one the glove makes it more interesting.

Movement interests animals of all kinds more than anything else. Even an object unattractive in itself will secure a dog's notice, if thrown a little distance, with a gesture for him to get it. Sometimes a pretense to race him for the object will awaken the desired response; and it is very natural for him, when he reaches the object, to grab it up in his mouth.

Talk to the dog very kindly, and success will be achieved much sooner, while he is learning. When you begin to use various articles, he

must understand your caution of "Gently, boy," etc. I read of a dog's bringing a freshly laundered collar to his master without soiling it. It had fallen from a desk into the waste basket, and this observant dog knew that it did not belong there, and that it was something that he should handle with care.

The way to train a dog to go after things alone, or to do any trick without your supervision, is to go through the performance with him exactly many, many times always using the same words to start the things. In this way, with patience on the part of the trainer, a smart dog may be taught to take a basket and go alone for some article. Generally, too, he will know whether he has been given the usual thing. If you have the merchant instructed to put what you want into the basket, the dog, if well taught, will do his part and bring the basket back to you.

You should teach the carrier dog not to give up his package or message to any stranger. Have some person with whom your pet is not acquainted start to take the object from the dog's mouth, then change his mind. Let this be repeated a few times; then come up yourself, take the object (as though you valued it) and praise the dog. This method was first recommended by Bruette, of the greatest "dog-ologists" of this country. A dog, like a person, dislikes being fooled, and clings to the person who seems to appreciate his efforts.

to Utica. It was just a beautiful day. The scenery in New York is something wonderful. We arrived in Utica about nine thirty p. m. We spent a few days in Utica visiting friends and my brother-in-law's parents. We started back on Thursday the 12th, and stayed over night in Batavia at the Richmond hotel. The next morning we started for Buffalo which we reached at 12 that noon. From there we went to Niagara Falls. Have you ever been there? We were there about a half hour, took pictures and had a nice time. We then went back to Buffalo and got on the boat. We had a lovely trip coming back. We arrived in Detroit the next morning glad to be back in dear old Michigan again. I think New York State is very nice but I think Michigan is the best of all. Don't you Uncle? I spent three weeks with my sister and her husband and came back with my brother and his wife the second of August. I had such a wonderful trip and enjoyed it real well. Now after such a nice vacation I'm ready to start to school and work. I will be in the ninth grade this year. Well its getting pretty late so guess I will close. Love to Uncle and all the cousins. Your affectionate niece,—Eleanor D. L. Stovel, Hubbards Lake, Michigan.

P. S.—Please excuse me for taking up so much space. I won't write so a long letter the next time.

—My, what an interesting letter. I am sure all of the cousins will forgive you for taking so much space. Yes, I received your card and was pleased to get it. Thank you. I too, have seen the Falls and think they are beautiful.

Dear Uncle Ned:—I will write to you once more. I wrote before but it is quite a while ago since I have, so I thought I would write again. We still take the M. B. F. and enjoy it very much. I thought of something that I would like to do, so I'm going to tell you about it, and maybe it can be done if this letter doesn't visit the waste paper basket. Will all of the Arnold's write to me? If they can, also if they are my age or older. I am 14 years old, my birthday is the twenty-fifth day of September. Have I a twin? I had a twin before, her name is Mildred Dommer. I passed the 8th grade country examinations at the Mt. Clemens High School last May. I saw the Michigan Business Farmer building nearly straight across from the High School. I could have called on you Uncle Ned, if I would have thought of it, but I suppose I had different things on my mind when I left school. I got out early enough to go. Am sorry I never thought of it. I live on the East Jefferson road and we have a good road all the way to Mt. Clemens, also to Detroit. We have a loud speaker for our radio, the tube set and crystal set both work very loud on it. I am glad now because every one can enjoy it. I wish you all could hear it. We can hear from Kentucky, New York, and all different places far away from here. There is an awful lot of static in the air. My brother says he will be able to hear better when winter comes. My brother made the radio all by himself, but of course he bought the parts. It looks like a chinese puzzle to me. Who can guess this riddle? "I have a wife, her name is Elizabeth, she has two kids, what have I? The one who guesses it will receive a letter from me. I hope all of the Arnold's will read my request, if they do I will be very much pleased. With love, from your niece,—Rose M. Arnold, R4, Box 474, Mt. Clemens, Michigan.

—Your suggestion is very good and I hope you let me know how many letters you receive from the "Arnold family." I do not wonder that you enjoy the radio. I do, and I believe every one else does if they have ever listened to one. I have a tube set but no loud speaker. I use the phonograph for that purpose and it works very satisfactorily.

Dear Uncle Ned:—I have been much interested for sometime in your Children's page and I thought my letter might interest some other boy or girl. We live on a farm of 120 acres on the shore of Lake Michigan. It is a beautiful place in the summer but in winter it is very cold. I would like to know how many cousins have Indian playmates? Our school numbers 30 pupils and two-thirds of them are Indians and I like them very much. We have sheep and shorthorn cattle. We have four horses. I have four pet lambs. I am twelve years of age and in the eighth grade at school and third grade in music. I think the answer to Doris Margaret Scott's riddle is "A well". Here is a riddle: Why is a newspaper like a lazy dog? I hope you will print this. Your niece—Irene Miller, R. 1, Box 5, Good Hart, Mich.

Dear Uncle Ned:—I have never written to you before but I have always been very much interested in the boys' and girls' department. I live three miles from the school which I attended. I say attended because I graduated this June. There were 56 in my class; mostly girls. When departing from the school we left a trophy case in remembrance of the class of '23. I have light hair and light blue eyes, and I have neither brother nor sister so you see I have my own way as far as mother will let me. Will some of the older cousins please write to me? Well Uncle Ned I must say good-bye.—Helen H. Bland, R6, Holland, Michigan.

KETCHEM SPOKE AT MONROE FARM BUREAU-GRANGE PICNIC

THE Monroe County Farm Bureau-Grange picnic held at the Raisinville Grange hall, August 23, was a real success. With games and sports for the youngsters, a baseball game and quoit pitching for the men, the day was well spent. The ball game between Ida and Frenchtown Grange was won by the former by a large score. The old folks had to take a back seat when the quoit pitching contest was won by two youngsters both under fourteen years of age. This contest was won by Tracy Knapp of Raisinville and Verlin Barr of Raisinville, each receiving a pair of steel quoits as a prize. R. Halburstead and A. Halburstead, both of Monroe, won second place in the contest. The attendance was around a thousand.

By far the most important part of the program was the address by Hon. J. C. Ketchem, Congressman from the fourth Mich. District and former Master of the Michigan State Grange, also a member of the Farm Bloc in Congress.

Mr. Ketchem soon warmed up to his subject so that it was necessary for him to remove his coat although the weather seemed a little cold to most of the audience. He minced no words whatever but spoke direct from the shoulder. He told his hearers that he did not believe in class legislation for the farmer or anyone else. He does believe, however in the legislation already enacted to put the farmer on the same plane with other lines of business. It is a deplorable fact that agriculture has fallen to its present condition. The American farmer must join hands with his neighbors in the cooperative movement in marketing or descend to the state of peasantry as we now have it in the older countries of Europe. Agriculture produces annually \$77,000,000,000 worth of farm products and employs 27 per cent of our total population. Should the agricultural industry descend to the state of peasantry it would be the greatest calamity that this nation has ever been called on to face.

Another important point brought out by Mr. Ketchem in regard to our farms is the subject of home ownership. With home ownership goes the stability that is necessary to maintain a democratic government such as we now have. Statistics show that only 10 per cent of the population of New York city own their own homes. 40 per cent of the total population including both city and rural districts own their own homes which shows that the percentage of home ownership runs very high in the country. The number of people in the country if negroes and indians are included, who came from native born parentage is nearly 90 per cent while the number of native born white of native parentage is 66 per cent. These facts should be a source of comfort to any red blooded American as it is the home owners that are the ones upon whom any nation must depend in time of strife. This one fact alone makes it well worth what it will cost the nation to put the farmer back on his feet regardless of what the cost may be.

In viewing the economic condition in which the farmer finds himself, pig iron and corn were two commodities chosen to represent industry and agriculture. In 1914 it took 18 bu. of corn to buy one ton of pig iron. During the war period 27 were required, during deflation period 47 bu. and today 29 bu. are required to buy the same amount of iron. Summing up all these facts we find that the farmers dollar compared to other industries, is only worth 71c. The farmers economic condition will not improve until his dollar is as valuable as any other.

In summing up the whole situation it was pointed out that co-operative marketing properly managed is the solution to the whole trouble. Farmers must learn that it is foolhardiness to produce more than the market wants and then dump the whole thing within a few days after harvest. Orderly merchandising throughout the whole season and producing only what the market will absorb is the solution to the whole trouble.—F. H. Dexter, Sec'y-Treas., Monroe County Farm Bureau.



Geographical isolation makes the Railroads of Michigan a transportation system like that of no other state. Most of our traffic either originates or ends in Michigan.

Bridge the Great Lakes with car-ferries and tunnel under the mighty connecting rivers, though we may, such accomplishments merely better our service to you; we are Michigan Railroads more than trans-continental traffic lines. Our train schedules are for Michigan, not for New York and San Francisco.

To a degree greater than any other state, Michigan's welfare, and the welfare of her Railroads, are therefore one and inseparable. You cannot fall back on trans-continental lines for emergency help; we must always rely on you for our chief support.

We can prosper only together.

Because of this mutual dependence, the twenty-four Railroads operating in Michigan have formed this Association with the purpose of strengthening the relations of the Railroads with the People of the State, by providing you with a clearing house for the exchange of ideas, relative to the transportation problems so vital to the prosperity of our Peninsular State.

We invite your suggestions toward bringing about a better understanding and closer cooperation between the Public and the Railroads. Communicate with this Association.

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Michigan Railroad Association

Railway Exchange Bldg., Detroit

SEPTEMBER

The goldenrod is yellow,
The corn is turning brown,
The trees in apple orchards
With fruit are bending down;

The gentian's bluest fringes
Are curling in the sun;
In dusty pods the milkweed
Its hidden silk has spun;

The sedges flaunt their harvest
In every meadow nook,
And asters by the brookside
Make asters in the brook;

From dewy lanes at morning
The grapes' sweet odor rise;
At noon the roads all flutter
With yellow butterflies.

By all these lovely tokens
September days are here,
With summer's best of weather
And autumn's best of cheer.

—H. H.

SEEN AT THE STATE FAIR—

WHERE shall I begin? So many lovely and wonderful things for us all. The many beautiful helpful departments were all there. The woman's building, always a great attraction to me had so many wonderful hand made articles that would fit into the best of the most humble of homes. Laces made by hand. I marveled at it all. Embroidery work of the most difficult kind, they were all there; hanging row on row, vying for first place on the premium list.

The baby exhibit, held wonders for our future race and it seemed to me the crowd never tired of looking at the measuring of so much beauty and health as was displayed in that big glass room with a competent doctor and nurse in charge.

From there I strolled over to the Art building and those of us who were interested in making and painting pretty articles for our homes, could find out a lot of new ideas and ways to make them for the attendants there were pleasant instructors, who wanted to help and please.

The main building had a great many display rooms showing the wrong and right way of living and fixing up the home to make it easier for our work. I saw a new kitchen stove demonstrated for the farm home that looked just like our city gas stoves and had powerful heating qualities. It was an oil burner.

The sewing machine department had a demonstrator showing how to hemstitch with a very simple attachment; also how to darn on the sewing machine. I brought one of these. They seemed to do the work nicely and fast.

For those of us who have electricity the building given over to display electric appliances, contained appliances too numerous to mention. Everything for the home was there.

I am sure the school work was a revelation to some of us. It was to me. In the Educational building the "Hot Lunch" idea was demonstrated; also the cold-pack method done by the Girls Canning Clubs.

The only thing I was disappointed in was the poor way the "Household and Kitchen Food Products" were displayed. I had to climb up on the case in order to see the display of baked goods. Maybe next year we might have at least a lower shelf. Next year I want to see more of the names of my readers on the cards telling me they are interested in their own State Fair.

NEXT YEAR GARDEN

NOW is the time to think and plan and order our fall garden. Maybe some of my readers will feel I have said too much about gardening, but in this new country of ours, we need a little coaxing to realize that the beautiful gives back to us so much more than we put into it. The work is well spent for the results we get, and I feel sure that looking at a bright clump or row of flowers will create a certain amount of happiness for the beauty that it gives out and the lesson we learn bringing a wonderful bed of flowers forth, even if it is only wild flowers.

For those who wish lovely Crocuses, Daffodils, Tulips and Hyacinths, order your fall bulbs now, if you want to be sure of the best stock. Early orders are never unwise. You can have plenty of time to prepare for the stock, and are doubly sure of getting what you want. I am ordering my bulbs today and I know I receive more pleasure from my flowers than the

The Farm Home

A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS—Now is the time to plan your fall sewing and all the new patterns are in. Give your dress a little tho't this fall and it will be money saved to have picked the right style suited to your type.

Remember Hallowe'en is next month and what could be nicer than to plan a party for this fun loving night. Any questions upon this or any other home subject I will gladly answer. Do write me, I want to help you.

Your Friend,
Mrs. Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

amount of work I put on them. Read our personal in the last issue and know what one woman did to make extra money. Fall is the time for planting these flowers.

A KIND DEED EACH DAY

I WAS talking to a neighbor the other day and he was telling me how his mother taught them, a family of twelve, to do a kind deed each day. I am wondering how many of us try and live up to this golden rule. This neighbor of mine has tried to live up to the rule until, he says that if the kind deed has not been done before twelve o'clock he gets nervous and restless. It is a wonderful thought that has a hold of human beings to such an extent that we become uncomfortable until the deed is done. I must confess I did not try and live up to this rule, but I am now, and I just feel that I must pass this same thought along to you my readers.

USING OLD FLOUR SACKS FOR CLOTHING—

AN interesting phase of the flour milling industry of certain parts of China is the manufacture and various uses of the flour sacks. The cloth for the bags is made and cut in the correct sizes at the mill and the pieces are then sent out to the homes of the country people of the district who sew them together. The finished bags are then stamped with a dye that is easily washed out. The bags are given as a commission to the dealers, who wash them out and sell them to the town people for use as clothing. The

dealers rarely sell the bags with the flour as only very small amounts of flour are purchased at one time by the Chinese.

Mothers Problems

ASKING PERMISSION

"HEY, Bob, come on down in the swamp and catch frogs!"
"Sure! Just wait till I ask Mother."

"Hmph! Do you have to ask your mother before you can do anything? I never ask mine. If I'm not home when Mom wants me she knows I've gone somewhere."

"I know, but Mother says she always likes to know where I am, and then she doesn't worry. She always lets me go wherever I ask, and it only takes me a minute to hunt her up, so I don't mind."

"Probably not, but—say, I'll beat you to the old oak tree!"

Which boy is your son like—Bob or his companion? Does he ask your permission to go out of sight of home, or do you fret and worry and wonder when he is too long away?

Asking permission means more than begging mother's consent: it means informing her of the proposed jaunt or visit. It means quieting any needless alarms that might arise should the time away be unusually long. Boys are thoughtless. They cause a great deal of unnecessary worry merely because they don't realize how easy it is for mothers to worry. Perhaps you cannot cure the thoughtlessness, but you can make it

second nature for them to run in and tell of their proposed plans.

Begin when the children are very little. Never allow them to run over to a neighbor's without first asking your permission. Impress them with the fact that you only want to know where they are in case you should want them immediately. Make it a habit with them to ask your permission to leave the home-yard. Then even though they are old enough to look out for themselves, even though they are not tied so tightly to Mother's apron-strings, they will let you know where they are going and often relieve you of many anxious moments.

Asking Mother's permission to go somewhere is not babyish; it merely shows that a boy has been taught how to be thoughtful of his mother.

WHEN SCHOOL IS OUT

IT is as natural for children to run and play and laugh and shout as it is for kittens to frolic. If strong and healthy they are full of good spirits, and good spirits demand an outlet. For the little child who has never known the restraint of school, who has been able to spend hours and hours in play and exercise, the confinement of the school-room is a severe strain. If he is at first shy, there will be no let-down of account, during recess periods. From the time he leaves home in the morning till he returns at night, every nerve and every muscle is held in check. THAT is why, when school is out, many a little beginner comes home cross and disagreeable and as full of noise as a machine-shop.

It is trying on the mothers who have to hear the noise and quiet and soothe the apparently out-of-sorts child, but when school is out is one of the many times when patience must be exercised continually. Then must a mother strive to get the child back into his normal state of mind. Sometimes a glass of milk and slice of bread and butter will "sweeten him up" like magic, for, the chances are, not being used to eating lunch with other children, he will slight the dinner he carries, and his stomach will be craving food, and when there is hunger, there is seldom good nature.

If it is found that he will not play nicely with his younger brothers and sisters, separate him from them for a time. In his heart, he thinks they are the finest children anywhere, but at school he has been a "beginner," looked down upon by the older children, and it pleases him to treat the "little ones" the same way. He'll soon be glad to play with them on any terms, if only he can play with them!

As for his voice, stuff your ears with cotton! The young animal in the civilized child must assert itself. Let him "holler like a wild Indian" till his pent-up energy is exhausted.

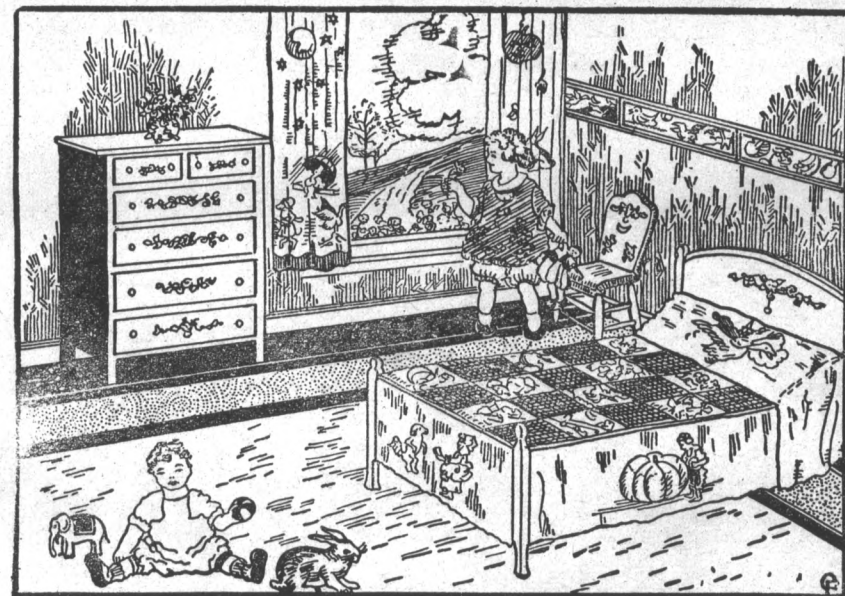
Don't bewail that school is teaching him all sorts of bad habits. It is merely holding a wild young thing in check, and at home he is "letting off steam."

Personal Column

Can Any Reader Answer Our Subscriber With More Information?—I enjoy the Home Department in M. B. F. very much. I like the cooking recipes. I am asking about a little information about flowering bulbs. This spring I planted twenty-eight healthy looking gladiolus bulbs and five of them rotted in the ground. The large bulbs I planted about six inches deep and the smaller ones about four. I prepared the soil by digging holes and putting in two pails of good rich dirt from near the manure pile. I have watered them as often as they needed it, but some did not grow as well as I thought they should and some rotted in the ground. I planted them the last week in April.

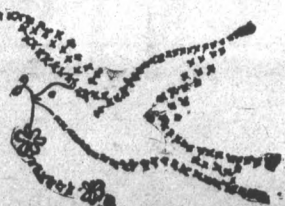
I am going to plant some crocus, tulip and hyacinth bulbs this fall and would like to know what kind of soil is best suited for them, how far apart they should be, and all about the care of them, also how to store Canna bulbs for winter. Will try to return the favor Mrs. Wm. Hoffman.

The best soil for the Gladiolus is a medium loam. It appreciates good fertility, but seems sensitive to any manure in contact with the bulbs. Manure is good if applied in the autumn previous to planting. The best fertilizer for general use is one that would be called a potato fertilizer, rich in potash, and phosphoric acid, both chemicals being useful in the proper formation of good bulbs. Bone-meal is also extensively used. Liquid manure, when the buds are



What little boy or girl would not be delighted to be tucked to bed under a nursery quilt like this, to dream about Boy Blue, Little Bo Peep, and the rest of the Nursery Folk so dear to the heart of every child? The good old nursery jingles can be told in other ways than by words, and what better place to tell a needle-and-thread story than on a little boy's or girl's very own bed set?

These quilt blocks can be furnished for outline embroidery, on good quality linen finished white muslin in three designs. Nursery Rhyme Series, 12 assorted designs. The blocks are nine inches square and ten stamped blocks, combined with ten plain blocks of pink or blue sateen, makes a 36x45 Baby Quilt or Crib Blanket. Ten blocks 50c; 30 blocks (Sufficient for both crib blanket and full-sized quilt), \$1.00. Address: The Business Farmer, Pattern Department Mt. Clemens, Michigan.

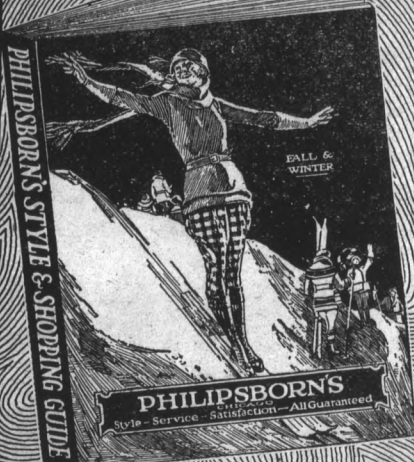


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forming seem beneficial. Gladioli are not hardy and require a little protection against frost in our northern states. Planting should be after all danger of frost is past. A well planned succession in planting is advisable. The depth to plant is determined by the character of the soil. In the lightest soil seven or eight inches is not too deep, but in a heavy clay four or five inches would be a sufficient depth. There are two reasons why bulbs should be planted as deep as the character of the soil will permit. First, the Gladiolus is moisture-loving, and in deep planting its roots are in the cooler moisture soil; Second the soil acts as a support, no other support for the stem being necessary ordinarily. In the fall before frost remove the bulbs, leave the stems on. Store in an airy place to dry thoroughly. After several weeks the stock can be cleaned by removing stems and the old bulb, leaving new stock for next year. You should get from one to six new bulbs off of old one each year.

Crocus—Must be planted in an open place where they can get the sun in order to have them flower. New bulbs are produced above the old ones each year and the plant becomes higher and higher in the soil. They should thus be transplanted every third year. A layer of sand to place the bulb on insures good drainage and keeps the bulb from rotting. They can be grown in ground near trees and should be planted in clumps to be attractive. Plant about four inches in ground.

Hyacinth—Treat the same as Crocus. They, of all the bulbs, need protection in winter. Plant six inches deep. Tulips, like the Hyacinth should be planted six inches or more in rich sandy loam and a good plan is to put them in rows about four inches apart. Plant in early October, or before frost.

Cannas—Digging and Storing.—When the tops are killed by the frost, the roots can be dug in the morning, and if the day is sunny, they can be left to dry. They must be stored where they can be kept warm, for if they are cold and damp, they decay. They may either be buried in sand or soil, although sand is preferable. If a green house is available he roots may be stored under the benches. It is really unnecessary to wait until the tops die down, because the beds may be wanted for fall bulb planting, in which case let the Cannas grow as long as possible and then dig them.

"To My Son"—Can you tell me where I can obtain a copy of the motto that has appealed to so many mothers the past few years, "To My Son" by Margaret Johnston Grafflin? For a time it was on sale at stores where these mottos were sold but am now unable to find them. If any of our readers can advise me I will very much appreciate it or if you can do me the same favor.

The lines of the first verse are:
"Do you know that your soul of my soul is such part,
That you seem to be fibre and core of my heart?"

None other can pain me as you dear, can do
None other can please me or praise me as you."

Thanking you in advance.—Katherine.
—The motto can be obtained thru the Detroit Library and the book of poems is called "Heart Throbs." The second and third stanzas are:

Remember the world will be quick with its blame,
If shadow or stain ever darken your name.

"Like Mother, like Son", is a saying so true.
The world will judge largely of Mother by you.

Be yours, then, the task, if task it should be,
To force the proud world to do homage to me.
Be sure it will say when its verdict you've won,
She reaped, as she sowed, Lo! This is her son.

WOMEN'S EXCHANGE

If you have something to exchange, we will print it FREE under this heading providing: First—it appeals to women and is a bonafide exchange, no cash involved. Second—it will go in three lines. Third—you are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room.
—MRS. ANNIE TAYLOR, Editor.

Exchange Notice—Patterns of girls velvet or plush hats, tam-o'shanters, bonnets, also man's mitten pattern for thread, aprons, velvet pieces or anything useful. Send list.—Mrs. G. W. Morgan, Route 3, Vicksburg, Michigan.

The Runner's Bible

They helped everyone his neighbor: and every one said to his brother, Be of good courage. So the carpenter encouraged the goldsmith, and he that smoothened with the hammer him that smote the anvil, saying, It is ready for the smoldering; and he fastened it with nails, that it should not be moved. Isa. 41:6-7.

It is the Christian's imperative duty to give encouragement whenever and wherever he is able; yet how many of those who call themselves followers of (Continued on Page 22.)

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Christ take any pains to say a sympathetic, appreciative work? On the contrary, it often appears that the Christian feels it his duty to say that which is discouraging or disagreeable, deeming everything else flattery, and of evil. We little know how near to despair our neighbor may be even though he masks it with smiles. An adverse remark may fell him to the ground, whereas he might rise on wings of hope because of our appreciation. There is always something good one way. Say (Prov. 16:20) something to lessen the sting of criticism if that seems to be needful. Remember that just praise is a smile of God, and loving criticism, his guarding hand.

RECIPES

Chopped Pickles—Four quarts chopped green tomatoes, two-thirds cup salt, two teaspoons pepper, three teaspoons mustard, three teaspoons cinnamon, three teaspoons allspice, three teaspoons cloves, one-half cup white mustard seed, four green peppers, sliced and two chopped onions, and two quarts vinegar. Sprinkle alternate layers of tomatoes and onions with salt, and let stand over night. In the morning drain, and put in preserving kettle, adding remaining ingredients, using enough vinegar to cover all. Heat gradually to boiling point and boil one-half hour.

Green Tomato Relish—One peck green tomatoes; four lemons; 6 pounds or one and one-half pounds sugar and one-half pound corn syrup; four or five pieces of ginger root, more if desired. Wash and cut tomatoes into pieces; slice lemons very thin; put all into acid proof kettle and cook until clear.—Elvis Alford.

Peach Conserve—25 nice yellow peaches and one pound of white grapes, ten red plums, one pineapple, one orange, one-fourth pound of almond meats. Cut each fruit in small pieces, cook all together for about one-half hour. Measure and allow three-fourths cup of sugar to every cupful fruit. Cook very gently about twenty minutes, then add the nut meats cut in pieces; continue to cook slowly for two hours or longer. Pour in glasses and seal when cool.—Mrs. H. C.

Potato Puffs—Mix together one pint mashed potatoes, one teaspoon salt, one teaspoon black pepper, yolk of two eggs, one-quarter cup milk or cream, one tablespoon butter, one tablespoon onion juice and one cup of walnuts cut fine. Shape in small balls, dip each in beaten egg, roll in crumbs and fry brown in deep fat. One tablespoon chopped parsley may be added before shaping if wished.—Alma B., Augusta, Michigan.

Three Egg Angel Cake—Take one cup of sugar, one and one-third cups flour, one-half teaspoon of cream tartar, one-third teaspoon salt, three teaspoons of baking powder, two-thirds cup scalded milk, one teaspoon of vanilla, whites of three eggs. Mix and sift the five ingredients four times, add the milk slowly while still hot stirring constantly. Add vanilla and fold in the whites of eggs beaten light and stiff.—Alma B., Augusta, Michigan.

—if you are well bred!

You will not laugh or talk loudly. Modulate your speaking voice until it is low and sweet for your hearers. Never monopolize the whole conversation. Maybe the other fellow has something worth while to tell you.

AIDS TO GOOD DRESSING



4510. A Smart Blouse—Figured silk was used for this model with faille in a contrasting color for cuffs and collar. Velvet and moire are also good for this style. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2 1/4 yards of 32 inch material. For collar and cuffs of contrasting material 1/4 yard 40 inches wide will be required.



4492. A Stylish Dress—This fashionable model will develop well in kasha cloth or in satin. As an illustrated sash-like braid was used for trimming on collar and cuffs, a vest of embroidery in Oriental colors makes a very attractive finish. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 3 1/4 yards of 54 inch material. To make the vest of contrasting material requires 1/4 yard 9 inches wide or wider. The width at the foot is 1 1/2 yard.



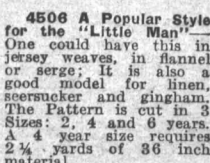
4503. A Simple Practical Coat Style—Broad cloth, polo cloth, heather mixtures, tweed or velvet as well as other pile fabrics are good for this model. Fur, braid or or braiding will be suitable for decoration. The Pattern is cut in 5 Sizes: 2, 4, 6, 8 and 10 years. A 6 year size requires 2 1/4 yards of 40 inch material.



4494. The Latest Expression of a Smart Style—The new tiered skirt and side drapery, topped by a smart blouse is here portrayed. Satin in a pretty shade of brown was employed to develop this style, with a finish of bias self bands. The model is also attractive for crepe weaves, taffeta, and broad cloth. The Pattern is cut in 3 Sizes: 16, 18 and 20 years. A 18 year size requires 6 1/4 yards of 40 inch material. The width at the foot is 1 1/2 yard. To make the concealed part of the skirt of lining requires 1 1/4 yard, 32 inches wide.



4497. A Becoming Frock for the Growing Girl—Youthful lines, and popular style features are expressed in this model. Crepe satin with facings of the satin side and the dress portions of the reversed side, is here pictured. This is a pretty style for voile and organdy. It may also be developed in one material with embroidery or braid for decoration. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 14 year size requires 4 1/4 yards of 40 inch material. Without tunic, bertha and cuffs 1 1/2 yard less is required. To trim with contrasting material as illustrated requires 1 1/4 yard 40 inches wide.



4506 A Popular Style for the "Little Man"—One could have this in jersey weaves, in flannel or serge; it is also a good model for linen, seersucker and gingham. The Pattern is cut in 3 Sizes: 2, 4 and 6 years. A 4 year size requires 2 1/4 yards of 36 inch material.

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WHY THE "FARM HAND" AND HIS FAMILY ARE GOING BACK

(Continued from Page 4)

until about five o'clock. Then, there being no convenient place for us to ride, my husband suggested that the children and I walk ahead. The roads we had to travel at that season of the year are mud, deep, clinging mud. Our two-mile walk through it might be taken as a symbol of the discomforts and disappointments to follow.

We ate our supper that night in the kitchen around the kitchen table, and for weeks after the kitchen was, for the greater part of the time, the only comfortable room in the house. We found that the room off the kitchen which we wished to use for a dining room had no pipe hole, so we could not put our coal heater in it. The sitting room was down a sort of hall from the kitchen and opened into the dining room at a door clear at the farthest corner. A fire in it would have to be very hot indeed to make the dining room comfortable. So we did the only thing left; put up the heater along with the cookstove in the kitchen.

The agreement which the farmer made with my husband promised that the kitchen drain which was out would be fixed as soon as the ground thawed in the spring. It has never been fixed at all. Once or twice I have suggested to my husband that he might tell the farmer that if he did not want to have it done we would do the work ourselves and he could allow the time, but my husband had already made suggestions which were not followed and so at last, in June, he put in a pipe which runs along on top of the ground and empties into the pig pasture which lies just beside our yard. The wind-ows all over the house needed to be puttied but my husband has found time to do only one. The rain comes in and is making spots on the walls in every room except the kitchen. It ruined the ceiling of the dining room and there is a large piece of paper loose and partly hanging. Both the farmer and his wife promised to get new paper but haven't. They both asked about the screens, but our house has only one screen door that is not ragged, and the windows are partly covered with old netting. I cannot keep out the flies.

The only horse among sixteen that I can drive is crippled so badly that I would rather walk than drive it, and when my husband suggests taking one of the others when he is going to drive the owner nearly always makes some excuse for taking the lame one. Neither of us drive unless we have so much to carry that we must. When we walk to church and Sunday School the children come home cross and tired.

When we came the working hours were to be from five in the morning to seven at night, and the owner counted himself as one of three men who did the work. Owing chiefly to his own tardiness and irregularity, the men were all late to all meals most of the time during the first month we were here. Instead of getting supper for all of us at seven I often got supper at seven, waited until seven-thirty for my husband to come in, and then gave

the children their supper and put them to bed, while I waited until my husband came in, sometimes as late as eight-thirty or nine. I do my cooking on a gasoline stove and each reheating of food uses more fuel and adds to our expenses. After the first month my husband began quitting at quitting time—seven o'clock—always being at the barn at five in the morning, though the other two men continued to be late. When he was there first he had all the feeding of the cows to do alone before milking, which was very hard as all the food had to be carried to the cattle.

One morning the owner told my husband to stay at the barn nights until all the chores were done and Jack reminded him of their agreement as to hours, and declared that he would quit at seven as a general rule or quit for good. The owner made excuses but, finding Jack firm, agreed that they would usually quit at seven. But the injustice of his demand added to our resentment on account of his failure to repair the house.

It is now mid-summer. All the horses are at work in the fields nearly every day. The farmer or his wife go to town about once a week and Jack can go on Saturday night after seven. If I need anything at any other time I can walk after it. Getting to town so infrequently as we have and do costs money in various ways. In town I could buy fresh meat as I used it; here I have to get ham or bacon or canned meats, all of them expensive. In town we used gas for cooking and lighting; here the gasoline for cooking and kerosene for lighting comes to considerable more.

We are finding life on this farm, to which we came with so many hopes and plans, nothing more than a discouraging failure. Jack started in with enthusiasm, with desire to earn his money and please his employer. He started with real knowledge and ability to do his work well. He is an honest, upright, sober, intelligent man, who desires and intends to make farming a life work.

There are farms all over the country needing such men, and I am sure there are in towns and cities many men like Jack, who feel that they can succeed on a farm if they can only get a good opportunity.

It seems to me that it is up to the owners who are complaining about the inability to secure or keep farm help because of the longer hours on the farm and the higher wages in the cities and towns, or to the government, itself, to offer such men the sort of living conditions, the commission on profits they help to make, and the appreciation, which will enable the farm laborer who has it in him to become a real farmer to get a start in farming without the money investment for land and stock and equipment which a family man working for wages finds it impossible to make.

The factory worker and the railroad employee and the majority of all town and city workers are living in conditions similar to those of their neighbors, who are for the most part their fellow-workers. The Unions help them to get justice, and they live in comfort with some, at least, of the modern conveniences. Most of them have some time to call their own and can use it for trying out on a small scale some hobby, such as chicken raising, gardening, etc. On the other hand many of the men, both married and single, who go to the farms as laborers, find the hours so long and the conditions which they thought they would like, so unsatisfactory, that they are giving up their desire for a farm life and are returning to the factories. Unless these conditions are changed the problem of sufficient help on the farms will grow worse until the government finds the solution one which it must undertake in order to produce sufficient food for the nation.

We are going back to the city this fall. The house in which we live would be very uncomfortable in winter. The garden, which we got in late because Jack was so busy, yielded hardly anything so we need not stay to harvest it.

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F. H. Johnson, 609 W. Lake Street, Chicago, Ill. He also wants local distributors and has a very unique selling plan to offer agents. He is even offering to give one free to the first user in each locality who will help introduce this new light.—(Adv.)

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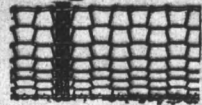


Poultry Netting

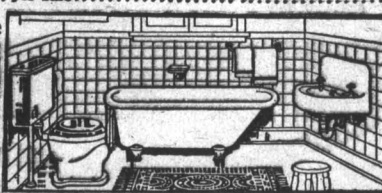
No. SA-300 Made of 19 gauge Bessemer steel wire heavily galvanized; 2 inch hexagon mesh in two heights. Bales contain 150 lineal feet, 36 inches high, per bale.....\$2.40

\$2.40

Hog Fence



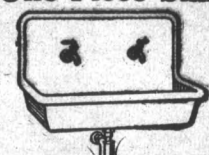
No. SA-6. Made of No. 11 top wire and No. 14 intermediate wire and stay wires. Spaced 6 in. apart, 3, 3 1/2, 4, 4 1/2, 5 1/2 and 6 in. spaced from bottom upwards. Barbed bottom. 26 in. high, per 24c 32 in. high, per 30c



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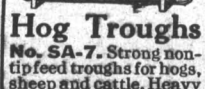
No. SA-10. White porcelain enameled roll rim kitchen sink, furnished complete with two faucets and trap. Size 18 in. x 24 in. \$12.00 Size 18 in. x 30 in. \$13.00 Size 20 in. x 30 in. \$14.00 White porcelain enameled drain board, 26 in. long, each.....\$5.50

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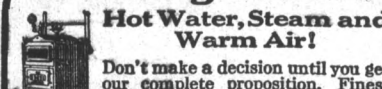
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FARM MECHANICS

PURITY OF WATER SUPPLY

I have a never-failing well about 18 ft. from back door. My sink is 9 ft. east and 14 ft. south from back door. Is there any way a pump by the sink can draw water easily from this well; is deep, cold and delicious water; has not been cleaned out in years. The last cleaner said when he got through with it there was still 6 ft. of mud in the bottom of it. Another cleaner said he might be able to clean it in a dry season, when water is correspondingly low. We have had no illness from this water and it is certainly good. Should anything be put in it to make it doubly safe? How close to a well is it safe for an outdoor toilet? Ground is level.—Enquirer, Michigan.

Whether or not water could be pumped as you suggest depends entirely upon the distance of the permanent water level below the pump if installed as described. Twenty-five feet is about the practical working distance; that is, the maximum distance that a pump cylinder can be placed above the water and have it work properly. If the vertical distance from the pump cylinder to low-water level in the well is not greater than this a pump could be put in as you suggest.

It is impossible to say whether or not the water from your well is pure; some of the coldest, sparkling water is contaminated. From a sanitary standpoint the location of the well near the back door is bad, as refuse is likely to be thrown out here, especially where the house is not provided with a sewer system, that is likely to find its way into the well as seepage. This of course need not necessarily be true, as precautions can be taken in the disposal of dishwater and other house waste that prevent any of it finding its way into the well.

No definite distance can be set down as a "safety distance" for a well from a source of pollution. The above applies to dug wells, as they are perhaps most susceptible to pollution. The character of the soil and the source of pollution as well as the general slope of the ground and the character of the subsoil all have a bearing on this "safety distance." As a general rule in clay or other tight soils and where the pollution is at the ground surface 100 feet is a sufficient distance to guarantee a pure water supply as far as the particular source of pollution under consideration is concerned. If the contaminating matter is beneath the ground's surface, as in the case of a cesspool, a much greater distance may be required.

Simple precautions toward securing a safe water supply from a dug well are either to make the upper 10 to 15 feet of the casing watertight by the use of concrete, brick or tiling, or by simply filling in behind the stonework with tightly packed puddled clay. This casing should be carried high enough above the surrounding surface to give good drainage and to prevent the entrance of any surface water, and the top covered by a good concrete curb.

Pollution of well waters by seepage from private or similar source of contamination is usually indicated by the presence of chlorine in the water. The presence of chlorine can be detected by the following test: Thoroughly wash and rinse in water from the well to be tested a glass tumbler. Fill the tumbler half full of the well water and add six drops of a solution of five grains of nitrate of silver in one ounce of distilled water. This solution can be made up at a drug store. If chlorine is present in any appreciable amount the water will appear cloudy when held up against a dark surface. If there is reason to doubt the purity of drinking water and chlorine is found to be present it is advisable to have it tested by a laboratory examination.—R. H. S.

BLASTING BOULDERS

THERE are three kinds of boulders from a blasting standpoint—one which is not a boulder at all, but a ledge of rock extending up through the ground; second, a boulder proper which is not imbed-

ded in the ground so deep but that a charge can be placed under it; and third, a boulder which rests on the surface of the ground with some depression in the top which makes it possible to break it up by firing a charge of high explosives placed directly on the rock with a quantity of soft mud on top to give confinement.

Suppose for this demonstration that the rock is of the second class, and about four feet long, three feet wide and two feet high, without visible seams or cracks. It would take too long to drill a hole into it, as we would have to do with the ledge rock, and it is imbedded in the ground too deeply to mudcap economically, so we will punch a hole with a crowbar or pointed piece of drill steel at such an angle that the end of the hole is close up under the rock. This, you will notice, is different from our proceeding with the stump we blasted in the last article where we got the charge down about two feet below the base of the stump. We do not want to blow this boulder out entire; we want to break it up. As there are no buildings in sight, we will put about three 1 1/4" x 8" cartridges under this boulder the last on being the primer. Although there no buildings in sight, the boulder is alongside a fairly well traveled road, so we will fire it electrically.

We make the primer in the same way as with cap and fuse, placing the electric blasting cap in a hole punched in the side of the cartridge and tying a piece of string about eight inches long first to the wire and then around the cartridge so that the cap cannot pull out. After pressing this primer down against the other two cartridges with our sawed-off broom stick, we fill up the hole with soil scraped up in the neighborhood in order to confine the explosive and prevent it from blowing out the bore hole. We then connect the two wires sticking out of the hole to the two free ends of our duplex leading wire, being careful that the joints do not touch each other and being particularly careful to wind the cap wires around the well scraped leading wire ends, bending these latter over into a hook to prevent their pulling loose. We next uncoil the leading wire as far as it will go—in this case 250 feet—and connect the two free ends of the leading wire to the two binding posts on the blasting machine. It does not matter which wire goes to which post. Just as we get ready to fire, a team is seen coming up the road. This shows the advantage of electric firing, because if we had lighted the fuse when we left the boulder we should have had to go down the road and warn all vehicles to stop, a thing they do not particularly like. With the electric blasting, however, we merely wait until the team has passed. Then we lift the rack bar of the blasting machine up as far as it will go and push it down with a sudden, quick, powerful movement as hard as we can. This generates an electric current which travels down through the leading wires and fires the cap, which in turn explodes the dynamite, and if we have gauged the charge correctly the boulder is broken in pieces of a size which can readily be loaded on a stone boat and taken away.—Arthur La Motte, Mgr. Technical Section, Explosives Dept., E. I. du Pont de Nemours & Co.

DON'TS FOR TRUCK DRIVERS

DON'T try racing with a touring car; your truck was built for strength not for speed.

Street car tracks are nice on springs, but hard on tires—and steel costs less than rubber.

Don't neglect a loose part, even though it seems to operate more freely that way.

Don't forget to watch the other fellow ahead; a slow stop on your part nearly always costs you a punctured radiator.

Use your brakes when getting "spotted;" platforms were built to load from not for bumping posts.

Don't drive too close to the curb; edge-trimming is a fine institution for pie crusts, but to expensive for truck tires.

MICHIGAN CROPS

HISTORY OF THE IRISH POTATO

THE potato is not a root, as many are inclined to think. It is an underground stem which has become thickened, and which is a storehouse of food for the new plant. The eyes are auxiliary buds from which the stems and roots come when the potato begins to grow.

So many authentic evidences of the nativity of the potato in temperate South America, from Chili to Colombia, that this region is indisputably considered its original home. It is said that potatoes grow wild in Chili at present.

The Irish potato, *Solanum tuberosum*, belongs to the Solanaceae. *Solanum* is the Latin for nightshade, hence it is a member of the nightshade family; to this family also belong our good friend the tomato, the ground-cherry and the beautiful winter flower the bittersweet.

Also some we do not like so well, as the nightshade and the tobacco. The genus *Solanum* contains a great many species now distributed all over the world, but most abundant in the south temperate zone.

From Virginia to Europe

The potato was introduced into the colonies in the latter part of the 16th century, but just how it was brought there is not exactly known. It is possible that it was obtained from the Spanish traders as the Spanish were using it quite commonly as a food at that particular time.

Undoubtedly the Spaniards had become acquainted with the potato during their conquest of Peru during 1532-1585. Our best authorities say that there is no positive evidence to show that the potato was utilized by the Indians before the arrival of the white people. From Virginia it was taken to Europe.

First a Cattle Food

When the potato was first discovered and used for food it did not make the palatable and appetizing dish it does today. It was much smaller and somewhat bitter in its taste. It was first, both in England and in other parts of Europe, thought that it might serve as food for cattle. Later it was decided that it might be used as a food for the poorer classes of people, and that it might be cultivated for a food for use during emergencies, such as famines and when grain crops would fail.

Now Indispensable

For a long, long time it was cultivated indifferently. People evidently were skeptical and the result was the potato did not improve very rapidly. It is only during the latter age of scientific cultivation that the potato really did improve, and this was through better cultivation, breeding and cross-breeding. Thru this it has reached its present state of perfection and become an indispensable dish for rich and poor.

Although the potato can now be grown in almost all temperate and sub-tropical regions, the climate sets an irrevocable stamp upon it. The potato raised in the warm climates bring a high price in our markets in the spring, but it cannot in the least compare with the much superior article grown in the North where climatic conditions are the more nearly like those where it originally grew—South American temperate regions. It prefers cool climates with rich, fertile soils and reached the climax of perfection in the north and northwestern states and Canada.

Murphy's Father

The potato was not generally cultivated in the United States until after 1800. The people of the United States are greatly indebted to the efforts of Rev. Chauncey E. Goodrich of Utica, New York, for the present high state of perfection the potato bears. In 1842, in the hope of improving the potato, Rev. Goodrich sent to South America for some wild tubers and during the following sixteen years he conducted experiments. The results were that he originated about a half-dozen new varieties of great value, among which were the forerunners of some of the present leading varieties which we enjoy so much today, one of them being the Early Rose.

Why Irish?

Where did the potato acquire the name of Irish potato? This question

is often asked. The name is certainly misleading, for Ireland is not its native home. It is true that Ireland opened her doors to the lowly potato and had succeeded in bringing about many improvements on the crop before the rest of the European countries realized its value and good qualities.

It is also said that colonists had taken potatoes along back to Europe after they had in some way been introduced into the American colonies from South America, and after they had been cultivated for a time had been brought to America as Irish potatoes. It is possible that they never will know exactly how the name originated.

BEST KIND OF CLOVER FOR HAY

I would like to know through your paper which kind of clover makes the best quality of hay. The Red clover or the Alsike? Which can be most successfully raised on all kinds of soil and whether alsike is hard on land?—N. K., Midland, Mich.

—Alsike is a hardier, longer lived plant and adapted to a wider range of conditions than Red Clover. Alsike will grow on land that is too wet and too acid for Red clover.

There is but little difference in the feeding value for hay. The following table from Henry's Feeds and Feedings shows the digestive nutriment in one hundred pounds of each:

Dry matter: Alsike 87.7, Red clover 87.1; Crude Protein: Alsike 7.9, Red clover 7.6; Carbohydrates: Alsike 36.9, Red clover 39.3; Fat: Alsike 1.1; Red clover 1.8; Total: Alsike 47.3, Red clover 50.9.—C. R. Megee, Farm Crops Dept., Mich. Agricultural College.

HOW MUCH MARL SHOULD BE USED?

Can you please tell me where I can get material to inoculate sweet clover seed? Also, how much marl should one use to the acre, using the marl test, 95 per cent lime?—A. L. L., Traverse City, Mich.

—Material for the inoculation of sweet clover seed may be secured from the Department of Bacteriology, M. A. C., East Lansing. The price is 25c per bottle and one bottle contains sufficient material to inoculate a bushel of seed. Directions for application accompany the material.

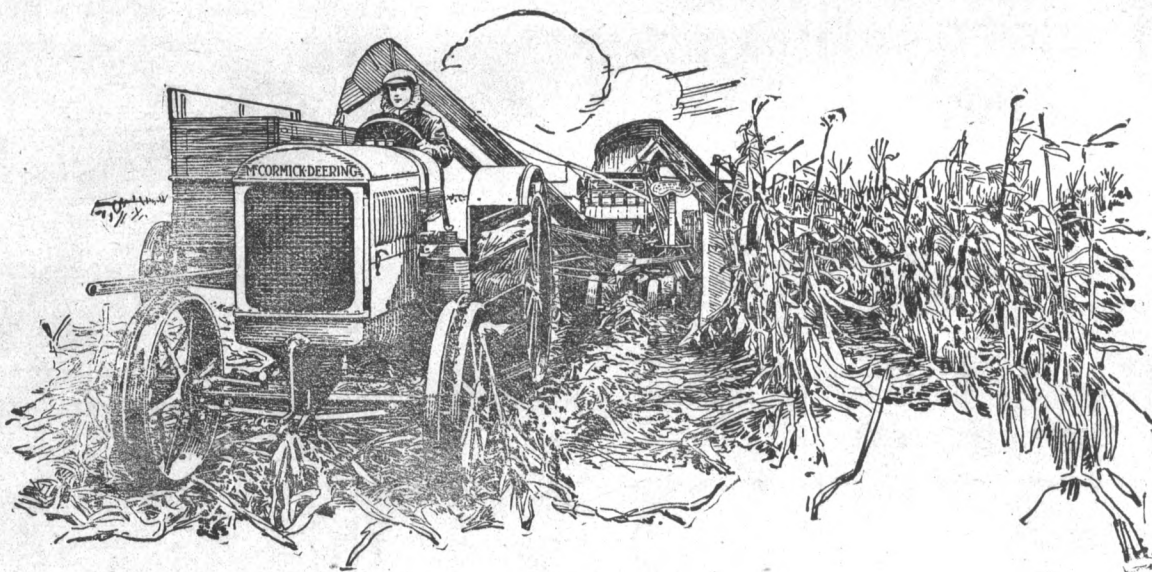
The amount of marl that should be used will depend largely upon the acidity of the soil. In general from four to six cubic yards should be used. There are a few soils that require a higher application.—C. R. Megee, Associate Prof. of Farm Crops, M. A. C.

SHALL WE HAND PICK OUR BEANS ON THE FARM?

(Continued from Page 3)

hour. Could give you statement from several friends that I cleaned a few for them just to show what it would do and for one neighbor cleaned the screenings which he brought back from the elevator and thought worthless, which he returned and sold for \$25. This took about three hours. The machine also proved to be the best for cleaning seed beans, except hand picking which few of us have time to do.

After finding a way to increase the capacity to 30 or 40 bushels per hour and realizing that the farmer should have a chance to clean his own beans for market, applied for patent. This is as far as I ever got have not had time to build a complete machine for myself as the other farm work takes all of my time. Have talked with some manufacturing concerns but they seem to think that the elevators should have the chance to pick the beans and take it away from the farmer or they find fault because there would be very few repairs or the bean growers are losing thousands of dollars by not having proper ways of cleaning seed and paying the elevators for hand picking their beans while they do a greater part with mechanical pickers and keep the profit. Here is hoping that this will be stopped some day.—Lee A. Medcalf, Fairgrove, Mich.



Let Livestock Put Your Corn Crop in the Bank

The corn crop will soon be ready—and there is one best way to turn the crop into money. Sell your corn on the hoof! Low-priced grain produces cheap pork and beef, yet the livestock market promises fair. By harvesting your corn with the least possible man labor, and putting both ear and stalk into shape for feeding, you can fatten livestock this winter and sell it at a profit.

Big factors in the success of this plan will be McCormick-Deering corn machines. Corn binders and ensilage cutters are doing the early work on many farms. Later you can pick the corn with a mechanical picker that enables two men to do the work of from five to seven men. Pick your own crop quickly, then pay for your McCormick-Deering Corn Picker by helping some of your neighbors with their crops.

Many acres of fodder will be fed in the coming winter. As soon as the corn has dried in the shock, put it through a McCormick-Deering Husker and Shredder. You can gauge your feeding better when you feed ear corn and roughage separately. McCormick-Deering Huskers and Shredders are built in sizes for home or custom work.

This fall hundreds of enterprising farmers will feed the corn and sell the crop on the hoof. And they will have McCormick-Deering Corn Machines ready for many more years of good work—both at home and in the fields of their neighbors. Good machines save man power, cutting your operating costs and adding to your profits. Talk it over with the McCormick-Deering dealer in your town.

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of America
(Incorporated)

Chicago, Ill.

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Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per square line per insertion. Fourteen square lines to the column inch or \$4.20 per inch, less 2c for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters, BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

ABSOLUTE DISPERSAL SALE

of the Federal Accredited Herd of

Peaceful Vista Farm Guernseys

the property of MR. W. J. BROWN, at

Peaceful Vista Farm, Redford, Mich

(12 Miles from Detroit)

Saturday, September 22, 1923

AT 11 A. M.

Twenty-two Advanced Register Cows
Imported Cows of Choicest Island blood
Bred and Unbred Heifers of Superb Quality
Three Choicely Bred Bulls

For Catalogue Address

LEANDER F. HERRICK

Sale Manager

405 Main Street, Worcester, Mass.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Sept. 21—Holstein, B. S. Gier, Lansing, F. J. Fishbeck, Sales Manager, Howell, Mich.
Sept. 27—Holstein, Grand River Stock Farm, Eaton Rapids, Mich.
Sept. 28—Holstein, Poland Chinas, Percherons, J. M. Hicks & Sons, Williams-
ton, Michigan.
Oct. 9—Holsteins, Art Bogart and D. B. Pinkerton, Vassar, Michigan.
Oct. 18—Holsteins, Howell Sales Company of Livingston County, Wm. Griffin, Sec'y, Howell, Mich.

G. P. PHILLIPS

THE GOLDEN RULE AUCTIONEER

Bellevue, Michigan

Pedigreed Sales a Specialty.

Write, wire or call for terms and dates.

HOLSTEINS

FASCINATION FARM, VASSAR, MICHIGAN.
Holsteins, registered fully accredited 82 1/2 lb. sire. Write your want.

3 Fine Holstein Bulls

ready for light service in October from heavy milking Dams and sired by Romeo King Pontiac Begs Korndyke. The price is very reasonable. Better drive over and see them.

SCHAFFER BROS., R. 4, Oxford, Mich.

HEREFORDS

Are You Considering
What to Feed This
Fall That Will Prove
Profitable

Before purchasing feeders investigate the Sothern Earlbire HEREFORD feed plan. A proven, profitable system of beef production of great benefit to the producer. Realize the utmost from your feeding operations. Write for information. HEREFORDS, Yearlings, Two-year-olds, Young cows with calves, all registered and T. E. tested at practical prices for producing Earlbire HEREFORD Baby Bevers. Terms granted upon proper credentials.

T. F. B. SOTHAM & SONS
(Herefords since 1939) Saint Clair, Mich.

Steers For Sale

70 Herefords 780 lbs. 76 Herefords 700 lbs.
80 Herefords 610 lbs. 88 Herefords 650 lbs.
86 Herefords 600 lbs. 80 Herefords 820 lbs.
Each bunch even in size, dark reds, deboned, good grass flesh. Some bunches fair flesh account short pastures. If in the market for real quality, one load or more your choice. Write stating number and weight preferred.
V. V. BALDWIN, Eldon, Wapello Co., Iowa

SECOND ANNUAL SALE

The Get of
MODEL KING REGIS GLISTA
Famous for Show Type and Milk Production

GRAND RIVER STOCK FARMS

EATON RAPIDS, MICHIGAN

Thursday, September 27th

Sale will begin at 10 A. M.

48—SELECTED REGISTERED HOLSTEINS—48

Composed of 22 Young Bulls and 21 Females

Fully Accredited Herd

Approved Bankable Paper of Nine Months Will Be Accepted

111 E. Main St.—COREY J. SPENCER, Owner—Jackson, Mich.

—HEREFORDS—

5 extra nice Repeater heifers one year old for \$500.00. Also 10 cows with ten nice lusty calves by side for sale.

If in want of bulls, write us.

ALLEN BROS.

616 So. West St. Kalamazoo, Mich.

We Have Bred Herefords Since 1860

Herd established by Gov. H. E. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm.

CRAPPO FARM, Swartz Creek, Michigan.

GUERNSEYS

FOR SALE: BULL CALF BORN IN MARCH. Right every way. Dam is dam of Belle Missaukee Beauty A. R. 8th cow in Class D. D. and State Champion in Class. Sire has 1/2 of same breeding as "Red Rose" and Missaukee Sally Class leading in G. G. Price for quick sale \$150.00. Buy type and production.

A. M. SMITH, Lake City, Michigan.

FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.

H. W. WIGMAN, Lansing, Mich., Box 52.

FOR SALE: REGISTERED GUERNSEY BULL calves for \$85.00 each. May Rose Breeding.

E. A. BLACK, Howard, City, Michigan.

SHORTHORNS

YOUR CHOICE OF MY ENTIRE HERD OF Shorthorns, several heifers, and young bulls in the bunch. Also cows and calves. Priced at fifteen cents per pound. One percheron mare. Priced at ten cents per pound.

R. G. PALMER, R. 4, Belding, Michigan

REGISTERED MILKING SHORTHORN CATTLE. Shropshire and Delaine sheep. Stock and prices right. Write wants. Also car load feeding cattle.

CLOVER CREST RANCH, Tawas City, R3, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write.

L. C. KELLY & SON, Plymouth, Michigan.

FOR SALE: SEVERAL REGISTERED Shorthorn Cattle. Tubercular tested. Inquire

PIPER & GOODALE, East Tawas, Michigan.

Polled Shorthorn Bulls. Some ready for service. Heifers 1 to 4 mos. old. O. I. C. and C. W. young hears. Frank Bartlett, Dryden, Mich.

JERSEYS

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.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.

FINDLAY BROS., R. 5, Vassar, Mich.

DAIRY and LIVESTOCK

HOLSTEIN TOURS WELL ATTENDED

WHEN the dust had settled away the Holstein Tours staged by the county agents, Dairy Department, M. A. C., and the State Holstein Association had covered twenty-two counties, visiting 131 farms and the number of breeders who toured totaled 661. In addition to this attendance there was held a noon meeting in Clinton county in connection with the Locking Glass Farmers' Club with a point gathering of 200, and a night meeting in Livingston county at the lake on the Brouse Farm where 300 Holstein enthusiasts took in the bathing, boating, movies and program. So well over 1,000 breeders were reached.

High honors for attendance and interesting program lay between Kent, Clinton and Livingston counties.

The Grand Round-up at the farm of D. D. Aitken, Flint, was indeed a success. Over 350 breeders were in attendance, coming from practically every nearby county. The editor of Hoard's Dairyman, A. J. Gillover, was the principal speaker of the afternoon. Other imported talent included Fred Koeing, Director of Extension for the National Holstein Association and W. B. Barney, the first Holstein breeder west of the Mississippi. The surprise of the occasion came when following a gift to Mr. Aitken of a silver loving cup from Genesee neighbors the costly set of True Type models of the breed were presented to him by Holstein cattle breeders of Michigan.—J. G. Hays, Ext. Spec. for Mich. State Holstein Ass'n. and Dairy Dept., M. A. C.

CATTLE SALE AT WEST MICHIGAN FAIR

ON Thursday, September 20th, about thirty cows with cow testing association records of 300 pounds of butterfat or better will be sold at the West Michigan Fair, Grand Rapids, Michigan.

This fair is unique in the history of Michigan Dairy Cattle Sales. It is the first effort that is being made to sell, at public sale, cows on a straight cow testing association basis. Very much interest in evident thruout the cow testing association area of Michigan.

The requirements for entry in this sale is a year's record in a Michigan cow testing association. The record must be three hundred pounds of butterfat or better, the cow to be T. B. tested, and definite information will be given concerning the total feed consumed, the value of her product, and the returns above cost of feed remaining to the owner. Both purebred and grade cows will be included in this sale. Farmers will be able to buy, at their own prices, cows on a definite basis of actual dollars and cents returned for feed consumed by each cow.

Considerable interest is evident in a number of associations to make entry in to this sale. The Fair management at Grand Rapids is offering free stall space, bedding and feed, and additionally is furnishing a high-class auctioneer free of charge. With sixty-one cow testing associations in Michigan totaling about eighteen thousand dairy cows and representing eighteen hundred cow testing association members, it can readily be understood that a great number of men appreciate the value of a cow testing association record on a cow. Hence the sale value, while no record prices are expected, will no doubt hold up with some of the best sales held in Michigan during the past months.

The records of the cows entered in this sale will be verified by a number of the Dairy Extension Department, M. A. C.—A. C. Baltzer, Extension Specialist in Dairying.

MICHIGAN'S FIRST PURE BREED SIRE SALE IS PLANNED

A NEW venture in livestock improvement work is the proposed pure bred sire sale which is being promoted by the Ionia County Farm Bureau. The sale is to be held September 22nd in the splendid new sales pavilion which was recently erected and placed at the dis-

posal of Ionia county farmers by the National Bank of Ionia.

The idea is believed to be a new one, and credit for it is given to B. F. Hall, of Belding. On his suggestion the Ionia County Farm Bureau is featuring the sale, the first of its kind, and is expected that it will lead the way to other sales of a similar nature that will result in great benefit to the live stock industry.

According to County Agent R. L. Helm, the proposed sale is novel and has the peculiar feature of being the first sale of the kind ever attempted in the state. It is to be a sire sale exclusively. There are no "equal rights" about it. The females of the species will not take part.

The plan briefly is this: Only sires are to be sold. Two to four good registered male animals of all breeds of dairy cattle, beef cattle, hogs and sheep being raised in the county are to be consigned by the various breeders and breed associations and sold at auction at this sale.

It is believed that most of those who come to this sale to buy will be farmers of Ionia and adjoining counties who are in the market for good pure bred males to improve their grade herds and flocks, and the purpose of this sale is to offer them an opportunity to get this kind of a male at an auction where prices are sure to be right. The movement will ultimately, it is declared, result in great improvement to the grade herds of Ionia county farmers by the more general use of pure bred sires.

The details of the sale are being arranged as rapidly as possible. Mr. Helm states, and nearly all of the consignments it is possible to handle have been made. The services of Col. J. P. Hutton, of Lansing, have been secured for the sale.

THE SILO ON THE RENTED FARM

RENTED farms are on the increase, according to the U. S. Department of Agriculture. In some states they represent nearly fifty per cent of the holdings. The land owner as well as the tenant is interested in making the farm pay, and it is well worth while to consider factors which cater to a dependable revenue from the land.

A silo on a rented farm not only makes it more attractive to a good renter but also encourages a longer period of renting, and all land owners know it is better to keep a good tenant for a term of years than to experiment by changing each year. Farm renting naturally favors crop farming, which is not only hazardous but tends to deplete soil fertility and fails to build up the land. General or stock farming requires more working hours of the tenant, but it is more sure of reward, especially if a good herd of milking cows is a part of the equipment. A renter who is willing to care for live stock should be encouraged, and the land owner will find a silo is one of the main factors toward popularizing stock farming and making it pay.

A Minnesota farmer, Mr. Patchen by name, recently reported to a farm paper an interesting comparison between a farm having a silo and one without such equipment. Mr. Patchen has a herd of Jersey cows and keeps careful record of each animal. He found on his rented farm with a silo that the average annual production was 325 lbs. of butterfat per cow. The next year on a farm not having a silo he was only able to get 260 lbs. of butterfat per cow. The third year he occupied a farm with a silo and increased the annual butterfat per cow 65 lbs. The silo gave this farmer an increase that represented a good profit, and with a herd of twelve cows and butterfat at 40c per pound it would equal \$312, which would about pay for a silo.

When we consider that the silo will not only feed the dairy herd but all other stock on the place including calves, steers and stock cattle besides colts, horses and mules, it is easy to figure how it will pay for itself in one year.

Both land owner and renter can depend on the silo as an economic means of producing stock and stock



It's NATURAL
for a hog to wallow

Provide a wallow and add

DR. HESS DIP and DISINFECTANT

then—

1. Your hogs will be free from lice.
2. They will have clean, healthy skins.
3. Disease germs will be destroyed.
4. Foul odors will be kept down.

If you do not have a wallow, use the sprinkling can freely. Sprinkle the animals—the sleeping quarters and pens.

Sprinkle the cow barns to keep them healthful and clean-smelling—

The poultry-house to kill the mites and lice.

Use it about the house—in the closets, sinks and drains. Excellent for the sickroom.

Standardized Guaranteed
DR. HESS & CLARK, Ashland, Ohio

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\$3.75 Per Square

Freight Paid
—as Follows

Freight charges prepaid in full on all orders of roofing from this advertisement at prices shown to Illinois, Indiana, Ohio, Wisconsin, Michigan, Minnesota, Missouri, Iowa, New York and Pennsylvania. If your state is not included, proportionate differences in freight charges will be allowed.

Order from this List!

Galvanized Roofing

These GALVANIZED sheets are suitable for roofing or siding, free from holes, squarely trimmed, recorrugated and given a coat of Red Paint free of charge.

No. SD-111—Heavy weight overhauled GALVANIZED 24-inch Corrugated sheets—per square of 100 **\$3.75** square feet

Painted Roofing and Siding

No. SD-112—Standard weight overhauled painted 24-inch Corrugated sheets—suitable for siding— **\$2.35** per square of 100 square feet

No. SD-113—Medium weight overhauled painted 24-in. Corrugated sheets—suitable for better siding **\$2.85**—per square of 100 square feet

New Government Corrugated Sheets

No. SD-114—BRAND NEW PAINTED 24-inch CORRUGATED SHEETS in 22 Gauge—purchased from the United States Government. A wonderful value **\$4.25**—per square of 100 square feet

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No. SD-115—NEW Slate Coated Roofing in rolls of 108 square feet complete with nails and cement. **\$2.00** Weight 35 pounds. Red or gray. Per roll

No. SD-116—New Heavy Smooth Surface Roofing—Sound and durable—easily taken care of—Adapted to every roofing need. Complete with nails and **\$1.65** cement—per roll

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35th and Iron Streets, CHICAGO

MAIL THIS COUPON NOW!

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Fill out coupon below and we will send you our estimate of cost for your building without obligation on your part.

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Size of Building or Roof Dimensions _____

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products. The silo is literally a necessity on the stock farm. It is a dependable forage bank and an insurance for a forage crop. Any corn which has been grown can be saved, even when injured by hail or frost. The silo saves labor in feeding, and furnishes a food which stimulates growth and milk production. It makes possible to carry more stock on the farm and saves much expensive grain feeding. It will encourage and keep the best tenant on the farm which means profit to both land owner and renter.—A. L. Haecker.

VETERINARY DEPARTMENT

LEGS GIVE OUT

I have a yearling ewe that is heavy with lamb and there is something wrong with her and I cannot find out what it is. She seems in good health, eats good and moves spry for a few minutes then acts as though her legs gave out and lies down. Bowels and kidneys seem alright. Can you tell me what is wrong with her and what to do for her?—S. A. M., Mancelona, Mich.

—I think the trouble with the ewe is due to her being heavy with lamb. Trouble like this sometimes occurs in ewes late in the gestation period, the cause has never been definitely determined. The trouble generally disappears when the ewe lambs.—John P. Hutton, Assoc. Prof. of Med. and Surg., M. A. C.

PRISON LABOR MAY SOLVE GOOD ROADS RIDDLE

(Continued from Page 4)

work on highway construction and their labor is proving efficient and most satisfactory.

The Human Side

We have mentioned the value of this plan to the individual convict, and this must not be lost sight of in the consideration of the use of convicts in highway construction. We would be less than human if we did not consider the rights of the individual who is confined for some misdemeanor against society.

The purpose of a prison and the purpose of prison confinement is to reconstruct the individual whose misdeeds are all too often the result of the degenerated physical body which preys on his mental processes.

It is undoubtedly true that with fresh air, wholesome food, the environment of the great outdoors, the sense of accomplishing something for the good of society or of paying a penance, as it were, by creating something which all people may enjoy, all these things must have their mental and physical effect on the individual convict. To know that he is earning \$1.25 a day is being credited to him for the day when he leaves the prison, must give him a feeling of accomplishing something for himself and remove from him the hopeless feeling that must come over the prisoner who sits alone within the confines of a prison cell and hopelessly views the future.

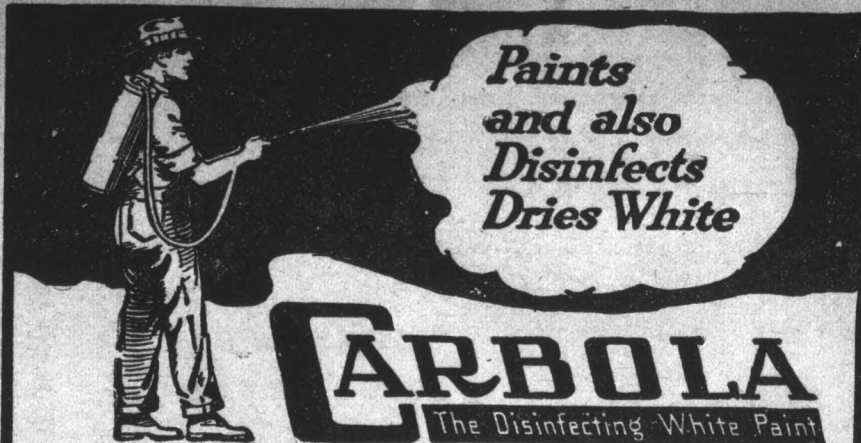
Communities Praise Work

The people in the communities where prison camps are being operated express themselves as not only highly pleased with the type of work being done, but with the conduct of the men who are employed in the camps having given them no cause for complaint.

At Grand Blanc the motion picture theatre owner invited the prisoners in for an evening of entertainment and the churches in that village have entered into the spirit and are doing all possible for the comfort and upbuilding of the men employed near them.

The tax payers in the state of Michigan can well be proud of the accomplishment which has been made to date, and with the enlarged plans for the coming year it may be that the riddle of the Sphinx has been solved and Michigan can have its system of paved highways joining every community, thus making all farm land more valuable, adding to the comfort, entertainment and education of every citizen of the state, and yet accomplishing it without a cost which is unbearable.

And it is well to remember that the fellows who cheer you today will be just as ready to jeer you tomorrow.



**Paints
and also
Disinfects
Dries White**

CARBOLA
The Disinfecting White Paint

So Easy to Use

—In Poultry Houses, Cow Barns, Etc.—

Carbola is a white paint and powerful disinfectant combined in powder form. Simply stir the powder in a pail of water and it is ready for brush or sprayer—no waiting or straining. *Does not clog sprayer. Won't peel or flake.*

The powerful disinfectant does not evaporate but keeps its strength on the walls. Carbola will not spoil even in water and may be kept standing in pail to be used as wanted. One pound covers about 100 square feet.

Results Are Sure and Certain

Carbola is neither poisonous nor caustic—harmless to the smallest chick or stock that licks a painted surface. It gives walls and ceilings a smooth, white finish, increases the light, improves the appearance, and helps make buildings clean, sweet-smelling and free from mites and contagious disease germs. There is nothing better than Carbola for dairies, poultry houses, cellars, dog kennels, rabbit hutches, garages, tree trunks, etc.

It has been used for years by more than 100,000 dairy and poultry farmers and by agricultural colleges and experiment stations. We have a big file of letters from farmers and storekeepers praising it. Give it a trial—you will never regret it.

AS A LOUSE POWDER for use on cattle, poultry, horses, hogs, dogs, etc., the dry powder will be found most satisfactory. The dry powder is applied like any other louse powder, and is very effective—a first-class louse powder at 10c a pound.

Your hardware, feed, seed, poultry supply or drug dealer has Carbola or can get it. If not, order direct—prompt shipment by parcel post or express.

5 lbs. 75c and 10c postage 10 lbs. \$1.25 and 15c postage 20 lbs. \$2.50 delivered
50 lbs. \$5.00 delivered 200 lbs. \$18.00 delivered

CARBOLA CHEMICAL CO., Inc., 310 Ely Avenue Long Island City, New York

HEAVES

Is your own horse afflicted?
Use 2 large cans. Cost \$2.50.

Money back if not satisfactory

ONE can at \$1.25 often sufficient. In powder form.

Most for cost

NEWTON'S
A veterinary's compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Inflammation, Worm expeller, Conditioner. At dealers or by parcel post.
30 years' sale
THE NEWTON REMEDY CO., Toledo, Ohio

DOG BOOK FREE
32 page book—how to keep your dog well—how to care for him when sick. Result of 35 years' experience with every known dog disease. Mailed FREE. Write today. Dept. 1099
H. CLAY GLOVER, V. S.
123 West 24th St. New York

ANGUS

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

SWINE

O. I. C.

O. I. C.'S

3 best fall gilts to farrow in Aug. and Sept. 60 spring pigs, not akin, recorded free. Good stock. OTTO B. SCHULZE, Nashville, Michigan.

FOR SALE—EXTRA FINE BIG TYPE O. I. C. pigs at farmers prices. Both sex. E. E. SALISBURY, Mendon, Michigan.

HAMPSHIRE

HAMPSHIRE: A FEW BRED GILTS LEFT. Place your order now for your Boar pig at a bargain. Pairs not akin. 10th year. JOHN W. SNYDER, St. Johns, R. 4, Mich.

DUROCS

Hill Crest Farms, Perrinton, Mich.
Duroc-Jerseys and Black Top Delaine Sheep. 35 stock rams to pick from. Farm 4 mi. straight south of Middleton. Gratiot Co. NEWTON & BLANK.

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

BIG TYPE DUROCS, SPRING PIGS, BOARS and Bred Sows. Write us your wants. SCHAFFER BROS., R. 4, Oxford, Michigan.

BERKSHIRES

TALCOA FARM OFFERS A VERY GOOD selection of bred Berkshire sows and sows with litters at farmers prices. R7, Lansing, Mich.

CHESTER WHITES

CHESTER WHITES FOR SALE—SPRING Bred of right type with quality. Shipped on approval. WILBER JONES, Reese, Michigan.

SHEEP

FOR SALE 400 BREEDING EWES.
For Prices Write
A. F. LONGPRE, Curran, Michigan.

WEST MARION OXFORDS, 25 YEARS Breeding. The best stock for sale. Both sex. WM. VAN SICKLE, Deckerville, Michigan

REGISTERED SHROPSHIRE SHEEP, 40 EWES 1 to 4 years, 50 ewe and ram lambs first class. Priced right. Flock Established 1890. C. L. LEMEN & SONS, Dexter, Michigan

GOATS

GOATS—TOGGENBERG BUCK IN STUD. Terms Reasonable. Write M. H. BIRD, R6, Lansing, Michigan

DOGS

For Sale-- Fox, Coon & Rabbit Hound
JOHN ATCHISON, Harrisville, Mich., R. 3.

German Shepherd, Alldales, Collies; Old English Shepherd dogs; Puppies; 10c illustrated instructive list. W. B. Watson, Box 27, Mason, Mo.



We can use a few earnest men and women part or full time in soliciting subscriptions and acting as our agents. Write

Circulation Manager
THE BUSINESS FARMER
Mt. Clemens, Mich.

AUCTION SALE

Having sold our farm we will sell at the farm 7 miles East of M. A. C. on M-16 Friday, September 28th, the following Registered Stock.

14 PERCHERON HORSES—All mares excepting 3 stud colts. One 1900 lb. dark gray 4 year old stallion.

15 HOLSTEINS—Registered and T. B. tested. All females. 10 cows under 5 years of age. Due to freshen in October.

Poland China hogs and a few breeding ewes. Farm tools and machinery. Usual sale terms. For Full Particulars Write to

J. M. HICKS & SON, Williamston, Mich.

FREE SAMPLE COUPON

Take this coupon to Dr. LeGear's dealer in your town and get free sample of Dr. LeGear's Poultry Prescription for your molting hens—also free 128-page book on "Care and Treatment of Stock and Poultry."



DR. LEGEAR'S POULTRY PRESCRIPTION
THE LAYING TONIC
A TESTED POULTRY REMEDY
DR. LEGEAR'S POULTRY LEADER
DR. L. D. LEGEAR MEDICINE CO.
MEDIUM SIZE

DEALERS: If your supply of Dr. LeGear's samples runs out, take name and write us for new supply. Dr. L. D. LeGear Medicine Co., St. Louis, Mo.

I want every poultry raiser to use Dr. LeGear's Poultry Prescription for molting hens, ten days free!

Your hens are right in the molt. You won't get eggs until it's over. Hurry it through. Get them laying.

You can do it—with special care.

Add one tablespoonful of my Prescription in mash feed, for 20 hens, every day.

It will put your hens in condition to offset the strain of the molt, and get them laying.

It purifies the blood! It keeps the bowels open! It improves the whole digestive system! It sharp-

ens the appetite! It's my own Prescription from my 30 years' poultry experience.

Test it now with your molting hens. See how quickly they get back to laying.

Go to my dealer in your town. He will give you my sample package free.

Try it! Then buy the size package you need for your flock. Ask at store.

IMPORTANT! Ask at store about my Poultry Course without cost to users of my Remedies.



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

Buy Dr. LeGear's Lice Powder

Use Dr. LeGear's Dip & Disinfectant

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate 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.

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.

Yearling Hens: English and American White Leghorns and Anconas. Reasonable prices. M. D. WYNGARDEN, Zeeland, Route 4, Mich.

BUFF ROCKS

Buff Rock Cocks, Hens, Ck's and Pullets, big, rich buff, low combs, rich yellow shanks, from our National winners and "Hogan" tested layers. J. C. CLIPP & SONS, Bx M. Saltville, Ind.

RHODE ISLAND REDS

WHITTAKER'S R. I. REDS. MICHIGAN'S greatest color and egg strain. Cockerel price list ready in September. Improve your flock with Whittaker's red cockerels. INTERLAKES FARM, Box 4, Lawrence, Mich.

BABY CHICKS

Tompkins Strain \$15.00 per hundred. Last hatch August 22nd. Quality breeder of Rhode Island Reds.

WM. H. FROHM, R. 1, New Baltimore, Mich.

HIGHEST CASH PRICES PAID FOR LIVE Poultry all kinds, Veal, Eggs, and Butter. A square deal always. Write for tags, etc. C. E. McNEILL & CO. 325 W. South Water St., Chicago

TAKE THE D. & C. WATERWAY trip to Buffalo. Restful, economical, all conveniences.



Poultry for Profit



MERITS OF WHEAT AS POULTRY FEED

WITH the price of wheat in several states lower than, or about equal to, the price of corn, poultry specialists in the United States Department of Agriculture point out the desirability of giving wheat an important place in poultry rations. The influence of war-time conservation of wheat is still evident, according to specialists of the department, but there are no longer any economic reasons for conserving wheat or using it solely as a human food. On the other hand, it is so plentiful and cheap in many localities that it is a more economical livestock and poultry feed than corn.

Corn and wheat are the best grains for poultry and are about equal in value for this purpose, although wheat can be fed alone better than corn, which is inclined to be fattening. Best results are obtained when wheat and corn are combined about equally in egg-laying rations. Following is a good scratch mixture: 1 pound cracked corn, 1 pound wheat, 1 pound oats.

While wheat is an excellent feed for dairy cows and meat animals. It needs to be ground for best results with such stock, whereas poultry relish it and utilize it as whole grain.

The department points out also that wheat at 89 cents per bushel, which was the approximate current price recently in seven Middle Western States, is \$29.66 per ton, which is a lower price than prevails for various other feeds having no greater nutritive value. The department's recommendations for putting wheat back on a pre-war basis as a stock feed are reinforced by action already taken by some farmers. A cooperative association of Michigan farmers recently published a list of feeds for which wheat could be economically substituted. This association contends that the local wheat market was below the cost of production and that local wheat would bring more when fed to livestock than when sold on the open market.

POULTRY FARMER'S BUSINESS IN NEED OF STANDARDIZATION

THE farmer has always been a poultryman. The fowl is more at home on a farm than in any other place in the world. There isn't a single feature about the poultry business that does not make it peculiarly adaptable to the farm life. The hen is native to the open country and always has been.

There is a good reason for this. There is no place in the world where the opportunities are more abundant and inviting for poultry culture than on the farm. The broad open fields, the largeness of room for houses and yards, the limitless chances for the production of everything that is needed for the feeding and the care of birds—everything in fact appears to invite the man of the soil to engage in this great business of raising fowls on a large scale. These statements will surely not be doubted nor disputed.

There is need of standardization of the farmer's poultry business.

What do I mean? This is my thought—there are too many farmers who are conducting the poultry end of their calling in practically the same old way as it was done on the average farm a hundred years ago. They may keep more hens; but they are not down to date in their methods.

Standardization means reducing your business to a system or standard corresponding to the best science that has been discovered for that particular work. Its the average farmer doing this? Is he adopting the most efficient means and methods for getting the largest profits out of a flock of 250 hens? I believe we must all admit that there is still much for the average farmer to do in this respect.

Many are coming along in fine form. But there is still a feeling that the keeping of hens is rather a trifling side line, unworthy of the sedulous attention of the men of the ranch. Accordingly, either the wo-

men have to take care of the birds and raise the chicks and market the eggs or that whole department of the farm job goes by default.

This ought not so to be. I know apparently very intelligent farmers who have been declaring for the last five years that the poultry business "is being overdone," and that the bottom will all fall out of it "next year." But each season these men have seen thousands of other people making fine little fortunes from their hen yards while they themselves have continued to scrape along milking cows and raising corn and potatoes at what they declare to be a loss. Why not try losing along some other line?

Many farmers are on this job; but I insist there are too many who are not making the best of a good thing. They need not only information, but inspiration. They need to come more down to date in hatching and housing, in caretaking and in marketing.

WEST MICHIGAN FAIR TO BE BEST EVER

MAKING farming pay! That in short, is the slogan of the officials who are behind the big educational program which will be presented at the coming West Michigan State Fair, Grand Rapids, September 17 and 21.

A visit to the fair will be like taking a short course at an agricultural college. It will give visitors many new ideas. The farmer, who is anxious to keep in step with the progress that is being made in agricultural and live stock breeding, will find much of interest to him. He will have a chance to study the various exhibits, make comparisons, and learn ways of improving his own crops and livestock.

One of the most interesting departments of the fair will be the machinery show. Machines of many different types, that will perform every conceivable task on the farm, will be exhibited. Factory experts will be on hand to explain their workings and tell exactly how much man-power each machine will replace.

The livestock show, with hundreds of head of fine cattle, sheep, swine and horses, valued at thousands of dollars, will be one of the show places on the grounds. Premiums totaling \$18,000 will be awarded to the owners of prize winning animals.

The West Michigan Fair this year will be the best ever staged according to Secretary L. A. Lily. Both the educational and entertainment ends of the program will be of the very highest standard.

NEW POULTRY COURSE COMPLETED BY NOTED EXPERT

DR. L. D. LEGEAR, V. S. of St. Louis, has just completed an extensive Poultry Course of 12 volumes and 33 lessons, in which he has given the practical knowledge of his 30 years of poultry raising experience.

Dr. LeGear is known throughout the United States as a National Poultry Expert, and it is the practical handling of the back yard flock that Dr. LeGear particularly covers in his Poultry Course studies.

Volume No. 12 of Dr. LeGear's Course is of particular interest at this time because it covers every phase of the molting period and gives complete instructions on how to get hens back to egg laying quickly.

This complete Poultry Course is not for sale but it being offered by Dr. LeGear without cost to users of his remedies. These volumes can be secured through any store where Dr. LeGear Remedies are sold.—(Adv.)

Calamity Ed had just taken his son back of the woodshed and thought the time ripe for a heart-to-heart talk.

"Eddie," said he as impressively as he could, "suppose I should be taken away suddenly, what would become of you? Eh?"

"Well, I'd stay here, I guess. Question is, what would become of you?"

"JUST WHAT I WANTED"

Your answer to inquiry No. 2183 at hand. The information is just what I wanted. Thank you.—E. S., Pittsford, Mich.

NEW SUBSCRIPTION RATES

(Effective April 2nd, 1923)

ONE YEAR60
TWO YEARS	\$1
FIVE YEARS	\$2

The Michigan Business Farmer,
Mt. Clemens, Mich.

I enclose \$..... for a years subscription, this entitles me to every department of Business Farmer Service, without further cost for the full period of my subscription.

M..... RFD No.....

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(If it is a Renewal, mark X here ☐ and if possible send the address label from this or any recent issue to avoid mistakes.)

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.

PRODUCTION AND TRADE:

August forecasts indicate a yield of wheat 8 per cent less than last year. Corn remains the same. Potatoes show a decline of 16 per cent. Cotton an increase of 17 per cent. The commercial apple crop promises an output 6 per cent greater than last season and peaches 17 per cent less. Comparisons with the five year average for eighteen crops may be noted in the accompanying table.

Industrial production is continuing at a high rate. In the first seven months of 1923 the output of automobiles almost equaled the output for the record year 1922. Total production for this year promises to be four million cars which is about one-third of the automobiles in use at the beginning of the year.

Building expenditures, the first six months of 1923, have been 32 per cent more than for the corresponding period in 1922. Prices of building materials during this period averaged 24 per cent higher than the same months last year.

Freight car loadings are at high levels except for grain and grain products. Railroads have added to their equipment and are meeting the demands made upon them without the congestion of a year ago.

Mail order sales, January to July this year, are 37 per cent above the same months in 1922.

I. Production and Trade.

I. Agriculture: U. S. Production—000,000 omitted.

	August, 1923	1922	Average, 1917-1921	1923*
	Forecast			Per Cent
Winter wheat, bu.	568	586	590	96
Spring wheat, bu.	225	276	245	92
All wheat, bu.	793	862	835	95
Corn, bu.	2982	2891	2931	102
Oats, bu.	1316	1201	1378	96
Barley, bu.	202	186	192	105
Rye, bu.	64.8	95.5	70.3	92
Buckwheat, bu.	13.5	15	14.9	91
White potatoes, bu.	380	451	388	98
Sweet potatoes, bu.	93.1	110	94.3	99
Tobacco, lbs.	1474	1325	1361	108
Flaxseed, bu.	19.1	11.7	9.7	197
Rice, bu.	32.9	42	41	80
Hay, tame, tons	81.3	96.7	83.3	98
Hay, wild, tons	16.0	16.1	16.2	99
Cotton, bales	11.5	9.8	11.2	103
Sugar beets, tons	6.5	5.2	6.9	94
Apples, total, bu.	188	201	160	118
Apples, com'l, bbl.	32.9	31	25.7	128
Peaches, bu.	47.3	56.7	42.7	111
Peanuts, lbs.	684	624	1025	67
Grain sorghums, bu.	113	90.4	103	110

* As per cent of average of 1917-1921.

2. Mining (Federal Reserve Bank of New York):

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

	June, 1923	May, 1923	June, 1922
Anthracite coal	98	98	1
Bituminous coal	109	114	43

3. Manufacturing (Federal Reserve Bank of New York):

	June, 1923	May, 1923	June, 1922
Wheat flour	107	113	104
Meat	120	120	112
Sugar	79	118	135
Cotton	96	108	92
Wool	118	118	116
Pig iron	122	124	79
Steel ingots	114	122	82
Copper	97p	95	75
Gasoline	108	108	101
Cement	123	133	120
Wood pulp	120	120	110
Lumber	125	91	91
Tobacco	93	97	97
Automobile	159	150	...

* Not available; p, preliminary.

4. Building Expenditures (Bradstreets):

	1923	1922	Per Cent Increase
January to June, six months	\$1,625	\$1,239	31.0
July, 160 cities	202	193	4.5

5. Transportation (000 omitted):

	Week Ending Aug. 4, 1923	Same Week Ago	Same Week Year	Week Ending Aug. 4, 1923*
Freight car loadings:	1923	1922	1921	1923*
Total	1,033	855	843	123
Grain and grain products	53	31	58	91
Livestock	31	25	26	119
Coal	191	160	79	242
Coke	13	14	8	163
Forest Products	76	54	55	138
Ore	84	76	67	125
Merchandise	240	209	228	105
Miscellaneous	345	287	320	108

* As percentage of week year ago.

6. Employment:

	July, 1923	June, 1923	July, 1922
Out of 64 industrial centers employment:	37	31	43
Increased over previous month in	27	33	21
Decreased over previous month in	27	33	21

11. FOREIGN TRADE:

Total exports in dollars for the twelve months ending June, 1923, were 5 per cent over the previous year while imports jumped 45 per cent. Pork exports, in volume, were 18 per cent greater this year; wheat exports were 20 per cent less; cotton 22 per cent less; tobacco practically the same.

European money with the exception of England, Holland and Sweden, is quoted lower than last year.

III. MONEY AND CREDIT:

Interest rates on four to six months commercial paper have made a steady advance since the low point of 4.25% in July, 1922, the rate now standing at 5.19%. The rate in August, 1920, at the beginning of the depression, was 8.25%.

IV. PRICES:

The latest figure on farm purchasing power, as published by the United States Department of Agriculture, is 71 compared with 72 for a year ago. For the first half of 1923 the figure averaged 69 compared with 72 for the same period last year.

Prices of many products are improving. Cattle, hogs and lambs are higher than a year ago. Wool is holding even. Dairy and poultry products are stronger. Corn is 25 cents higher. Wheat, although below the average for last year, is the same price as for the corresponding date a year previous. Cotton is 3 cents higher. Potatoes have taken a big jump.

Out of 25 commodities 17 are above a year ago; 5 are below and 2 remain unchanged. Compared with last month, 17 are higher and 7 lower.

7. Bank Debits:

	Units of \$1,000,000,000	July, 1923	June, 1923	July, 1922
New York City		\$18.32	\$21.04	\$19.71
Outside bank debits		18.18	19.53	16.34

8. Mail Order Sales:

	July	Seven Months Ending July	1923	1922
Montgomery	1923	1923	1923	1922
Ward & Co.	\$7,491,908	\$5,110,163	\$7,928,658	\$4,910,634
Sears Roebuck ..	14,960,939	12,244,961	12,737,196	9,478,186

II. Foreign Trade.

1. Exports (000 omitted):

	June	Twelve Months Ending June	1923	1922
Commodity:	1923	1922	1923	1922
Grand total, all exports	\$312,239	\$327,639	\$3,886,550	\$3,699,909
Beef and veal, lbs.	2,319	2,760	28,262	30,768
Pork, lbs.	65,921	60,897	814,665	683,875
Lard, lbs.	64,605	57,249	952,642	812,379
Neutral lard, lbs.	1,182	1,708	26,494	19,573
Butter, lbs.	460	1,104	9,410	7,512
Cheese, lbs.	372	447	8,446	7,471
Hides and skins	294	410	3,496	4,573
Corn, bu.	1,918	11,646	94,064	176,386
Meal and flour, bbls.	51	34	634	776
Wheat, bu.	9,252	14,006	154,951	208,321
Wheat flour, bbls.	806	932	14,883	15,797
Oats, bu.	100	6,727	18,574	15,987
Oatmeal, rolled oats, lbs.	10,377	11,650	123,115	94,491
Fruits and nuts	\$3,449	\$3,141	72,665	66,629
Vegetable oils, fats	655	786	12,732	13,446
Sugar, lbs.	70,938	367,564	749,855	2,002,038
Leaf tobacco, lbs.	49,730	30,324	445,186	451,888
Cotton, bales	215	491	5,066	6,542
Wool, lbs.	1,040	717	7,320	5,118

2. Imports:

	June	Twelve Months Ending June	1923	1922
Grand total, all imports	\$320,257	\$260,461	\$3,781,259	\$2,608,079
Beef and veal, lbs.	1,058	3,143	32,481	28,001
Pork, lbs.	71	27	998	930
Butter, lbs.	2,933	80	15,772	9,551
Cheese, lbs.	7,075	4,471	54,555	34,271
Hides and skins	\$13,434	\$8,220	140,392	78,899
Corn, bu.	21	5	138	125
Wheat, bu.	122	1,610	18,013	14,466
Flour, bbls.	18	64	429	619
Oats, bu.	8	127	293	1,733
Fruits and nuts	\$6,897	\$6,503	70,563	60,431
Vegetable oils, fats	\$8,032	\$5,176	64,479	55,028
Sugar, lbs.	694,213	1,030,129	8,422,483	8,464,329
Leaf tobacco, lbs.	3,534	4,741	73,794	65,225
Cotton, bales	14	13	494	375
Wool, lbs.	30,129	16,940	525,473	255,087

3. Prices of Foreign Drafts:

	Nominal Gold Value	Aug. 20, 1923	July 23, 1923	Aug. 21, 1922
England	\$4.87 to 1 £ sterling	\$4.54	\$4.59	\$4.48
France	19.3c to 1 franc	5.55c	5.99c	7.98c
Germany	23.8c to 1 mark	0.00014c	0.0002c	0.09c
Belgium	19.3c to 1 franc	4.43c	4.97c	7.58c
Italy	19.3c to 1 lire	4.30c	4.375c	4.53c
Spain	19.3c to 1 peseta	13.45c	14.31c	15.64c
Austria	20.3c to 1 crown	0.014c	0.014c	0.014c
Denmark	26.8c to 1 crown	18.07c	17.50c	21.63c
Norway	26.8c to 1 crown	16.37c	16.24c	17.43c
Sweden	26.8c to 1 crown	26.65c	26.65c	26.51c
Holland	40.2c to 1 florin	39.31c	39.21c	38.93c
Argentina	42.5c to 1 peso	32.60c	34.15c	36.38c
Brazil	32.4c to 1 milreis	10.00c	10.35c	13.45c
India	48.7c to 1 rupee	30.30c	30.80c	29.13c
Japan	49.9c to 1 yen	48.88c	48.70c	47.80c
Canada	100c to 1 dollar	97.75c	97.44c	99.876c

4. Discount Rate of the Bank of England:

	Aug. 15, 1923	Month Ago	Year Ago
4%	4%	4%	3%

III. Money and Credit.

1. Gold, Currency and Bank Deposits (000,000 omitted):

	July 1, 1923	June 1, 1923	July 1, 1922
Stocks of monetary gold in the United States	\$4,049	\$4,023	\$3,786
Total supply of currency in the United States	4,730	4,706	4,374
Total deposits in National Banks	\$17,036	\$17,420	\$15,390

2. Gold Movement (000 omitted):

	June, 1923	June, 1922	1923	1922
Exports of gold	\$548	\$1,600	\$49,021	\$23,345
Imports of gold	19,433	12,968	284,089	468,318

3. Federal Reserve Ratio:

	Aug. 18, 1923	July 11, 1923	Aug. 16, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	77.3%	75.4%	80.2%

4. Interest Rates:

	July, 1923	June, 1923	July, 1922
4-6 mos. commercial paper	5.19%	5.12%	4.25%
60-90 days commercial paper	4.94%	4.88%	3.94%

5. Discount Rate of Federal Reserve Banks:

	Aug. 1, 1923	July 1, 1923	Aug. 1, 1922
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4½-5%	4½-5%	4-5%

6. Stock and Bond Prices:

	Aug. 9, 1923	July 6, 1923	Aug. 11, 1922
20 Industrial stocks	\$89.11	\$88.65	\$97.06
20 Railroad stocks	78.11	77.99	89.32
40 Bonds	87.31	86.47	91.14

7. Business Failures:

	Week Ending Aug. 9, 1923	Week Ending July 5, 1923	Week Ending Aug. 10, 1922
Bradstreets	296	268	368
Duns	268	241	402

IV. Prices.

1. Wholesale Prices of Farm Commodities:

	Quotations at Chicago except as noted.	Aug. 21, 1923	Month Ago	Year Ago
Fat hogs, cwt., average		\$8.15	\$7.20	\$8.00
Beef steers, good native, cwt., av.		10.75	9.65	9.50
Fat lambs, cwt., average		13.00	13.25	12.80
Fat sheep, cwt., average		6.75	5.75	6.75
Wool, Ohio delaine unwashed, lb.54	.56	.55
Butter, 92 score, lb.44	.395	.34
Cheese, No. 1 twins, lb.2375	.2175	.19
Eggs, fresh firsts, doz.2575	.23	.2275
Poultry, hens, lb.23	.2025	.225
Wheat, No. 2 hard, bu.		1.04	1.00	1.035
Corn, No. 2 mixed, bu.90	.89	.825
Oats, No. 2 white, bu.405	.4325	.33
Rye, No. 2, bu.66	.655	.695
Barley, bu.62	.66	.545
Kafr, No. 2 white, cwt. (K. C.)		1.565	1.505	1.64
Hay, No. 1 timothy, ton.		28.00	23.50	22.50
Flax, No. 1, bu. (at Minneapolis)		2.32	2.725	2.225
Cotton, middling, lb. (New York)2575	.2465	.2280
Beans, white, cwt. (f. o. b. Michigan) ..		5.60	5.20	8.25
Potatoes, cobbles, cwt.		2.35	1.35	1.50
Onions, Washington yellows, cwt.		2.35	3.05	2.35
Apples, summer varieties, bu.		1.35	1.25	.85
Hides, No. 1 native, heavy, lb.1475	.15	.20
Sugar, fine granulated, lb. (N. Y.) ..		.0755	.087	.07

2. U. S. Department of Labor Relative Wholesale Prices:

	Prices in year 1913 equal 100.	July, 1923	June, 1923	July, 1922
All commodities (weighed average or general price level)		151	153	155
Farm products		151	138	135
Food products		141	142	142
Clothing and clothing		193	198	180
Fuel and lighting		183	186	254
Metals and metal products		145	148	121
Building materials		190	194	170
Chemicals and drugs		128	131	121
House furnishing goods		187	187	173
Miscellaneous		121	123	114

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)			
Prices in year 1913 equal 100.			
Commodity:	June, 1923	May, 1923	June, 1922
Cotton	211	207	164
Corn	146	143	105
Wheat	121	136	131
Hay	106	118	108
Potatoes	129	119	160
Beef Cattle	99	98	99
Hogs	85	95	122
Eggs	108	113	106
Butter	138	143	121
Wool	248	250	196



MARKET FLASHES



FOOTE'S MARKET LETTER

BY W. W. FOOTE

Business Conditions Good

MARKETS are in good shape compared with a few months ago and business is reported better from all industrial circles. It seems that the mid-summer lull has passed and there is a growing expansion of consuming and purchasing power everywhere. The population of the United States has increased around 14,000,000 during the last ten years and our yearly national income has increased around \$16,000,000,000 compared with ten years ago. The total of our savings deposits has grown from \$6,000,000,000 to \$14,000,000,000. The wide spread apprehension which has prevailed throughout all industries earlier in the year, has given way to more confidence and the outlook for the remainder of the period is more or less optimistic. Foreign trade balances are much in our favor, railroads report the heaviest volume of business in history, stock markets have improved materially within the last two weeks, and everything points toward further expansion and betterment of all businesses.

A recent act producing much good feeling in industrial world was the recognition of Mexico by the United States. That apparently small country is virtually an undeveloped area and there are vast resources of wealth yet to be found.

The purchasing power of the agricultural population continues to grow as indicated by increasing sales of those who cater to the rural districts. With the exception of the one crop man, the wheat raiser, most producers are reporting favorably as to their year's work. The cotton planter in the south has been hard hit but he learned the lesson of diversified farming a few years ago and now his condition is not so serious as the specialized wheat farmer. The cotton industry as a whole however, is of much concern to the United States who for many years controlled the world production of that staple product. Reduction in this year's crop is so great there is possibility that our country may lose the lead in production and Great Britain, who has long hoped to gain in that commodity is bending her efforts to lead in the world production.

The coal strike has passed without serious damage to business and peace generally exists in this country contrasted to the turmoil in Europe and the great calamity which has recently befallen the Japanese people. Here, we are busily laying up enormous sums of money for rainy days and still have immense amounts to send over to aid the Japs in their unfortunate predicament. True it is, that there is a certain class of farmers who have lost and seldom ever gain much. According to statements made by many bankers from all over the country at a meeting of the Land Banks Association recently, the American farmer is enjoying the best period in the history of agriculture. It was estimated that the value of agricultural land was \$67,000,000,000 and the estimated value of this year's crops was \$8,500,000,000, which is not a bad return even when the cost of production is deducted. More than 50 per cent of the farms in America are clear of debt and around 95 per cent are in sound financial condition.

The Weather Factor

There has been much rainfall in the corn belt states, and small grains have been damaged considerably. The corn crop is still growing and there is a possibility of much of it maturing late. Unless mild dry weather comes soon, there will be danger of early frosts. On the other hand there are some localities which have suffered from long dry spells. There has been a drought in the bean growing areas of Michigan to such an extent that the crop has been cut in half. Inland potato growing sections have also been dry but along the lake shore this crop has done well. Another pest which has caused much damage to the Michigan crops is the grasshopper. Innumerable

MARKET SUMMARY

Milling demand holds wheat firm. Moderate demand for corn. Oats steady. Rye quiet after decline. Beans firm. An oversupply of fruit on the market and prices are declining. Butter and eggs steady to firm. Poultry not wanted. Cattle trade active. Sheep higher in price. Hog trade active but prices lower.

(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.)

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of this foliage eating insect has invaded certain regions and stripped the trees and legumes of their foliage leaving the country devastated and driving many farmers from their land. In the fruit growing sections of the western part of the state, crops are good but there is a shortage of labor for harvesting the fruit. Labor in the near by cities is so dear that it is hard to find any one willing to work on farms. The dairy industry is rapidly growing in Michigan and most dairy men are doing business on a small scale which eliminates the need of much help.

Wheat Situation

Eastern wheat farmers have not experienced the great worry that western wheat men have suffered. Farming is more diversified in the east and when one crop proves unprofitable, others take its place. Recently there has been an uncertain trend in the wheat market and there is no reason to believe that big advances will come nor is there reason to think that prices will decline sharply. The market fluctuates but at present is still above the dollar mark and some choice grades of cash wheat are quoted from \$1.10 to \$1.16. Reports from abroad have influenced the market at times and there will have to be an increase of foreign demand to absorb the surplus of this grain. The decrease in export business is apt to more than offset the reduction in this year's crop as compared with last year. People who have been abroad recently report that very inch of tillable soil is under cultivation and crops are in exceptionally fine condition. Europe will undoubtedly raise a great part of what she will consume this year. In this country farmers are storing their wheat in enormous quantities and are feeding and intend to feed most of the low grade wheat. Millers of this country apparently are aware of the fact that there will be but a little over production, if any, of choice wheat and they are now willing to pay good big prices for the best. An estimate of the 1923 wheat crop for countries north of the equator, which produce around four fifths of the world crop, was made recently by the United States Department of Agriculture. As compared with 2,566,510,000 in 1922 and 2,477,638,000 in 1921, this year's crop is estimated at 2,683,396,000 bus. The increase is the result of wide spread acreage in Europe and particularly France.

Corn markets at present are high and are making up for lost profits in wheat sections. Some of the best corn is now quoted at 90c. Oats also show higher prices than a year ago. An outstanding feature in the whole grain situation is that coarse grain values are higher than last year while meat is about the same. This, in face of all bearish propaganda, is surely surprising.

Meat Consumption

Consumption of dressed meat in the United States has been tremendous during the first half of this year and undoubtedly will continue on the gigantic scale for the rest of the year and as long as people are working. According to figures published by the research department of one of the largest meat packers, domestic consumption during the first six months of this year totals 2,494,000,000 lbs. of beef and veal against 2,375,000,000 lbs. during the same period last year. The consumption of mutton and lamb was 229,000,000 lbs. as compared with 209,000,000 lbs. the year previous and of pork, 3,330,000,000 lbs as compared with 2,633,000,000 lbs. during the corres-

ponding months in 1922. Pork consumption increased 26 percent over last year. Pork prices have been considerably lower taking the year as a whole and like wise the price on hogs. However, recent markets on hogs have made money for the farmer. This enormous consumption of meat products indicates industrial activity.

Live Stock Declines

During the last two weeks, live stock values have suffered a set back, but most traders are firm in their belief that the decline is but temporary and with light receipts prices on most stock will go higher. Most severe turndowns were registered on hogs and cattle. Today's prices however are at money making levels and still higher prices are looked for before the year is over. Choice light weight hogs reached \$9.75 early this week, that being the highest of the year. Strictly finished steers sold up to \$13.00 but closed with \$12.85 taking the best. Fat lambs sold late at \$13.40 with choice feeding lambs at \$13.60. Producers have been gambling on live stock recently paying very high prices for cattle to take out for short feeding periods and giving from 25 to 50c more for lambs than killers were willing to pay. At Chicago countrymen bought fat steers of choice quality at \$9.50 to 10.50 during the past week intending to put the cattle in the feed lots for two or three months and bring them back in the fall and cash them at high prices. This is a dangerous game of chance but there is always someone who like the thrill. The same condition exists at the Missouri River markets and steers have left that market for a short feed in the country costing \$10.00 and above. There has been a broad country outlet for thin stock recently and as a movement of western range cattle comes into full swing, the trade in stocker and feeder is expected to show further volume.

Shortfed cattle have been offered on the market in large numbers lately, while strictly finished beefs have been comparatively scarce. Receipts were too much for the needs of the trade and declines were forced almost daily. During the last ten days beef steers have been on a downward trend and as compared with the high time then, closing values this week were from 75c to \$1.50 lower. Finished steers however, were in a class by themselves and did not show more than 25c loss during that time. Thousands of cattle good enough for beef making went for slaughter at \$8.50 to 12.00 with some thin, ill-bred steers going as low as \$6.50. Many western rangers found killer outlet at \$7.50 to \$8.50 and to feeders at \$7.00 to \$8.00. A few meaty western steers found feeding outlet at \$8.50 to 9.00. Butcher stock also suffered in line with steers although the best corn fed offerings received the least decline. Most cows and heifers turned within a spread of \$4.25 to 6.50 with the best at \$8.00 to 9.00. Canners and cutter cows cleared largely from \$2.50 to 3.00 and good dairy cows sold by the head from \$60 to 90. Veal calves strengthened and closed at \$11.00 to 12.00 levels. Bologna bulls found outlet mostly within a spread of \$4.25 to 4.60.

On closing sessions hogs showed a little reaction from the low spots when the best went at \$9.00. Most of the desirable light hogs sold late at \$8.75 to 9.10 with tops at \$9.15. Desirable medium weight hogs cleared largely from \$8.40 to 8.65 and heavy butchers went at \$8.25 to 8.50. Rough, heavy packing sows closed on a \$7.00 basis for bottom,

and pigs also sold as low as \$7.00 with the best around \$8.25.

While the bulk of feeding lambs went at \$13.00 to 13.50 all week, packers bought the best fat lambs downward from \$13.25 to 12.75 mostly. Late in the week the best fat lambs sold up to \$13.40. Common lambs sold down to \$11.00 with culls as low as \$9.00. Sheep values dropped sharply. 75c to \$1.50 on heavy offerings. Even the best light ewes were worth downward from \$7.00 and heavies cashed at \$5.00 and under. These prices were the lowest since last June. Slow demand for heavy cuts of mutton were responsible for the decided break in sheep values.

WHEAT

The wheat market continued steady during the two weeks ending Saturday, September 1st, and prices advanced on some markets during that period. Foreign news has been of a bearish nature but demand at home has been sufficient to keep the market from weakening. The demand has been mostly from the millers. Mills have been good buyers ever since the crop started moving. There were times that it was reported that they were filled up but at no time did it appear that they were out of the market, and the demand has been on the increase for some time. The market at Detroit seems to be in a very healthy condition. Flour is moving freely for domestic and foreign consumption. Good wheat is not plentiful and farmers are not inclined to sell readily, preferring to hold and see if prices will not advance. The holding is being done by both winter and spring wheat growers. Friends of lower prices are trying to use the large Canadian crop to bear the market. The American visible supply is very large and the hedging of it taxes the volume of speculation quite severely. The Canadian movement is heavy and this wheat is to a great extent hedged in Chicago as fast as it reaches the Lake Superior terminal elevators. Should the hedging be as great as usual it is feared the offerings may swamp Chicago and demoralize the whole North American market. Some grades of Canadian wheat have already been marketed in Minneapolis, duty paid. This makes an advance in prices appear difficult, if not impossible, while the marketing is on. The scarcity of corn has determined many wheat farmers to feed wheat largely and it is in this feature that bulls expect a stronger situation later on.

Prices

Detroit—Cash No. 1 red, \$1.07; No. 2, \$1.06; No. 3, \$1.03; No. 2 white, \$1.07; No. 2 mixed, \$1.06.

Chicago—Cash No. 3 red, \$1.04; No. 2 hard, \$1.05 1/2 @ 1.13.

New York—Cash No. 3 red, \$1.17 1/2; No. 2 hard, \$1.15 1/2.

Prices one year ago—Detroit, Cash No. 2 red, \$1.08; No. 2 white and No. 2 mixed, \$1.06.

CORN

Trading in corn has been slow and the market affected by the action of wheat. September has continued to act independently and prices have been higher on short covering. Shipping demand has been rather slow. Weather conditions have not been favorable throughout the corn belt and there is some fear of damage by frost to the crop. Dry, hot weather is needed over a large portion of the corn growing territory. Any bullish influence that weather conditions might have on the market have been offset by the government crop report which was quite bearish. Receipts are only moderate. Export trade appears to be looking to Argentina for its supply. Students of the market state that corn and oat prices are about as high as they can go with prices of other grains at present levels.

Prices

Detroit—Cash No. 2 yellow, 96c; No. 3, 95c.

Chicago—Cash No. 2 mixed, 89-@89 1/4 c.

New York—Cash No. 2 yellow and

No. 2 white, \$1.08; No. 2 mixed, \$1.07.

Prices one year ago—Detroit, No. 2 yellow, 68c; No. 3 yellow, 67c; No. 4 yellow, 66c.

OATS

Oats have followed the trend of the wheat market. A fair trade has been noted and the price has fluctuated some. Chicago reports receipts during the past few weeks have been considerable larger than a year ago.

Prices

Detroit—Cash No. 2, 42½c; No. 3, 40½c; No. 4, 38½c.

Chicago—Cash No. 2 white, 40½c; No. 3, 38c; No. 4, 36c.

New York—Cash No. 2 white, 51c.

Prices one year ago—Detroit, Cash No. 2 white, 39c; No. 3, 37c; No. 4, 34c.

RYE

Rye went from steady to easy at Detroit after an advance of 1 cent and the easy tone continues at this time.

Prices

Detroit—Cash No. 2, 75c.

Chicago—Cash No. 2, 72½c @ 73c.

Prices one year ago—Detroit, Cash No. 2, 74c.

BEANS

Dealers in beans are alarmed over the recent weather. Heavy rains in some sections has done considerable damage to the crop and it is now estimated that the crop will be much smaller than previously estimated. Michigan beans are expected to be about one-half of a normal crop. Dry weather during the growing season hurt the crop in this state. The price at Detroit advanced 10 cents last week.

Prices

Detroit—C. H. P., \$5.50.

Chicago—C. H. P., \$5.40 @ 5.85.

Prices one year ago—Detroit, C. H. P., \$4.75.

POTATOES

The people are beginning to realize that the potato crop in Michigan will not be as large as was expected owing to continued dry weather and as a result demand is better. Prices at Detroit and other points have made several advances during the past fortnight. The market is firm in tone.

Prices

Detroit—Michigan, \$2.83 @ 3, cwt.



Week of September 16

THE unsettled weather in the West the past few days will rapidly develop into a more intense storm and reach Michigan early this week. During Monday and Tuesday the winds will be strong and the rainfall plentiful. These storm conditions will weaken towards the middle part of the week, clouds gradually break away and fair weather set in for a few days.

Temperatures will rapidly fall about Wednesday and very low temperatures for the season are expected, especially the nights when frosts will also occur.

Near the end of the week there is a probability of a showery period but nothing severe is expected from this storm.

Week of September 23

While unsettled conditions are expected during early part of this week with some fair weather, we believe that showery weather will predominate over most of the state through the 25th. General rains may be expected about 27th and 28th but will be closely followed with higher barometer and much cooler weather. The weather will also remain unsettled in most parts of Michigan during last part of this and beginning of next week.

The price of butter depends a great deal upon flavor, body, color and salt and 50 per cent of these conditions depend upon the weather during previous weeks.

At this time we believe the butter market will be easy and the quality good, judging from a weather standpoint only. We also figure that late supplies of cheese will also be good.

Chicago—Wisconsin, \$2 @ 2.15 per cwt.

Prices one year ago—Detroit, Michigan, \$1.42 per cwt.

HAY

Hay markets remain firm but with prices working a trifle lower. Increased receipts have weakened the central western markets but stocks have been cleaned up from day to day and condition as a whole is healthy. The recent rains in the southwest checked the demand for alfalfa and the market is a shade easier.

Prices

Detroit—No. 1 timothy, \$20.50 @ 21; standard, \$19.50 @ 20; light mixed, \$19.50 @ 20; No. 2 timothy, \$18 @ 19; No. 1 clover mixed, \$17 @ 18; No. 1 clover, \$15 @ 18.

Chicago—No. 1 timothy, \$26 @ 27; No. 2 timothy, \$23 @ 25; No. 1 light timothy & clover mixed, \$24 @ 26; No. 1 clover, \$22 @ 23; No. 2 clover, \$15 @ 17.

Prices one year ago—Detroit, Standard timothy and light clover mixed, \$16 @ 16.50; No. 1 clover, \$14 @ 15.

FROM HERE AND THERE IN MICHIGAN

Grand Rapids—Nelson-Mather building to have 4-story addition for furniture exhibit building. Railroad shopment of the Pere Marquette railroad given wage increase of 3 cents per hour effective September 1. City plans new pumps and supplementary conduit as further expansion of water distribution service.

Saginaw—Michigan Central builds new spur track to provide better shipping facilities for Saginaw Products Company. Local shops of Pere Marquette turn out 4 steel frame way cars, first of new kind ordered by Interstate State Commerce Commission. City awards contract for Mackinaw street paving. Also plans to buy 50 automatic voting machines at cost of \$45,000. Local ladder factory organization increases capital from \$25,000 to \$75,000. Work on addition to Eagles temple making rapid progress. New Central school for east side children completed.

Bessemer—Hercules Powder Company building three new powder magazines near town. Three new contracts awarded for Gogebic county bridge and highway work.

CROP REPORTS

WEXFORD—Threshing time past, grain a fair average. Plenty of rain. Grass growing good, making good pasture. Some wheat sowed and some plowing for wheat. Potatoes looking fine but not a large acreage. Lots of apples. Light frost Sunday night but no damage.—Jos. H. Campbell.

CALHOUN—Not much doing in this section. Farmers are getting ready for their fall seeding. Late potatoes are looking good. Soil is in good shape.—C. E. Beardsley.

OGEMAW—Getting too much rain for new potatoes. Tri-county fair is over and I must say that Tescala, Roscommon and Ogemaw can boast of some of the best cattle in the state. I have never seen a better lot, the sheep and hogs were the best they have shown in years. James Anderson.

OAKLAND—Harvesting all finished and threshing being rushed. Wheat is a good sample, so are oats. Corn is getting ripe and some of it cut. Potatoes are looking well and no signs of blight. Pastures are gone. No rain of any account for a long time. Some orchards have a good show for apples but more have but a few. Not much fruit of either kind here.—E. Foster.

CLARE—Beans harvest on two-thirds of a crop. Corn good crop.—W. C. Fuller.

SHIAWASSEE—Farmers are very busy filling silos and pulling beans. Heavy rains during the past week have damaged beans to some extent. Quite a hard frost on September 2nd but was not a killer. Corn and potatoes promise good. Clover seed is well filled and of good quality. No wheat seeding is reported as yet but many farmers have their ground nearly fitted.—D. H. Morris.

CLINTON—Plenty of rain now, bean harvest being held up on account of rain. Bean yield cut by dry weather. Grain threshing nearly finished. Farmers are plowing for wheat. Low prices on wheat will cut acreage. Some corn being cut. Corn down bad by recent wind.—O. R. Richard.

MECOSTA—Weather was real wet and warm up to September 7, but it is quite cold at present. Corn is only a half crop. Threshing is all done. Potatoes are looking good but need at least three weeks to get their growth. Beans only a half crop. Some are doing fall plowing. Help is hard to get. Eggs and butter are on the raise. Farmers are real busy.—Frank DeBoer.

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The Michigan Business Farmer, Date.....1923
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I hereby apply for a \$1,000.00 TRAVEL ACCIDENT INSURANCE POLICY of the North American Accident Insurance Company, for which I enclose Seventy-five cents (75c) in check, money-order or registered letter.

☐ I also enclose my address label from a recent issue of The Business Farmer to prove that my subscription is paid-up for one year.

☐ I enclose SIXTY CENTS (60c) in addition (\$1.35 in all) and my old address label, for which you are to mark my subscription paid in advance One Full Year.

SIGNED..... Age.....

Post Office..... R. F. D. No.....

State..... Occupation.....

In consideration of my subscription I may also wish to secure additional \$1,000.00 Travel Accident Policies for other members of my immediate family, send necessary Order and Registration forms with my policy.



Own Your Garage or Business

LOOK at these pictures. Twenty thousand Sweeney trained men own garages, tire shops, vulcanizing and service shops, just like these. **You can be your own boss.** You can be independent. It is easy to start in business for yourself. Then you don't have to bow down to some employer and do work you don't like.

Sometimes it looks like carpenters, plasterers, etc., get big wages, but when hard times come they are out of work. I say work for yourself. Then you are not bothered by strikes, lockouts, factories closing down. **Own your own business;** work for yourself with enthusiasm, not drudgery. It's the yearning of every young man **TO BE HIS OWN BOSS,** and Sweeney makes it possible.

How would you like to see your name above the door of a neat and profitable garage like one of those shown in the pictures?

Sweeney trains men in eight weeks in the auto and tractor business. I have had over 60,000 graduates. I estimate 20,000 are in business for themselves.

You don't need previous experience. These men had no previous experience. You don't need any capital to speak of. These men hadn't much money. But they had Sweeney's training and made good. There are opportunities everywhere. Other fellows with money are often looking for trained men to handle the the mechanical end as partners.

Look at Clayton Eden's nice garage at Ainsworth, La. Clayton says: "We operate the leading garage. Have all the business we can do. Also handle Hudson, Essex and Buick cars. Owe my present success to the wonderful training received at the Sweeney School."

Look at the National Garage. Roy Atkinson sent me this picture from Everett, Mo. "Worked on a farm," says Roy. "At nineteen had only \$14.00. Got father to send me to the Sweeney School. Three days after I came home I fixed a neighbor's Ford car. That was my start. Today this garage is worth \$4,785.00. My business takes three men to handle. I never worked in any other garage. I used my Sweeney training. If you want to get that start, do as I did and go to the Sweeney School."

Look at John Boyer's garage at Milford, Illinois. John says: "Having a good business; busy all the time."

From far off Australia S. A. Noller writes "Business is fine."

What these boys have done you can do. If you like mechanics write me today Get my Big FREE catalog. There is a fortune for you in the pages of this book. You have a right to make a success of your life. Make the start right now. I'd like to show you what thousands of men just in your position have done as a result of the **SWEENEY SYSTEM OF PRACTICAL TRAINING.** Learning is a real pleasure in the Sweeney School. World's finest equipment. Fine associates. Healthful surroundings. Entertainment after working hours. Instructors who take a personal interest in you.

MAIL THE COUPON TODAY

Learn A Successful Trade In 8 Weeks At Sweeney School

SWEENEY SYSTEM OF PRACTICAL INSTRUCTION

Is the **ONLY WAY** to learn if you want to save time and money and be properly trained. You get this at the World's Greatest Trade School, the **MILLION DOLLAR SWEENEY SCHOOL** and you get it nowhere else. I will also give you a **FREE RADIO COURSE.** Sweeney Broadcasting Station Call WHB. One of the finest in the world. Talks anywhere in the U. S. Cost \$50,000 to erect. Remember you don't need previous experience. I teach with tools not books. You learn by actually doing the work. I am making a **SPECIAL THIRTY DAY OFFER.** That is why you should not delay. The first step is to send for my big Free Catalog—a post card will do.

FREE CATALOG AND SPECIAL OFFER

Get my big **FREE 64-page catalog.** It shows hundreds of actual photographs of men at work in my magnificent new school. Tells all about wages, profits, opportunities in auto and tractor business. Explains step by step how you learn. Interesting letters from graduates telling how they made good. Shows how men come from all over the world to this big school. Makes you want to join the crowd. Tells everything you want to know. I will gladly send you a copy beautifully illustrated. I'll tell you how to get into business for yourself. No colored students accepted.

E. J. SWEENEY, President

EMORY J. SWEENEY, President
Dept. 1225 Sweeney Building, Kansas City, Mo.

Please send me free, without any obligation on my part, your 64-page catalog and your Sweeney School News. Tell me of the opportunities in the Auto and Tractor Business.

Name

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