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DETROIT, AUGUST 4, 1923

CURRENT COMMENT

We like to have our emotions aroused, and we like to take pills for our ills. That's why radicalism sometimes draws crowds. The trouble is, aroused emotions and cure-alls promise much but do not cure.

Read the Road Signs

IN going about in Michigan or any other state these days, it is important that the traveler be able to read the road signs. In following the main lines, in hitting the towns or cities wanted, in reaching this or that farm, or in making the usually well-marked, but too often much-rutted detours, one must not only be able to read the signs posted for his guidance, but to also read the road itself and get the message of those who have gone before.

We have also been impressed with the need of this same lesson in our farming operations. The signs posted by those who have spent their lives in studying the needs of this and that soil; the advantages of one kind of plant over others; the peculiar qualities of different varieties; the benefits that come from good live stock; all these signs posted for us have not been generally heeded.

Then perhaps more important than all are the lessons learned by the farmers in every community. There is real need that the local experiences of farmers be taken advantage of.

The writer well knows how we excuse ourselves with lack of help, or capital; but when we come to analyze the matter closely, these things make more imperative the reason for our applying the best thought we have to the business we are in. And one of the most important fields of thinking for the average Michigan farmer is in the adaptation of the experience already available to the conditions of his farm. In other words, we shall do well to follow closely the signs already posted.

The Surplus Problem

THE surplus problem—excess of supply over demand—is perhaps the most perplexing problem confronting the farmers of the United States. Just now the striking example is wheat. The world has on hand and in prospect a large surplus of wheat. Wheat is a staple commodity, the surplus of which can be stored with a minimum of loss. Wheat production was stim-

ulated in this country, in Canada, and in the Argentine during the war to supply the deficiency due to lowered European production. European production is coming back, while wheat production in the United States, Canada and the Argentine has not been correspondingly decreased. It is evident on this account that there will be a large carry-over from this season's crop, which is the real reason for the shrinkage of wheat prices to present levels.

The big wheat dealers would have the public believe that the low price of wheat is due to the curtailment of speculation in wheat futures, but any intelligent analysis of the situation will not support that contention. Ambitious business advisors claim that the situation could be saved by the immediate purchase by organized farmers of one of the big grain companies through which controlled marketing could be practiced, but while a well-organized and intelligently handled wheat pool of large magnitude might help some it could not solve the surplus problem on a sound and permanent basis.

So long as there is a big world surplus of wheat, the price of the commodity is bound to be fixed by the price which that surplus will command in the open markets of the world, either for immediate use or to hold for future use in the hope of turning a profit. If it were possible to sustain the price temporarily in opposition to the law of supply and demand, the remedy would be but temporary, since the surplus would be automatically maintained or increased by the prospect of profit from its production.

The real problem, then, is the surplus of production over the demand for consumption. The low price for the grain is the only means at present apparent for its reduction, as it will tend to decrease production and increase the use of the poorer grades of wheat as a feed for live stock until the surplus is reduced. So long as the price which the surplus will command fixes the price for the whole crop, this will be true, and there is no immediate prospect of a change in this regard. It is a principle which

holds true with practically all farm products of which there is a surplus produced on American farms in excess of needs for domestic consumption.

The situation so far as wheat is concerned can be helped some by orderly marketing on the part of growers. Present prices are already discounted in line with the probable surplus. An even flow of the crop to market throughout the year would prevent a further discounting of the price on account of a mounting visible supply in the channels of trade, which would be likely to result from a general dumping of the crop by growers. Congested and inadequate transportation facilities will undoubtedly help to this end of orderly marketing. The yield of the crop anticipated for the southern hemisphere may not meet expectations. Eventualities generally favor the holder of staple commodities where prices are low, which is another argument for the practice of orderly marketing which would increase the growers' revenue from the current wheat crop.

In this connection we should discourage the acceptance of wheat prices as a barometer of prices for other farm products. Wheat represents only a small fraction of the country's crop value. Corn is high, as are live stock and live stock products, and practically all other farm products in comparison with wheat. Present indications are that the value of the farm products of the country will be many millions of dollars greater than last year. Recent compilations indicate that this will be true, even in the great wheat-producing states. The result should be a better balanced production and a larger measure of the prosperity insurance which accrues to the farmers of a state of diversified farm production, like Michigan.

Do It Now

THE "Do It Now" sign is very often found in business offices for the purposes of getting things done quickly so that the big boss can go golf playing, or to give the impression that the place is a busy one.

While this sign is used mainly for

impression purposes in offices, it might be used to practical purposes around the farm buildings. It may pay to wait in some few things but when it comes to repairing and repainting, a stitch in time saves nine.

The longer a small repair job is left the longer and more expensive the job will be. Our sense of economy may indicate that building materials are too high to do necessary repair work. If that is so, our sense of economy needs adjusting.

Your implements may need adequate shelter; your chicken coop may make it necessary for your chickens to spend their winter shivering; your barn may be leaking and thus cause loss in hay and fodder; and even your house may begin to look a little the worse for wear. If that is so the time to get busy is now.

To keep in repair is greatest economy; to repair when repairing is necessary shows good judgment, but to leave repairing go until it becomes a big job, is the grossest waste and extravagance.

When it comes to keeping things in shape, or putting them in shape, "Do It Now" is good, sound business advice.

The Cost a Livin'

I WAS just readin' about what you call the aforesaid subject, which is somethin' we farmers don't know nothin' about, 'cause we get our livin' for nothin'.

If it wasn't for taxes we farmers wouldn't have to make no money at all which is just what most a us are doin' right now. When it comes to taxes, seems like we farmers ought to get together and put a law through what kin let us work out our taxes, 'cause then we could pay them off with some of wages them laborin' folks is gettin'.

Just 'cause we get our livin' for nothin' these poor city folks what has got to spend all their money for the cost of high livin', or lovin', I don't know which, they come and spend their summers with lots of us country folks, for nothin'. Me and Sophie went on a vacation so we wouldn't have to charge somebody nothin' for stayin' with us.

While me and Sophie is in favor of this producer to consumer stuff, we like to have the consumer produce after he has consumed, 'cause that's what we gotta do when we buy liquid refreshments for our Oughto, to say nothin' of buyin' lolly-pops fer the kids.

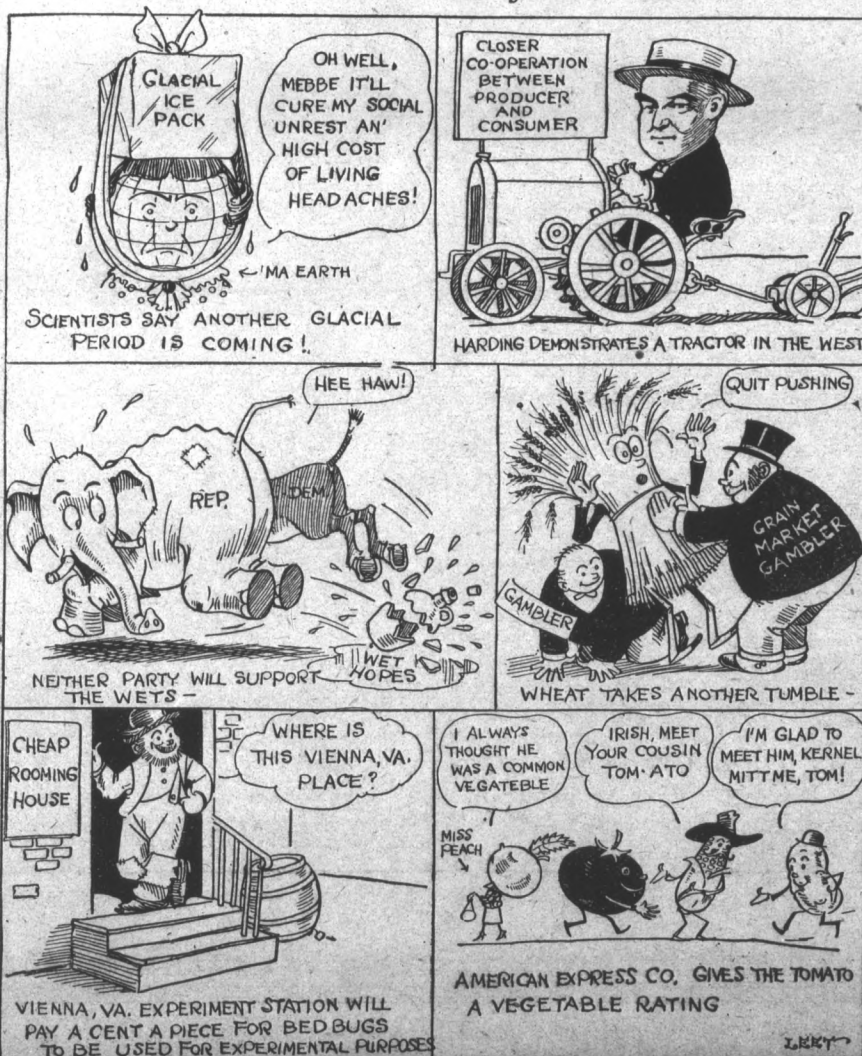
The high cost a livin' ain't. It's the high cost of soshul distincshun. For inst., we was at a place to eat a chicken dinner which me and Sophie figured was about fifty cents a piece. Well, when the perffessor what brought us the grub wanted the money he really hada wait, 'cause Sophie hada depart for a few minutes, 'cause she didn't want to do any shockin' by showin' her stockin', to draw from our family bank. It cost us \$2.50 each, and there was lots a folks in there payin' that price for fifty cents worth a food just to show other folks they kin do it. These are the kinda folks what ride around in cars with glass windows in 'em when they oughta be usin' a little run-around.

This soshul distincshun is in the country, too. For inst., our Oughto ain't so shiney as Roy Munson's now, so Sophie is ashamed of it. An I then this spring Jim Hudson goes and paints his barn, and now what I got ta do? You know.

Looks like this soshul distincshun is the quickest way to extincshun. But then, long's you're not makin' nothin', you might as well spend it.

HY SYCKLE.

Kernel Kob's Revue of The Month



Mid-Summer Poultry Suggestions

Neglect in the Summer Cuts Winter Egg Profits

By C. M. Ferguson,

Poultry Dept., M. A. C.

HOT days and sultry nights bring their own problems to the poultryman, whether he be operating on a commercial scale or managing a farm flock. The birds require different care and different feeding during the hot days. The old hens must be kept on the job and the young stock will have to be given every encouragement if they are to do their best next fall and winter when prices begin to come up. Much has been said of winter care, but winter care is much more difficult if your stock goes into winter quarters weakened by summer neglect.

The Time to Cull.

This is the time of year to get rid of the cull hen. Culling can be done at any time, but the amateur will find less trouble at this time of year. The spirit of spring, with its flush season for eggs is passing rapidly into summer slumps. Summer slumps may be caused by two factors: First, poor feeding, and secondly, the inability of the individual hen to stand the strain. In other words, the constitutionally weak, the mentally disinclined, and physically unfit, should be doomed to slaughter. Time and space will not permit an extensive article at this time on culling. A few of the high points might be enumerated. The big beefy hen with the chuckle head, yellow shanks, new plumage and a mass of hard fat stored in the egg sack region should be given carfare to market. Small, undersized, crow-headed, round-bodied types showing lack of vitality and vigor should also be let go. Keep an eye on the busy, industrious biddy who sings all day and wears no yellow pigment in her shanks. She is a most docile and friendly individual, always

looking for something to eat. Her plumage may be dry and hard, and possibly broken, but she will be outdoing her more "dressed up" sister of leisure. Note when you handle her, the spread in the egg sack region, indicating ovarian activity. The deep, long ribs, the long, broad, level back, the clean-cut head, and the hard, close plumage. These are all earmarks of heavy production and "laying type."

Laying-house Conditions.

Conditions in the laying-house are apt to become very bad in summer. A hot, stuffy house, odoriferous with the gases from heated manure, and in every chink and crack a nest of mites is not at all conducive to health and production.

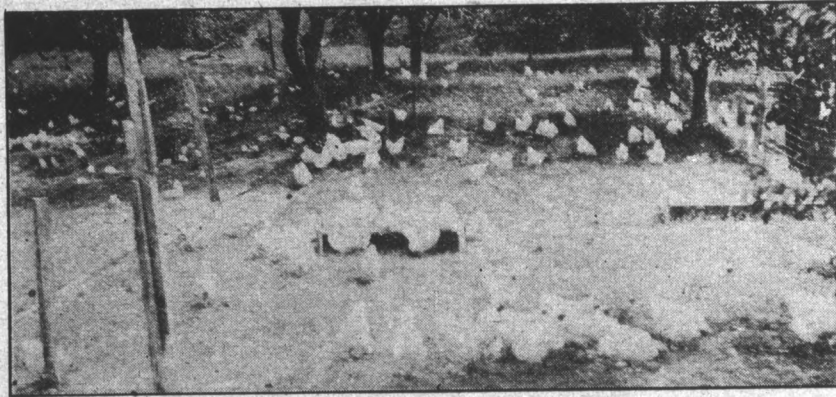
It may be difficult to ventilate some houses properly to maintain a sweet-smelling condition, but frequent cleaning will aid greatly in maintaining a

healthy atmosphere. In most houses adequate summer ventilation can be secured by keeping all windows wide open and if windows are opened under the dropping board on the north side it will aid materially in keeping the house cool and provide air circulation. Care must be taken to have all openings covered with wire netting to protect against skunks, weasels, etc. This precaution will also aid materially in preventing infestations of mites by keeping the sparrows out. Sparrows usually harbor and carry mites and if allowed to frequent the poultry house and build nests they are sure to be a source of vermin. They also develop a mania for visiting mash hoppers and feed bins. In this way they will materially reduce profits and are very apt to be carriers of disease organisms from infected flocks and yards.

Mites and lice reduce the vitality of

stock and interfere with production. These two common pests vary in their habits and must be dealt with accordingly. Mites live in cracks and crevices, about the nests, roosts and dropping boards, attacking the hen during the night while she is on the roost or during the day while she is on the nest. Mites may be detected by the characteristic "pepper and salt" appearance on the roosts and about the cracks and chinks. This is caused by excreta from the parasites. They are described as both gray and red mites. In reality, however, the gray mite is usually the same animal before breakfast. After his meal of good hen's blood he takes on a reddened appearance due to the blood in the body. A characteristic odor accompanies bad infestation and one can soon learn to recognize them and detect their presence in that way. Using louse killer on the birds will have but little effect on mites. They can be readily controlled, however, by using a good insecticide on the roosts, nests, dropping board, etc. The writer has found waste oil from the crank case of the automobile or tractor to be a very efficient and inexpensive mite control. Everyone has some at hand or can secure it from a local garage for a small sum. The roosts, nests and dropping boards should be thoroughly painted with this oil. Kerosene will have a killing effect but evaporates very quickly and has to be applied more often. There are on the market many wood preservers, coal tar by-products and other patent preparations which may be used with equal satisfaction.

Body lice can best be controlled by
(Continued on page 103).



The Successful Poultryman Keeps His Young Stock Growing.

Restoring Our Run-down Soils

Some Facts Learned from Over State Tests Made Under Farm Conditions

By O. B. Price

CONTINUOUS cropping and the removal of crops has depleted many Michigan soils of their main supply of plant food. These plant food elements must now be added and plant residues must be incorporated in the soil to restore fertility.

All the plant food could be added in a commercial form at one application, but that would not be profitable or good practice. The fertilizers would not add organic matter and humus, which are important in retaining moisture and providing good tilth.

Every time a crop is harvested there is drain on the supply of every plant food element, the amount depending on the kind of crop and the yield. Where clover and alfalfa, or any other legume, are grown there may be an increase in the nitrogen content if the soil has been well limed and legume inoculation used. These soil building legumes increase the nitrogen supply but little if all the crop is removed. The wise farmer occasionally turns under a good crop of green legume to keep land well provided with humus.

Notwithstanding that the nitrogen supply can be maintained by growing alfalfa continuously for four to six years before plowing under, as is frequently done on dairy farms, the soil will in time arrive at a state of low crop production. High fertility means an abundance of every element of plant food, plenty of organic matter or humus and a large population of soil micro-organisms.

When a crop of alfalfa is harvested large amounts of phosphoric acid and

calcium are removed. Even though the hay is all fed on the farm and the manure returned, the phosphoric acid and calcium balance can not be maintained. This phosphoric acid and calcium can not come from the air as the nitrogen does, but comes from the soil itself. With every crop of clover or alfalfa harvested the supply in the soil is lowered.

This should not discourage their use as soil builders, however, because they are important in maintaining the nitrogen supply, but phosphates should be applied to balance the ration for the plants.

Over state tests of acid phosphate conducted by the Soils Section of the Michigan Agricultural College shows that on the light soils the use of 250 pounds of acid phosphate per acre on corn returned \$3.82 per acre more after the price of fertilizer was subtracted, than where no phosphate was used. On wheat the difference was \$4.82 in favor of acid phosphate. On oats the difference was \$7.60. The yield of alfalfa was increased twelve per cent.

On the heavier soils the return from corn was \$5.35; oats \$4.13. Where acid phosphate is used with sodium nitrate on the lighter soil the increases are even greater. These values do not include additional costs of application, harvesting, marketing and interest on money invested in the fertilizer.

The use of manure is essential—either as animal manure or green manure—but it is a mistaken idea to think that manure alone will most economically maintain fertility. Manure is poorly balanced in plant food elements, being particularly low in phosphoric acid. Ordinary farm manure contains about 4.5 pounds of phosphoric acid per ton while it contains about ten pounds of nitrogen and ten pounds of potash. When farm manures are used it is very desirable to use about forty to sixty pounds of acid phosphate with each ton of manure as a reinforcing agent. This will increase the fertilizing value of the manure and prevent the loss of ammonia from the manure, due to fermentation.

Applications of manure will also increase the humus content of the soil and improve the physical condition. It causes the sandy soils to be more retentive of their moisture supply and it causes a granulating effect upon the heavier types.

Green manures are used to increase the organic matter of the soil. When a crop of rye is turned under as a green manure there is no additional supply of plant food added—it is merely worked-over plant food—the rye crop took all of its food from the soil in the first place. There is a distinct advantage, however, in growing rye or a similar crop to be returned to the soil. In the first place, it adds organic

matter and it also prevents the leaching away of soluble plant food elements. There is a greater advantage, however, in growing a legume as a green manure, for in addition to the above qualifications it actually increases the nitrogen content of the soil by returning to the soil nitrogen it has taken from the air through the aid of the bacteria on its roots.

Applications of potash have not in general given any increase on ordinary field crops except on alfalfa and clovers, where over-state tests on sandy soils have given an increased yield of sixty-five per cent. On the heavier types of soil less should be expected of the potash. On muck soils applications of potash respond favorably.

Where legumes can be successfully grown in the rotation and manures are applied it should not be necessary to apply high-priced nitrogenous fertilizers to the crops except on the light sandy soils where such applications will be profitable. Where rotations are not systematically followed and sufficient manure is not available, applications of sodium nitrate or ammonium sulphate have proven profitable. In applying nitrogenous fertilizer to the spring crops a small amount should be applied at time of seeding. If applied on fall seeded crops a small amount should be applied at time of seeding and the remainder the next spring. In the case of wheat and rye about twenty pounds of sodium nitrate are used in the fall, and eighty pounds in the spring when the plants start their growth.

Annual Farmer's Day

Rain Does Not Prevent Enthusiastic Gathering

THE fact that several thousand farmers were in attendance at the Sixth Annual Farmers' Day in spite of a rainy day, indicates the interest there is taken in these yearly events.

In the midst of the morning mist, the farmers' autos kept coming in until they were very much in evidence on all parts of the grounds. In the early part of the day men from the various departments of the college were stationed around the grounds to explain the various experiments, but the rain came so thick that this was given up. While the college professors were busy explaining, the farmers were busy following arrows on the various tours in accordance with their special lines of agriculture. There were eight routes laid out. Each one taking in a certain line of endeavor, such as live stock, horticulture, poultry, etc.

Big out-door exhibits were arranged in front of the woman's building, but they could not be carried out on account of the rain. A speaking platform and review stand were arranged to hear the talks and to see the live stock parade, but these had to be left vacant, as it was necessary to hold the program in the gymnasium.

Picnic dinners were eaten under the cover of autos or in the shelter of buildings. While this was an inconvenience, it perhaps added to the novelty of the day. At one-thirty the live stock was paraded past the gymnasium building, after which the program started. While the "gym" was filling to overflowing, the Reo Motor Company Band entertained with a variety of good band music. Prof. R. S. Shaw presided at the meeting and opened the program with a few remarks on the hopeful future of the college. He said despite all of the problems which they have had to contend with, things look as if the college would be in a position to give the farmers greater service than ever. Necessary organization is being brought about as the chief endeavor of the present administration was to give the greatest service for the money available.

The chief speaker of the day was E. O. Bradfute, president of the American Farm Bureau. President Shaw introduced Mr. Bradfute as one of the foremost live stock breeders of the country, and as one of the pioneers in the National Farm Bureau.

Mr. Bradfute compared the efficiency of the American farmers with those of other countries. He said the American agriculturist farmed about twenty acres, while farmers of Russia farm only nine, those of Germany seven, and the Japs only two. Farming in the past decade has increased in efficiency over twenty per cent, but despite this efficiency the American farmer was in distress.

He says the greatest need of present-day farming was not more efficient production, but greater efficiency in marketing and other business methods. Too much time was spent by farmers and other groups of activity in raising their hands against each other. More cooperation between the various groups of business and industrial activity was needed, especially as it was necessary that the other groups have a better understanding of the problems of the farmer.

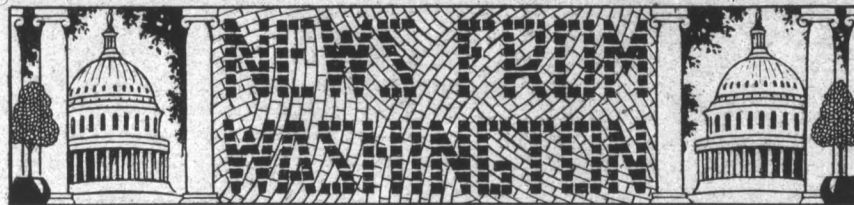
He felt that the one organization that was making the farmer a real factor in the world's activity that he is now becoming was the farm bureau, and with due respect to all other agricultural organizations, the farm bureau has done more to help solve the great problems confronting the farmer.

These problems, he said, were marketing, transportation, finance, legislation and taxation. The farmer had great interest in the transportation problems of the country, because he

paid over fifty per cent of its freight bills. By unity of effort, he can make himself heard by the railroads to get fair treatment in the handling of his products.

When it comes to marketing, he said that while the farmers were good producers, as salesmen they were N. G. Farming, he said, was the only industry which did not have three departments: buying, manufacturing, and selling. It is the purpose of the farm bureau to help out, especially on the selling phase of the industry.

Mr. Bradfute made a brief comment on the wheat situation, giving the farm bureau an interpretation of using the farmer's bin as a warehouse. The farm bureau hopes to get the secretary of agriculture to designate the



INCREASING SHORTAGE OF LABOR.

THE labor problem is a serious one for farmers in most sections of the country. Reports that come to Washington indicate that unless a larger supply of help can be had in some parts of the country than is now apparent much fruit and other perishable crops will spoil on the trees or in the fields.

There is such a demand coming from various sources for letting down the immigration bars that the American Farm Bureau Federation is sending out a questionnaire on immigration. Several states have already taken action upon this question.

The Minnesota Farm Bureau Federation has adopted a resolution asking that a special effort be made by President Harding, Secretary of Commerce Hoover and Secretary of Agriculture Wallace to induce and make arrangements for the immediate immigration to this country of farmers and farm laborers of foreign lands to help solve the labor problem and provide for American farmers efficient and willing help at such wages as the farmers can afford to pay and that any present restrictions on immigration be suspended.

Representative Johnson, chairman of the house immigration committee, just before congress adjourned introduced a bill which further restricts immigration. He proposes a base quota of 400 from each country. Then he would let in in addition, foreigners to the extent of two per cent of the foreign born population from each country based on the census of 1890. This bill excludes all persons not eligible to citizenship.

While the present act limits the total immigration from all countries to 357,000 in one year, the Johnson bill would reduce this limit to 186,000.

SIMPLIFY TRADE-MARK LEGISLATION.

THE American Farm Bureau Federation has established a "Trade-mark" service in connection with its Washington office, to assist farmers and cooperative marketing associations in securing the registration of their trade-marks in the United States Patent Office. This service is also helping cooperatives to secure registration of their trade-marks in foreign countries.

It is suggested that the big corporations put a high value on their trade-marks, which in some instances are considered worth many millions of

local warehouses and bins as suitable for storage of grain on which money can be loaned under the Farm Credits Act. The purposes of borrowing on the present wheat crop is not to withhold grain from the market, but to market it orderly and thus prevent the present slump from becoming even greater than it is. It is folly to rush wheat to the market at the present time.

The last speaker on the program was M. A. C.'s own Eben Mumford, who gave an inspiring talk on the farm situation. He laid special stress on the human factor in agriculture. He said that those who were leaving the farm did not worry him at all, but his greatest consideration was the kind of folks who were staying on the farm. And with the showing that rural students were making in comparison with those of the city he had no occasion to worry over the kind of folks who were to do the farming in

speculators in retaliation for the regulation of the grain exchanges by congress is responsible for the fall in wheat prices, according to Senator Dadd, of North Dakota. "Nine days after the exchange regulatory act went into effect," he says, "the wheat market started to slide, and since that time there has been a steady decline."

The storage of wheat by the government as a hold-over to supply the nation's needs in case of a world shortage is said by friends of the proposition in Washington to have gained the support of large banking interests.

The department of agriculture in a statement discussing the wheat surplus, soon to be issued, will give valuable information as to the comparative value of wheat for stock feeding, with the suggestion that wheat be fed to farm animals. Maryland farmers are already acting upon this suggestion, by grinding their wheat and feeding it to their dairy cows. In this way they say they are receiving \$1.57 per bushel for their wheat, based on the prevailing price of \$52 a ton for store feed of about equal feeding value. In Missouri and Kansas farmers are finding it more profitable to feed wheat in place of corn. It is believed that there will be much wheat fed to stock this season.

THE WATKINS HEREFORD SALE.

THE first annual sale of Hereford cattle was held at the farm of Hon. L. Whitney Watkins, of Manchester, Michigan, on July 26. Forty-four head, which constituted the entire offering, consisting largely of young females, was sold. All of the animals were retained in Michigan as foundation stock for pure-bred Hereford herds.

As a result of this sale something like a half-dozen new Hereford herds will be established in the state. The largest purchaser was George F. York for his Jackson county farm. James Campbell, of Clinton county, made large purchases, as did J. B. Parshall, of Livingston county. Fred Wilkinson, of Livingston county, C. C. Goodwin, J. C. Nixon and W. E. Ramsey were also purchasers, while a number of good animals went to Meadowbrook Stock Farm, of Sanilac county.

The bidding was spirited, and the sale was highly successful, considering present agricultural and economic conditions. The forty-four head sold

Upper Peninsula Round-Up August 6-11

THE Upper Peninsula Farmers' Round-up will be held at the Experiment Station Farm at Chatham, August 6-11, inclusive. This annual event is attended by thousands of Upper Peninsula farmers, to whom it affords valuable demonstrations along many lines of experiment station and home demonstration work, as well as a program of practical talks by members of the M. A. C. faculty, and the experiment station and college extension staff. Every Cloverland farmer will find it time profitably spent to attend this round-up meeting.

routes and 52,774 miles. Michigan has 1,817 rural mail routes, covering 50,237 miles.

RAISE CONSUMPTION OF WHEAT.

BUSINESS men and banks throughout the middle west are promoting a "buy a barrel of flour" and "eat another slice of bread" campaign, designed to increase the demand for wheat.

Several organizations are cooperating in an effort to induce wheat belt farmers to reduce their acreage of wheat, and reports from Kansas say that farmers in that state are planning to cut their winter wheat acreage this fall.

Manipulation of the grain market by

made an average of better than \$141, which may be considered as a good average in consideration of the fact that a large percentage of the offering consisted of young animals.

Mr. Watkins has established one of the best herds of pure-bred Herefords, not only in Michigan, but in this section of the United States. This action was the result of his experience as a feeder, which demonstrated the superiority of Herefords for the making of baby beef, to which Michigan farmers must look for profit from cattle feeding operations. He plans to make this sale at Watkins farm an annual event as a means of interesting more farmers in his community and in the state in the possibilities of pure-bred Hereford cattle.

Seen Along the Way

By the Editor

ONE is most favorably impressed with the showing made by the progressive farmers in Alcona county. Nature, of course, did her part. There is an abundance of good soil and climate suited to the production of staple farm products and many specialties. But the farmers have also fitted practices to conditions with a nicety, and the good showing is the result. Some of the thoughtful ones are prophesying that the amount of timothy hay grown will decline, while the legumes will be given more and more favor; and further, that dairying has a larger future and that the poultry business is going to be taken out of the "kitchen" class.

When you say "fruit" the eye of the Michigan farmer quickly shifts to our western shore. But all our orchards are not there, and some new fruit localities are almost certain to be developed. Not long ago County Agent Jewell, of Cheboygan county, had horticultural extension men in his jurisdiction. Eight farmers were called in to council. These farmers represented 800 acres of fruit land now growing thrifty trees.

If you have never traveled the territory lying between the Straits of Mackinac and the Soo, your ideas of the farms to be seen in that district are probably all wrong. Here is to be found one of the finest commercial hay sections of the state and nation. We do not know whether these good farmers can keep on growing hay indefinitely, but they have grown it for a long time and this year are bringing through a good crop. We note, however, that carloads of good dairy cattle are now being imported and distributed among the farmers. Dairy manufacturing plants are also looking forward to a greatly increased production. We predict a good future for the locality.

You cannot get away from the fact that the good farmer watches closely his manure pile. Right in the midst of one of the prosperous farming districts of northeastern Michigan was a farm with sickly looking crops, and one of the healthiest looking manure piles seen in many a day. It eclipsed the barn from which it supposedly came, and from the appearance little, if any, manure had been taken to the

fields for years. Evidently one helps make the crops big by keeping the manure pile small.

A Problem Solved

AN interesting story of how one banker-farmer is solving the farmer's problems in Nebraska, was told at the Washington Farm Hands' Club recently by Dan V. Stephens, of Fremont, Nebraska.

When the deflation struck Nebraska Mr. Stephens was head of a joint stock bank and a state bank, loaning money to farmers, and he was also operating a large stock farm. His business operations suffered at both ends of the line, in common with all business in the west when the markets and prices fell flat.

Out of this experience, however, he conceived the idea that the one best bet for the farmers of Nebraska was to feed calves and sell them as yearlings, and these calves must not only be pure-breds, but of known breeding for beef productions. The banking institutions of which he is the head, now with resources of \$16,000,000, buy the calves for the farmers and finance their feeding operations. These calves are all Herefords. They must not only have white faces, but must be of the purest breeding. The slightest taint of Jersey or Holstein disqualifies them for the feed lots of the farmers financed by Mr. Stephens' banks.

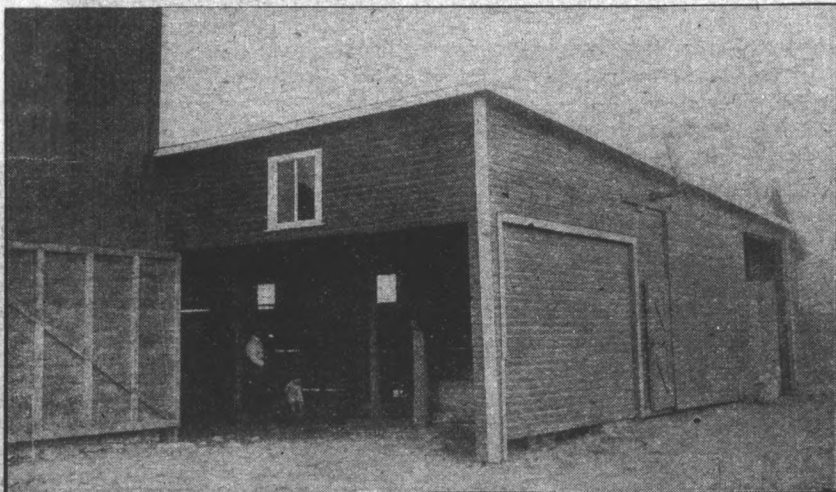
One thousand head of calves, all of the same weight and markings, have been purchased in Texas and are now on their way to Nebraska. Ten thousand head will be purchased for the farmers this year.

Mr. Stephens has found that backing the farmers who feed this kind of stock is a safe business proposition. Even if the price goes down the increase in weight on growing young stock makes the investment secure. An expert stockman and feeder, one of the best to be had, is employed by the bank to instruct the farmers in feeding and care of the animals.

As yearlings, the calves are shipped to the Chicago market where they bring the top prices. There is no trouble to sell such stock. The packers want them.

Since this plan was put into operation the business of the banks under Mr. Stephens' management has largely increased and the farmers who feed the stock have received very satisfactory returns.

Covered Barnyard



THE C. S. Rasey farm employs a covered barnyard in the handling of the herd of dairy animals maintained on the place. This has been found to be of practical value through the entire year. In winter the cows may secure freedom and exercise without being turned out into a snow-covered barn lot. In midsummer the place may be semi-darkened and offers refuge from both flies and heat.

Although it has an almost flat roof,

the presence of large paneled doors at either end permits the air to work through in sufficient quantity to counteract the heat from the room. A stock tank at one end is so arranged that it can be used by animals on the outside through the raising of a hinged section forming part of one of the doors. By regulating the various wall openings the place may be converted into a comfortable shelter in any season.—O. Crooker.



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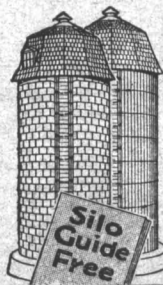
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You do not have to try an experiment to get a windmill which will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine. Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production. The Auto-oiled Aermotor is so thoroughly oiled that it runs in the lightest breeze. It gives more service for the money invested than any other piece of machinery on the farm. The Aermotor is made by a responsible company which has been specializing in steel windmills for more than 30 years.

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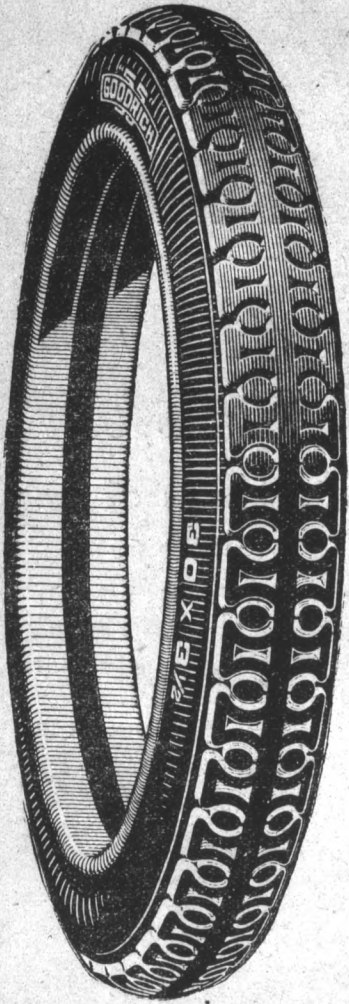
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NEW-DAY knowledge marks the end of the old belief that salt is "just salt." Ordinary salt is Cube shape. Hard and comparatively non-porous, slow to dissolve—slow in penetration. Another looks like a Crystal of glass—flaky but hard, slow dissolving and of low penetrative value. Colonial Special Farmers Salt is a soft,

porous Flake—that instantly dissolves and does not form in wasteful lumps like ordinary salt. Colonial Special Farmers Salt is all salt—pure salt with all the moisture removed. Packed in a branded 70-pound bag, which is as big as a 100-pound bag of ordinary salt. The lined material makes fine toweling.

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OUR SERVICE DEPARTMENT

Always Give Name and Address When Sending Inquiries as Satisfactory Service Cannot be Given to Unsigned Letters

MISUNDERSTANDING.

My wife's father made a verbal agreement to turn his stock and crops over to us, we to be managers without any interference, if we would buy a farm close by and take him and his wife for their board, room and clothes and keep them for the rest of their lives. I accepted on those terms. After we moved into his house (as ours was not in condition), and had used up most of our money, he commenced to interfere between my wife and myself. This fall we had a falling out and he ordered us off the place. He could not do much work. Now he demands half of the crops, I to pay all bills accumulated during the summer. I have offered to pay bills and then divide the remainder half-and-half. What would be right?—Reader.

No legal question is involved. Such cases should be settled out of court if possible. Otherwise bill in chancery for accounting.—Rood.

NOTE BY MINOR.

Have a young man twenty years old working for me by the month. Can he give a note? Also, can I be served with garnishment papers for the note, he being a minor? Can a minor be garnisheed? If so, what are proceedings? If I refuse to sign papers and he acknowledges note and goes before the justice and pays face of note and interest, who pays the costs? The young man refuses to pay costs. The holder of the note demands the young man must pay the costs or he will not accept the settlement. What can he do? If he refuses settlement, does he forfeit the account? Is it possible to compel the justice to stand costs?—J. S.

The man under twenty-one can contract only for necessities for himself, and his note for anything else would be voidable. He may be sued and summoned as a garnishee, as may persons of age. A garnishee is not chargeable for costs but is entitled to costs. The justice is not liable for costs.—Rood.

WAGE GARNISHEE.

A. bought stock and gave note for same. B. signed note to help him out and before note came due A. sold the stock for cash and spent the money. Can B. force holder of note to garnishee A.'s wages and collect that way, or has B. got to pay the note and collect from A. by garnishee? What per cent of wages is collectable from A?—L. I. B.

The holder of the note may collect of either signer. If the debtor is a householder, \$30, and all over that up to sixty per cent of wages is exempt, if not a householder, \$15, and all over up to thirty per cent of wages is exempt.—Rood.

ADVERSE POSSESSION.

Is it a fact that a fence cannot be moved after fifteen years? We just bought a strip two rods wide, as it should have gone with our land in the first place, on the other side of the fence.—A. M.

The answer depends on many facts. Possession without claim of right does not give title by adverse possession. Unless it was claimed by the party in possession that the fence was on the line, no title is acquired by the continued possession.—Rood.

TRANSPLANTING TREES.

Which is the best time of the year to move trees, and how do you take them up? I have had some nice trees offered me, if I will move them; among them are the horse chestnut, ash, maple and soft maple. Some people say to dig around them now, and move this fall when frozen up. They are from four to eight inches through.—A. H. L.

The best time for transplanting deciduous or broadleaf trees is when they are dormant, that is, in the late fall, through the winter and into the

early spring. They can usually be best transplanted in the early spring after the ground thaws out and before the growth starts. Very large trees can be moved safely by digging around them in the late fall and moving them with a ball of frozen dirt around the roots. As much of the roots as possible should be saved in lifting the trees and the tops should be trimmed back so as to counterbalance any loss of roots. The trees should be set just a little deeper than they stood originally and the dirt packed well around the roots.

ALFALFA ON SANDY LAND.

I own a piece of sandy land, which is in rye. I intend to turn under in August when ripe, and seed to clover or alfalfa. How much seed will I need to the acre? Which is best?—G. V.

It is customary to sow from ten to twelve pounds of alfalfa seed per acre. Only the hardy, northern-grown seed should be used. The Grimm is very well adapted to Michigan conditions. In seeding alfalfa it is well to have a firm seed-bed, sow on soil that is well drained and not acid, and inoculate the seed before planting.

From eight to ten pounds of clover seed is sufficient for one acre. Alfalfa produces a higher tonnage of forage than clover and if conditions are favorable the stand will last longer.

WHO OWNS THE STRAW?

I am working a farm on shares besides working my own. My contract says second party is to do, or cause to be done, all work, furnish all tools, horses, etc., for carrying on work of said farm. It also says each to get the sale of all grains, produce, etc., one-half the proceeds derived from or taken off said farm. First party agrees to stand one-half the threshing bill. Each to stand one-half of all seeds. The only reserve is the house, orchard and garden spot which first party reserves. The question I want to know is—am I entitled to one-half the straw from the grain I raise on this farm? Can I make him furnish one-half of the coal and twine (coal for threshing grain)? It is customary for each party to furnish one-half of coal and twine but the contract doesn't say anything about it.—J. C. P.

In the one-half grain share lease the usual practice is for the landlord to furnish one-half of such expense as seed, twine, threshing bill, and in some cases one-half the fuel. The tenant to furnish one-half of above expenses and do all work. Each to receive one-half the crops which would cover the straw as well as grain.

There are a great many modifications to exact terms of a lease due to local conditions and crop prospects.

INSECTS DESTROY SWISS CHARD AND BEETS.

Will you please tell me why Swiss chard and beet leaves have holes in them? They look as if something was eating them full of holes.—Mrs. C. S.

Swiss chard and beets are attacked by leaf-eating insects which often do considerable harm. These can be controlled by spraying or dusting with poisons and this, of course, cannot be done with safety in the ordinary garden. Leaf spot, a disease well-known to gardeners, also causes small circular whitish spots which later become brownish in color. This disease can be controlled by careful spraying with Bordeaux mixture but when the leaves are to be used as food this is objectionable.

Deep plowing and a careful cleaning up and burning of rubbish from the garden in the fall of the year will aid to some extent in keeping these troubles under control.

Wheat yields in America since 1918 have averaged 13.4 bushels to the acre, twelve per cent below normal natural average.

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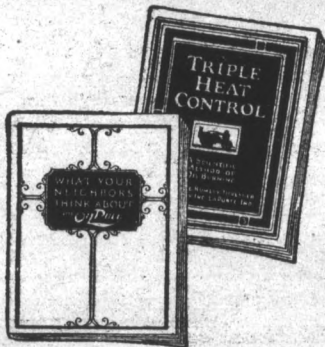
The OILPULL has won all principal Fuel Economy tests for the past ten years. In addition it has won nation-wide renown for Lowest Fuel Costs among thousands of users. D. B. Brenneiss, whose farm is operated on modern principles, remarks in his recent letter, "I have used quite a number of tractors but the OILPULL is my favorite. I am not afraid to show up with it in any kind of work. It works with low grade kerosene. It saves the big fuel bill."

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Getting By the Dry Period

By Michigan Farmer Readers

GETTING by the dry period might be taken in two ways, but everyone who sent in suggestions had the constructive way in mind. It does not need money and disrespect of the law to take care of these kind of droughts. Below five men give their ideas on the best way to conserve moisture in the soil. They will get the safety razors offered as prizes. —The Handy Man.

KEEP WEEDS DOWN.

TO conserve moisture after our cultivated crops are planted, we keep the ground loose to the depth of one or two inches until the crop shades the ground between the rows. We use a weeder and spike-tooth drag at first, then gradually increase

vate three times each way and then, if the ground isn't packed by a hard rain, follow up each week until corn is laid by, by so doing I always have plenty of moisture and plenty of corn. —Louis C. Bodell, Osceola County.

FALL PLOWING HELPS.

THE best insurance I find against dry weather is fall plowing, especially for sod. If the ground is to be manured, a spreader is the best way to do it, then disc it in as soon as you can get on in the spring.

By dragging the ground a little in the fall after being plowed, it will be smoother going for the spreader when the ground is frozen.

The manure helps to hold the moisture, and is more quickly available than when plowed under.

Of course, cultivation is the keynote of success in dry weather. Deep and close up at first to encourage the roots to go downward, instead of spreading, then shallower and farther away each succeeding cultivation.

The first cultivation should be done as soon as you can follow the row, and at least once a week for about six weeks afterward. It is detrimental to the corn to cultivate too deep and too close when the corn gets big, especially if left more than a week between cultivations.

It is a well-known fact that moisture draws frost, and it is a fact that cultivation draws moisture.

I had convincing proof of that, some five years ago when we had a killing frost on June 21.

I could easily tell by the way the corn was frozen, just how far I had cultivated the day before. The uncultivated part stood the freeze much better than that which had been gone over the day before.

Cultivation is the only substitute for rain in dry weather, and fall plowing gives you a good start. —John A. Rees, Berrien County.

GREEN MANURES HOLD MOISTURE.

MY experience in getting by the dry periods has proven to me the following facts: By applying lime or marl to keep the soil sweet so that clovers may be grown when soil is inoculated. The clover should be plowed under and straw from grain also plowed after being spread over fields. Add all the organic matter you can, and especially so on the very light soils, as organic matter is the life of the soil. Also apply acid phosphate. Plenty of active organic matter in the soil with some form of lime will have an action on the soil that will liberate plant food and supply moisture at all times. Therefore, plants will not suffer during dry periods.

I sold one-half of my stock four years ago and have followed the above practice since, with the satisfactory results of doubling the yields of my crops. My idea is to cut down on the amount of live stock kept to as small a number as possible, thereby eliminating the hired help that would be required to grow and harvest crops to feed the stock and then to return manure to the land. For cultivated crops keep a dust mulch to absorb all the rain that comes and prevent crust forming on the surface.

So much has been said and written regarding the value of farm manure that it is common talk that the manurial value of the crops fed is almost wholly recovered in the manure. (Continued on page 107).

Summer Milk

MANY of us experience quite a drop in the flow of milk, during the time of flies and short pasture. Others, by special care, keep the milk production up at this time. We would like personal experiences of how it is done and of the profit there is in it. To the five who send the best letters on "How I Keep Up the Summer Milk Flow," we will give modern, practical safety razors, with five sharp blades. Please send your letters to The Handy Man, Michigan Farmer, Detroit, Mich., before August 8.

the size of the cultivator shovels as the crops grow. The weeder and spike-tooth go through the rows taking out small weeds, while the cultivator shovels throw dirt into the rows, thereby covering small weeds, and not in sufficient quantities to cover the crop.

We thus save an immense amount of moisture which would otherwise pass off through the leaf system of every weed that grows. By careful and timely cultivation the utmost moisture content can be conserved for development of corn, beans, beets, etc. —Carl C. DeWitt, Gratiot County.

LIVE STOCK FARMER HAS NO MOISTURE TROUBLE.

THE way we get by the dry periods is in preparing for them beforehand. All ground possible is fall-plowed. Frequent cultivation of this so no crust forms will give moisture to growing crops all summer.

We have for the last twelve years drawn the manure direct from the stables to the fields which, applied as top-dressing helps a lot to conserve moisture for the dry spells.

I might add that the farmer who keeps lots of stock is the man whose crops will stand a drought the best. It takes a dry year to show the benefits derived from liberal applications of stable manure. —Clyde Austin Shiawassee County.

PRACTICE THOROUGH CULTIVATION.

I FIND this the best way to hold moisture. When plowing in the fall or spring I follow each day's plowing with the drag. When the potatoes are planted I drag two or three times, start cultivating corn as soon as the rows can be followed. Cultivation

ABSORBINE STOPS LAMENESS

from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone, or similar troubles and gets horse going sound. It acts mildly but quickly and good results are lasting. Does not blister or remove the hair and horse can be worked. Page 17 in pamphlet with each bottle tells how. \$2.50 a bottle delivered. Horse Book 9 R free.

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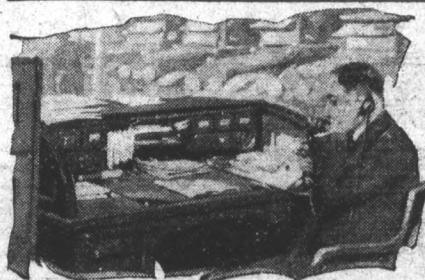
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I can make you a big money man, whether you are now a mechanic or not. Are you mechanically inclined? Then you can succeed in this business. Not necessarily as a mechanic, but as a business man, with a foundation of mechanical training. The opportunity is simply unlimited. Over 13 million cars running 400,000 were made in one month. The service business is enormous.

Write to me today for full information. I can fit you for a good position, or to run a business of your own as I have thousands of others. Write right now.

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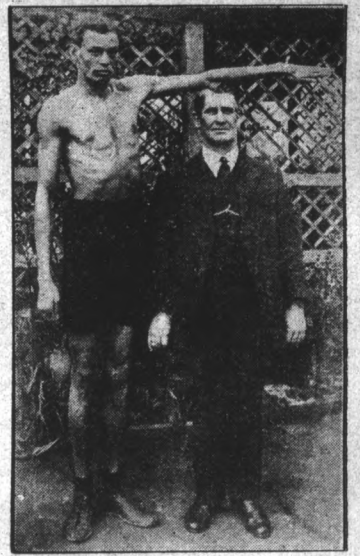
WORLD EVENTS IN PICTURES



Leonard, this famous southern cook, has presided at barbecues for five U. S. Presidents.



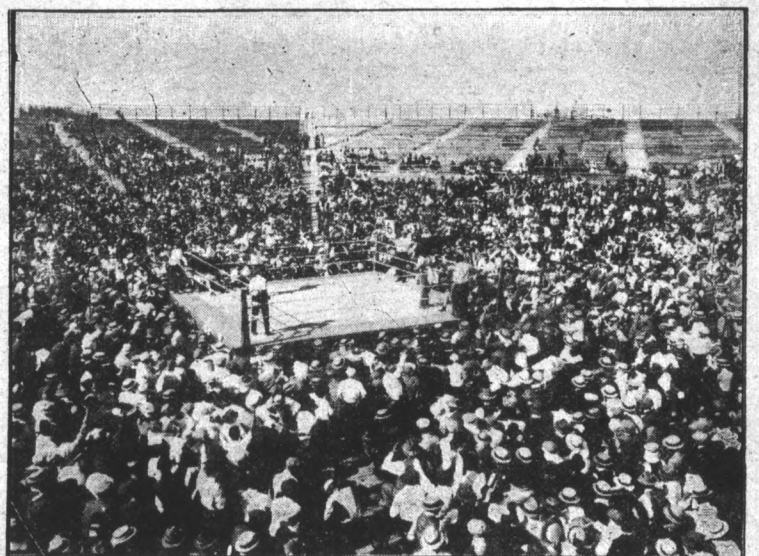
In Pocatello, Idaho, President Harding, while on his trip to Alaska, made a tour of inspection of the irrigation systems used for potato crops.



De Silva, tallest lightweight boxer in the world, is six feet four inches tall, weighing 135 lbs.



It is rumored that Ex-President Wilson has in mind the purchase of this old Virginia home about ten miles from Washington, so that he might more thoroughly enjoy out-of-doors life.



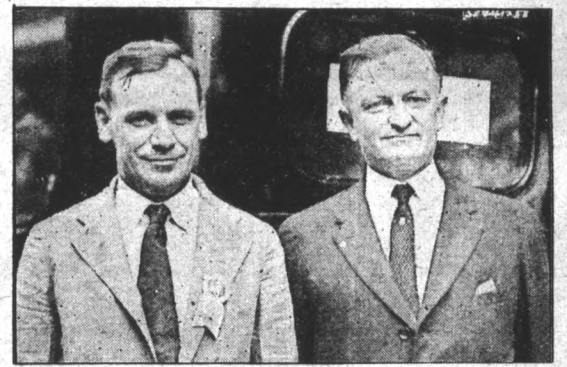
A blistering sun and a sea of sweating pine boards were only a few of the discomforts that this mob bore to see Dempsey and Gibbons in their battle in Montana.



Here is a member of a "kindness class" sponsored by N. Y. Women's League, getting instruction in care of dumb animals.



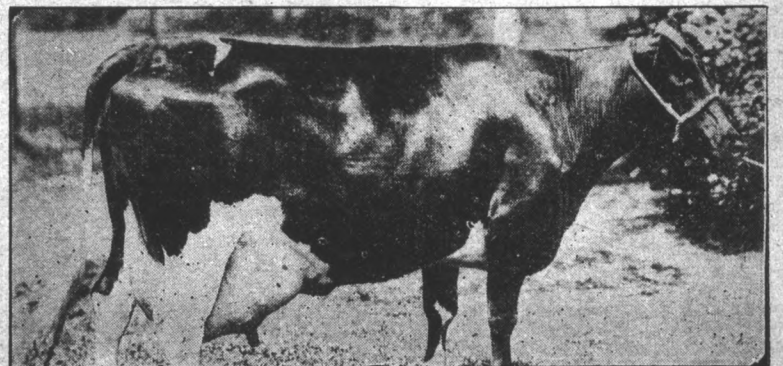
Signora Marconi, wife of inventor of wireless telegraphy, is lady-in-waiting to Queen of Italy.



The old and new Grand Exalted Rulers at the Elks' Convention, J. Edgar Masters, retiring, and James J. McFarland, his successor.



The two gentlemen on the left are United States delegates who attended the Mexican military review. President Obregon is between the military officers.



De Kol Plus Segis Dixie, the new world's champion butter-maker, produced 33,064.7 lbs. of milk, the equivalent of 1,863.69 lbs. of butter in one year—mighty close to a ton.



SHE bent down and drank at her feet. It was disagreeable to drink with the wire net on her muzzle and the iron bit in her mouth. She lashed the fast flowing stream with her muzzle in the hope that somehow the nasty basket would be washed away by the water, but she gave up the attempt, and drank as best she could. Suddenly she lifted her head and stared away into the dark spaces. In the far distance a small shadowy form swooped from the top of a tall poplar, like a bit of shadow breaking away from the body of the night, and disappeared in the whiteness of the sky, leaving behind the melancholy echo of its cry. She followed it with her eyes till it was no more visible, then suddenly turned and ran for the open.

It was not only the open prairie she sought, because the open prairie was the world she knew and loved best; but something else was driving her. A fear that seemed to have been born of shadow and water and the lonely cry of the loon. It was the sudden realization that though she had escaped from the detestable slavery of man and toil and dirty barn, she had carried away from her bondage man's inescapable curse.

Her first act upon reaching the open was to search the shaded distances, then out of the depths of her embittered, fear-infested heart, she sent into the wilds she had longed for her earnest appeal for companionship; but only the mocking echo of her own voice came back from the motionless tree-walls on each side of her. She lowered her head to graze but raised it at once again. Now she knew what she had feared. Now she grasped something of the extent of man's curse. The wire net on her muzzle, like a trap, forbade her to eat until she returned humbly to man and submitted to his tyranny.

IN a frenzy of fear and anger she loped about in a circle for the greater part of an hour, then she attempted to rub the cursed thing from her lips. But rubbing on the ground pushed back the levers of the rider's bit and hurt her with every move. She stopped to think a moment, gazing helplessly about. She lowered her head, pushing it along between her hoofs, and pulling it forward, trying to rub it off that way; but all that she did was to bend the strong wire of the basket, which after that pressed painfully into her nose. She tried rubbing her muzzle against the bark of a tree. A small twig point pierced the skin of her lip and as she hastily pulled her head back the lever of the bit caught in some way and she struggled for

some time before she freed it. Then she gave up, running off into space as if she were trying to flee from some fearful thing she had just seen.

The cinch was still tight and though it did not bother her much when she was up on her feet, it seemed to grow tighter and cut into her skin when she tried to lie down; and if, for want of rest, she lay down anyway, the stirrups always fell in such a way as to press into some tender spot as she lay upon one of them. She would endure that for a few minutes and then she would get up again with a groan.

The poplar woods about the Saskatchewan are not continuous. Patches and strips covering spaces of from one to fifty acres cut up the rolling plains. By running round about these she could keep herself invisible to ap-

ed sight of ducks. Many a time in her slavery she had had visions of this bit of water with its reflections smiling up to the heavens. It seemed hard for her to believe that she was really there; yet, now, she experienced something like a feeling of disappointment. What it was or why, she did not know.

She was crossing a muddy spot when she slipped and fell on her side. She was not hurt but slightly stunned and remained lying down. As she lay there it occurred to her that the stirrup was not hurting her. She did not think of its sinking into the mud, but thenceforth when she wanted to lie down she came to that muddy spot. The pond came to her assistance in another way. She had gone in some

came hunger. All day she struggled to obtain enough grass to keep her alive and when the stirrup resting on frozen mud kept her awake at night, she only thought of grass and how to get more and more of it. The sweetness of the wilds she had loved was gone, leaving them hollow and desolate and so cruelly unresponsive as to be almost mocking.

Day after day man's curse grew heavier to bear and the strangle-hold it had upon her life contracted with more telling effect. It was only a matter of a short time when its contracting hold would finally and mercifully put an end to her misery.

The short Indian summer passed away. The nights became cold and the frosts froze the mud into rock. When in lying down the stirrup pressed into some tender spot, she would endure the pain, then rise next morning and go limping over the plains. A layer of thick ice which no longer melted by the middle of the day now covered the pond. What little frozen dew that she could get, with the little grass she could crop, only intensified her thirst and the desire for water drove her to desperation. She tried to break a hole in the ice but she did not have the necessary strength. The irresistible desire for water sent her out upon the slippery ice in the hope of finding a weaker spot. A dozen feet from the edge she slipped and fell with a crash, breaking through and falling into the icy water. She was obliged to rest a while before she could summon enough energy to get up. When she did get up she was aching from head to foot and on her leg was an open, bleeding wound. She drank, however, all she could hold, then she turned and looked helplessly to the shore, afraid to step over the broken ice, falling again when at last she ventured toward it, but finally getting back.

Her sides pained her terrible and her open wound smarted and itched. She tried to lick it but only hurt it with the wire net. She stood stolidly for a few moments, her addled brain trying to clarify the great confusion that came over it. What was she to do? What was going to become of her? Life was almost unendurable, and instincts of terrifying force guarded against the death that would have relieved her. Paroxysms of fear swept over her, filling the shadows of the desolation with beasts of prey who, leering and licking their chops, waited with terrifying patience for the weaker moment when they expected to pull her down.

Geese flew southward constantly and their ominous honking sang dirges

A Twilight Pastoral

By E. H. Pitcher

Fair Jennie takes the milking-pail,
And to the meadow trips along,
The sunbeams slant across the vale,
And sweetly rings her merry song.

The meadows with white daisies
glisten,
The cricket stops his chirp to listen;
As o'er the fields her sweet voice
rings.

And high upon an elm tree bough
A robin gaily sings.

Richard hears the sweet voice call,
And sees the cows slowly moving
toward her,
No call for him, but yet he goes,
For twilight is the time to woo her.

So Richard leans upon the bars,
And woeth Jennie till the stars
Shine through the haze the twilight
brings;

And still upon the elm tree bough
The robin gaily sings.

proaching enemies. Her old power to detect man's approach seemed to come back to her. Once that day she thought she detected some one coming, and hid in the trees without even making sure, then coming out on the other side and taking a roundabout run, left that section of the country. Yet as she hastily put distance between herself and this danger, she half realized that she might have to go back at last to the man from whom she had escaped, who she knew could save her from the iron grip on her muzzle. Two days later she saw some one coming on the eastern horizon. She was certain that it was the boy pursuing her and first going north to get under cover of a patch of woods, she fled west for many miles.

She came late in the afternoon to the pond in the wilderness where White-black had been trapped in the mud. She remembered clearly White-black's floundering in the mud and avoided that side of the pond. She walked leisurely around it, gazing over the silent water from whose brightness she missed the remember-

distance to get a drink of clear water where the pond bottom was quite hard and as she drank, some of the lower rushes penetrated the basket through the meshes of the net. She lowered her muzzle carefully, keeping her jaws open; and when she felt some of the rushes in her mouth, she cropped them quickly, chewing them triumphantly as the water dripped from her muzzle.

THE rushes grew tallest in the center of the pond. She was afraid to go in very far, feeling constantly, as she would move inward, that this time she was going to stick there. It was not long before what rushes she could reach had all been cropped. She learned to get some grass by doing with the grass what she had done with the rushes, but though this was better food she could not get as much of the grass as she had gotten of the rushes. She managed in that way, however, to keep life burning in her bedraggled body.

The fear of being captured again left her as the days went by without a sign of man, but as this fear left

AL ACRES—Slim Says You Can't Kill Grasshoppers that Easy.

By Frank R. Leet.



to the depth of all that life had been to her in its happier past. The skies grew grey and remained chronically grey and the atmosphere seemed filled up with a great cosmic sorrow, like the face of a child suppressing the impulse to cry. The winds reaching out from the frozen north wailed with maddening grief.

A TACITURN old coyote began to worry her. He would sometimes pass her while she grazed or struggled in her attempts to graze, each time seemingly coming nearer. He filled her soul with terror. Sometimes he woke her at night with his demoniac howling and she would spring to her feet and shake and tremble with fear and cold, only to find that he was sitting on the rim of the hollow, looking down at her, his black, hateful form cut clearly against the dark grey sky. Then one morning, she awoke to find him less than a rod away, sitting on his haunches and watching her. He fled when she sprang weakly toward him with a fearful cry in which she tried desperately to be defiant; but she decided to abandon the basin.

The great weakness was upon her. The coyote had long recognized it and she knew it now. Whether she was to go or what she was to do, she did not know. Only she felt the need of going and she went, limping slowly and painfully, sick in body and soul, all her defiance of man crushed out of her. Thus the erstwhile Queen of the wilds lumbered painfully over the plains that seemed to no longer sustain her, going humbly back to man to dumbly beg for mercy, for even in that state of mind she felt that as man had placed his curse upon her only man could remove it.

It was a dreary, dull afternoon. The sun struggled to show itself and its weakest warmth was driven from her protruding bones by a cold, cutting gale. In her lumbering along over the plains that seemed strangely dim and uncertain she stopped every once in a while and stared like a decrepit old woman. She came at last to an open space between two patches of woodland and stopped to gaze wild-eyed upon a black shanty covered with tarpaper, and a sod barn.

(Continued next week.)

Mary Magdalene, the Faithful

Our Weekly Sermon—By N. A. McCune

MARY came from Magdala. To this day an old watch tower marks the site of the village. What we know of her is comparatively little. Luke says, "The twelve were with Him, and certain women which had been healed of evil spirits and infirmities, Mary that was called Magdalene; from who seven devils had gone out, and Joanna, the wife of Chuza Herod's steward, and Susanna, and many others, which ministered unto them of their substance." It seems that it was a common custom for women of means who had been helped by the teaching of a rabbi to accompany him and minister to his wants. If that is true, Christ was but following a common custom.

Mary had been immensely helped by Christ. Any one who is afflicted as

she was, and is cured, would do almost anything for the physician. To use the words of another, "Perhaps in some street of Magdala, the city of her youth, He found



her, torn with frenzy; and in upon the wretchedness of despair, the divided consciousness, the long continued fits of silence which darkened her life, there broke that calm, clear voice which restored her to sane and happy womanhood and freed her from the terrors of the devil-haunted past. No wonder that she loved Him and with woman's whole-hearted devotion hung about His footsteps in Galilee and 'ministered unto him,' content in some small poor measure thus to repay her infinite debt."

JUST what demon possession was, probably no one knows. We should probably speak of such persons as Mary as epileptics. Others of this class would be classed as insane. Yet it is possible that there is something in demon possession, if the testimony of missionaries is to be believed. Something like it is found on mission fields now, we are informed. An incident related by the late Bishop C. H. Fowler is to the point. He was traveling around the world, visiting the mission stations of his church. He reached China. A native pastor reported the case of a small woman whose husband was a Christian. She herself was not and she made life miserable for her spouse. She had fearful bursts of temper and at such times she was uncontrollable. Her husband on one occasion hired a professional athlete to come and conquer her. She seemed to know all about it, though no one told her. She said, "When that man comes, you will see what I will do to him." He came, a huge fellow, a trained wrestler. The little demoniac soon put him to flight, and even picked him up and pitched him over a stone fence. It sounds like the words of Mark concerning the demoniac in the tombs, "And no man could bind him, no, not with chains." Two Chinese pastors went to see this woman, prayed, and commanded in the name of Jesus that the demon depart from her. She was cured, and became a devoted Christian.

WE learn most of Mary at the time of resurrection. Probably Mary was the first to arrive at the tomb on Sunday morning. "Very early in the morning," say two gospels. "Very early, while it was yet dark," says John. Three gospels say that a company of women went to the sepulchre. It is likely that Mary hastened on ahead, as they drew near the tomb. The others no doubt soon left and returned to the city, while Mary Magda-

lene remained. She stood there weeping. She could not tear herself away from the spot. She did not believe He had risen. That was too good even to suggest. She only wanted to know where the body had been taken. Presently a man is seen near by. Naturally, it would be the caretaker of the garden, she thinks. He asks her why she is weeping. She tells him she wants to know where the body has been taken. "Mary"—one word is enough. She recognizes it instantly. "Master!" She falls at His feet, but He says, "Touch me not, for I have not yet ascended," implying that the unseen communion with Him would be a far greater boon than conversing with Him in the flesh. He gives her a message—"Go unto my brethren, and say to them, I ascend unto my Father and your Father, and my God and your God."

There are some good things to think of, in connection with Mary Magdalene. To begin with, it is a wonderful influence in one's life to admire some great soul, with a passionate admiration. An Englishman became so enamored of the life of Lincoln that he wrote one of the best studies of him ever published—"Lincoln, Master of Men." The editor of one of Michigan's daily papers has recently written a new life of Alexander Hamilton, whom he considers the greatest American. The superintendent of a reform school for boys states that the majority of boys there have never had their admiration awakened for any distinguished person. In other words, they know nothing of hero-worship. That is tragedy. Great men are always hero-worshippers. The one who has had the most widespread influence on men is the Christ. He is and has been the hero of millions, and will continue to be. That is a poor and shallow way to speak of Him, but it is one way which appeals to the crowd. They know what a hero is. The person whom one admires ought to have the power to lift one up out of his common level of thinking and living.

AND that, of course, is precisely what Christ does. In fact, it is astonishing that He does not make a deeper impression on the lives of His followers than He does. They do not take Him seriously. It is time they did.

Mary loved much. She would do anything for the One who meant so much to her. That is the secret of her devotion. And love always wins. "Love will conquer at the Last," says Tennyson. That is about the hardest fact of life to learn, and it certainly is the hardest truth of Christianity. Force is so much easier and quicker. Yet in the long run it is not quicker. The use of force was the popular medicine dealt out to the Indians in the early days. But the wars, scalps, lives sacrificed, showed that it was not the surest method nor the quickest. (This is not to be taken as meaning that the Indians never should have been resisted, but refers to the general policy of the white man toward the red man). One of the most striking facts of recent times was the erection of a statue of Christ on the border line between Chile and the Argentine Republic, called "The Christ of the Andes." That statue and the sentiment back of it will do more to prevent future wars in South American than any standing army.

SUNDAY SCHOOL LESSON FOR AUGUST 5.

SUBJECT:—Mary Magdalene. Luke 8:1 to 3. Matt. 27:55,56. John 19:25,20:1 to 18.
GOLDEN TEXT:—Our soul hath waited for Jehovah; he is our help and our shield. Ps. 33:20.

Rural Health

By Dr. C. H. Lerrigo

COMMON SENSE ABOUT GERMS.

A SUBSCRIBER, of a thoughtful turn, would like a little light upon the germ theory of disease. If germs are so very deadly, and if they multiply so fast, how is the human race saved from extermination, she asks. She would also like to know what common sense tells us to do about germs.

The fact of the matter is that disease germs, dangerous though they are, do not have everything their own way. They are not very long lived. They cannot exist unless they find suitable soil. They must have proper degrees of temperature and moisture. They are blasted by the breezes of the atmosphere and withered by the bright rays of the sun. If every single disease germ proved fatal to every person attacked the result would be a speedy end to the human race. But disease germs must attack in force to be effective, they must find a non-resistant soil, and even then the human body will generally destroy them after a resistance that we speak of as an "illness."

I think it is safe to make the broad statement that germs from the body of a person in health will do no harm to other persons. It is true that even a healthy person carries constantly germs that are capable, under certain conditions, of creating disease, but while the body is in health they lack virulence.

There is one great exception, and that is in the bodies of persons who are "disease carriers." These "carriers" are those who have had a disease, such as typhoid fever or diphtheria, have recovered from it so that they are immune to its germs, but for some reason still harbor the live germs in their bodies, and are capable of passing them on to other persons in such a way as to transmit the disease.

I do not think that harmful carriers are so very numerous, but there are enough so that I feel sure that all persons employed in dairies, in bakeries, in restaurants, or in the production or preparation of any food supplies should be rigidly questioned as to their previous illnesses and a physical examination made to determine their safety to the public.

Just as the human body in health is perfectly safe to others, the same body in contagious illness is actively dangerous to others. The germs that rest

in the mouth and throat harmlessly during health become active for evil when health has given way to illness. Most of the spread of contagious disease comes from a well person coming in contact with one who is ill with the disease.

I will sum the matter up by saying: Don't bother about germs so long as you are in good health. In case of illness quarantine yourself until you know that you cannot spread contagion. Avoid actual contact with persons who show symptoms of contagious disease. That's all you can do. Don't worry.

DISTURBANCE OF SWEAT GLANDS.

I have something that comes by spots the size of a pin head, just under the skin of my face. I had this for years and it seems to be getting worse. Will you please tell me what it is, and cause and cure?—Mrs. E. B.

I am not sure from your description, but think these spots are Sudamina, caused by disturbance of the sweat glands. The best treatment is to promote a healthy, vigorous condition of the skin of the entire body. Take a regular morning bath in water of a temperature that you can bear comfortably, but the cooler the better. Follow this with a brisk toweling and a rub all over the body that will bring the circulation to a pink glow. For young, vigorous people cold water is best. This will improve the circulation throughout the entire skin and give you a better complexion.

SORE IN MOUTH.

What shall I do about a pimple in the back of roof of mouth? This is sore only in damp weather or when I have a slight cold, sometimes two or three days at a time, then is not noticeable for some days again. This has bothered me for three years but I have never tried to bring it to a head for fear of making a cancer.—Mrs. R. A.

Go at once to a good doctor who can examine your mouth and keep that ulcer under treatment until it is well. A persistent sore in the mouth must never be neglected, on account of the bare possibility of its leading to cancer. Just as a hint: have the doctor or dentist look carefully at your teeth. Sometimes carious teeth cause such a condition, and sometimes it comes from unsuitable fillings.



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Woman's Interests



Good Things to Eat in Summer

Some New Dishes Now and Then Help to Stimulate the Appetite on Warm Days

TO surprise the family with a new food or a unique way of serving an old one, is one of the happiest stunts in a home-maker's bag of tricks. There are countless changes, additions, and other devices by which the ingenious housewife may entice the appetite on a hot summer day as the men come in tired from a long day's work in the field. Of course, there are many extra demands on mother's time, too, during the summer, but her efforts will be well repaid. When the men folks enter the dining-room with that expectation of finding fried potatoes, bread and butter, cake and sauce, it is a welcome surprise to them to find some little change mother has been capable of devising.

It is a soul-satisfying feeling that mother has when son pushes back from the table saying, "I didn't feel a bit like eating supper but that new dish looked so good I had to try it. Now I am so full I don't feel like doing the chores."

These are some dishes that are simple and will be a welcome and delightful change in summer.

Curried Lima Beans.

Cook one cup of lima beans with a small onion sliced and one-quarter cup of diced meat. Next add one-quarter cup of rice, half cup of sweet corn, one cup tomato soup or three whole tomatoes, and one teaspoon of curry powder or other seasoning. Simmer slowly until vegetables and rice are done. Season and serve. Fine if served with toast.

This same recipe makes a very tasty dish if served with steak. Omit the diced meat, and prepare all together. Place on cut of steak and roll. If the mixture is not of the right consistency, add bread crumbs, bake until tender.

Creamed Salt Pork.

One often becomes tired of salt pork when the warm days come. Try serving it this way. Slice half pound of salt pork rather thin and dip first in flour then in corn meal. Fry until brown on both sides. Place on a platter and pour all but two and a half tablespoons of drippings from the frying pan, add two tablespoons of flour, pepper and one cup of milk, and make a creamed gravy. Pour this over the pork and serve with baked potatoes and fried apples.

Salmon Scallop.

Salmon scallop makes an enticing warm weather dish. Make a sauce of one cup of milk, two tablespoons of flour, two tablespoons of drippings. Cook until thick and add one cup of flaked salmon, and half cup of boiled onion. Line a baking dish with one cups of mashed potatoes, and add the creamed mixture. Beat two eggs, half cup of milk, salt, pepper, and pour over the top. Bake twenty minutes in a hot oven.

MAKES THEM WORK.

DEAR READERS:—I have just finished reading how Mrs. Brown feels about city company. I am just the reverse. At our house we are always glad to have friends and relatives from the city come and stay.

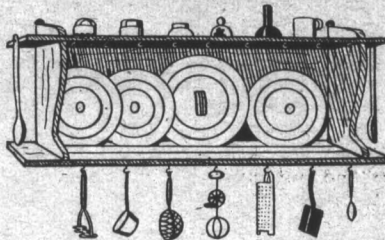
The reason why I don't mind them is that I give them to understand that they are welcome as long as they don't make any extra work. They all turn in and help until the work is done, including canning, picking fruit, preparing vegetables and the regular housework. Then we are then already

to enjoy our good time together.

I think I have as many city folks at our house as anyone who lives on a 120-acre farm, and they say they would rather come here than anywhere else. —Mrs. J. A. G.

HAVE KITCHEN UTENSILS AT YOUR SERVICE.

ONE of the handiest arrangements in my kitchen is an old-fashioned plate rack which I have converted into a kitchen convenience. After staining it the color of the woodwork in my kitchen, I fastened it to the wall by means of screweyes. Placing extra hooks on each small shelf, all my working tools are hung upon these



hooks—those utensils which are usually put in a drawer with no proper arrangement.

All my kettle covers are placed where the plates used to go, which is much handier and better looking than the old rack for covers.

Cookie, biscuit and fried cake cutters, potato chopper, and measuring cups are placed in a row on top.

Two small nails are driven at each end of the top shelf to give a place for spoons too large to fasten on the hooks.

This convenience is so simple that even the unskilled can fashion one similar—even though you don't possess such a rack. A small strip on lower shelf will take the place of the groove to hold covers.—Mrs. W. P. R.

BECOMING MOTHER'S LITTLE HELPER.

I AM anxious to tell the readers of the home department of the unique way I saw a young mother and daddy training their five-year-old daughter. The mother is delicate but very ambitious, and daddy's job gives him much time at home. He helps mother a good deal.

Little daughter has been provided with broom, carpet sweeper, dust cloth, etc. When the sweeping is in progress, she is given a small corner to sweep, dust and put in order. When mother makes the beds, she puts her dolly's bed to air and makes it up according to the rules of the house.

She has her own dishes, little cupboard, dishpan and towels. When the dishes are done, with a chair at the sink, she prepares her washwater and washes her dishes, arranges them in order, rinses her towels and hangs them to dry. Twice in my week's visit to this home daddy told her her cupboard was not in order and both times she put clean papers on the shelves and arranged it just as neatly as her mother's.

She makes little pies on baking day.



Her little range is set on the stove and with mother watching over her she learns how to bake.

She is also receiving training with her needle under her mother's direction, and it struck me, why don't all mothers do the same? To this little miss it is play and amusement. She uses her own telephone which really rings, and gives orders to the grocery man every day. After ringing she will say, "Hello, Mr. Groceryman, what is the price of eggs, lettuce, lamb chops, etc?" After a minute's hesitation, she will decide that lamb chops are too high and will order round steak.

Perhaps she has inherited her management from her parents, and perhaps it is training. At least, she is becoming a very efficient little housekeeper, as a child.—Grandma M.

HOUSEHOLD HINTS.

WHEN using soft, turbid water to do washings or any other cleaning, put a loose piece of cotton batting on the top of the water and let boil for a few minutes. The sediment will go into the batting and the water will be clear. Do not squeeze the batting; either leave it in the bottom or take it out with a dipper.

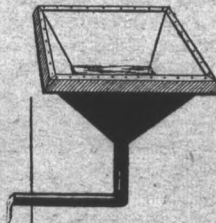
Keep a pair of scissors in the kitchen. They are excellent for cutting the edges of pork or steak which curl when frying, also clipping the fibers in grape fruit, etc. They will save the sharp knives, aluminum pans and many burns beside.—Mrs. N. L.

Fruit pies can be prevented from boiling over and wasting the juice while baking, if a tablespoonful of corn starch is added to the fruit. Sweeten the fruit to taste, add the corn starch and heat, then pour into the crusts.—G. S.

AN INEXPENSIVE DRAIN.

THE handiest thing in my house is a Handy Man. Now, don't think by this that my husband sits in the house all the time, waiting to do the hundred and one things that help to lighten a woman's burdens. He has many duties beside his farm work, and doesn't always find it easy to take the time to do these things. The majority of men can be handy if they will, but remember, sister housewives, we must be "on taps" to give our busy husbands an occasional lift.

Probably the most appreciated of his recent helps is a drain in my wash room. It was not convenient to place a sink with underground drain in this room, and besides, it would cost considerable. So he had sort of a slop sink constructed of galvanized iron, re-enforced around the edges with wood, with an elbow of eave spouting soldered into the bottom. To this he attached sufficient spouting to carry the water away from the house. The window in this room is low and by taking out a pane of glass and substituting one made of galvanized iron a satisfactory outlet could be made for the drain. The complete drain cost four dollars, and my! the steps and heavy lifting it has saved me.—Mrs. G. W. L.



Hurrah for a Picnic!

I HEARD a woman say the other day that in her opinion there were two ways of cutting down the labor of preparing a meal. The first was putting into operation the practical labor-saving devices which her kitchen afforded and the latter was going on a picnic.

Perhaps many would not agree with this woman, but she undoubtedly planned her picnic eats in such a way as to satisfy the fresh air appetites and to save herself as much work as possible.

If mother is to enjoy the picnic along with her family, the time spent in preparation of the lunch should receive much consideration. The following are some suggestions with which one of our readers fills up a tasty picnic basket.

First Prize.

Miss A. J. B., Holland, Michigan.
 Potato Salad Chicken Salad
 Pickles Olives
 Nut Bread Sandwiches
 Cheese and Nut Sandwiches
 Coffee
 Apple and Custard Pie
 American Cheese
 Assorted Fruits
 Potato Salad.

Dice twelve boiled potatoes, three onions, two green cucumbers, stalk of celery.

Dressing.

One egg well beaten
 One teaspoonful salt
 Three tablespoons sugar
 Three tablespoons flour
 Half teaspoonful mustard
 One cup vinegar
 Large tablespoon of butter
 Dash of paprika.

Mix in order given. Dissolve mustard in vinegar. Boil slowly and stir constantly.

Chicken Salad.

Boil fowl until tender. Cut meat into small pieces. To one part of

chicken add one and one-half parts of diced celery. Use this dressing.

Two tablespoons cream salad mustard

Five tablespoons sweet cream
 One teaspoon of sugar
 Garnish to suit.

Nut Bread.

One egg
 One scant cup of sugar
 One cup milk
 Three cups flour
 Three teaspoons baking powder
 Half teaspoon of salt
 Fifteen cents worth walnut meats.

Mix and sift dry ingredients. Beat the egg well and add to the milk. Add egg and milk to dry ingredients.

Beat well and add chopped walnut meats. Bake in moderate oven for thirty minutes.

Cut slices thin and spread with butter.

For cheese and nut sandwiches take home-made bread, butter, and use the following filling:

Take equal parts of American cheese and pecan (or walnut) meats. Chop the nuts fine and mix thoroughly with the cheese, to which should be and enough sweet cream to moisten or soften the mixture, two tablespoons cream salad mustard. Season to taste.

Apple Custard Pie.

Peel some apples and stew until soft and not much water left in them. Then add butter the size of a large egg, one-half cup of sugar, one egg, season with nutmeg. To be baked with one crust, bake crust partly done, then add filling and return to oven. Serve with squares of cheese.

Mrs. B. T., Leslie, Mich., won the aluminum serving tray, while Mrs. M. J. H., Okemos, Mich.; Mrs. P. F., Pigeon, Mich., and Mrs. E. L. E., Howell, Mich., each won sauce pans in our contest this week.



(Use this department to help solve your Household Problems. Address your letters to Martha Cole, Michigan Farmer, Detroit, Michigan.)

TOMATO SOUP FOR WINTER.

Will you please give me a recipe for canning tomato soup? I have good luck with canned tomatoes, but this tomatoes strained and prepared for soup I have never tried.—Mrs. M. A.

It is most economical to can a soup as concentrated as possible. After blanching your tomatoes in boiling water to remove skins, cut in medium size pieces and add one large onion chopped fine; and one cup of chopped fresh peppers to each gallon of tomatoes. Cook until tender, then put through a sieve. Add one-half teaspoon of salt, three tablespoons sugar to each gallon of pulp. Cook until the consistency of catsup, stirring constantly. Pack boiling hot in sterilized jars. Adjust rubbers and top into position and take one turn back. Process thirty minutes in hot water bath, or ten minutes over ten pounds steam pressure. Remove the jars and seal.

PICKLING DIFFICULTIES.

I would like to get some information about canning pickles. About two hours after I put the vinegar on the pickles, they shrivel up and are not good to eat. I use nothing but pure cider vinegar, granulated sugar and a few spices. Before I put the vinegar on them they are as crisp as though fresh from the vines.—Mrs. E. O.

From the explanation of your trouble with your pickles, I believe your difficulty lies in the vinegar you use. I have had several housewives tell me

of similar difficulties they have had along this line.

Some home-made vinegar cannot be used successfully for canning. It might be well for you to change the vinegar barrel you are using. Are you keeping the vinegar where it is cool, and where it takes the cider too long a time to be changed to vinegar?

To make sweet pickles without having them shrivel, they should stand in brine three days in an open crock, and after this is removed they should be placed in a weak solution of vinegar for two days, and the hot vinegar, sugar and spices added to them just before they are packed into jars.

TO CLEAN WALL PAPER.

Some paste stains are left on the outside of our wallpaper which are more conspicuous than the pattern in the paper. Can you tell me how these may be removed?—Mrs. C. P.

If you would clean the paper lightly with the following wall paper cleaner the result would be quite satisfactory. Do not rub hard, and clean a rather large area around the spots.

To make this wall paper cleaner use one-half cup of water; one cup of flour; three teaspoons of vinegar; three teaspoons of ammonia; one-teaspoon carbon oil.

Boil and stir constantly until thick. Work into small balls and rub the paper always with a downward stroke. If the paste spots are not very large it might be satisfactory to tear irregular shaped pieces of paper with pattern to match, and paste down carefully over the stains.



Famous for Flavor

Poor bread for dinner won't help out Friend Husband's disposition after a hard day at the office. Neither will medium good bread. But an excellent bread, a bread that is delicious to the taste, good to eat, and satisfying all the way through brings forth a smile where only a frown grew before.

Lily White is the finest flour you can buy. It is made from superior wheat and milled by a most careful and extensive process. It is clean. It has wonderful flavor. It will please you better. You'll be delighted with your baking triumphs and you'll please the whole family. Just see!

Lily White

"The Flour the Best Cooks Use"



A GOOD RECIPE FOR NUT BREAD

1 egg, 1 cup sugar, 1 cup sweet milk, 1 teaspoon salt, 1 cup nuts, 4 1/2 cups Lily White Flour, 4 level teaspoons baking powder. Mix well and let stand twenty minutes in two pans nine inches long, four and three-quarters inches wide, three inches deep. This amount just fills these two pans. Grease pans and over top of loaves with melted butter; bake in moderate oven until done. (Use one-half cup of flour to knead in soft dough.)

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

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

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STAMMERING PERMANENTLY CORRECTED
 Most Successful speech correction school in America. You can learn to talk naturally in a few weeks. Information Free.
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FRUIT BASKETS.

These are made for grocers, fruit growers, and roadside trade for tomatoes, peaches, plums, grapes, etc. They greatly increase sales and profits and supply a convenient measure. Prices are as follows, f. o. b. cars Lansing.

	100	250	1000
1 qt. size	\$1.25	\$3.00	\$11.50
2 qt. size	1.60	3.75	14.50
3 qt. size	2.00	4.75	18.00

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 Box 525,

Michigan Farmer Pattern Service



No. 4360—Ladies' House Dress. Cut in seven sizes, 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 5 3/4 yards of 36-inch material. The width at the foot is 2 3/4 yards. Price 12c.

No. 4022—Ladies' Apron. Cut in four sizes: Small, medium, large and extra large. A medium size requires 2 3/4 yards of 40-inch material. Price 12c.



No. 4377—Ladies' Camisole. Cut in four sizes: Small 34-36; medium 38-40; large 42-44; extra large 46-48 inches bust measure. A medium size requires one yard of material 32 or 36 inches wide. Price 12c.

No. 4376—Child's Dress. Cut in four sizes, 2, 4, 6 and 8 years. A six-year size requires three yards of 27-inch material. Price 12c.

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Michigan people prefer this hotel for its service, courtesy and fairness of charge. The Fort Shelby Garage is one of the finest in the world. Great excellence at moderate prices in the Cafe.

Rates per day \$2 and up
 Double \$3.50 and up



OUR BOYS AND GIRLS



Club Work Builds for Future

Club "Graduates" Find It Helps in Constructive Activities

By Johnny

THE beginner, or younger club worker, is always interested in what the older boys and girls have done, and how they have succeeded. He usually enjoys hearing their stories, and profits from them. With this in mind, and that the experiences of those who have succeeded would be of interest to that new class of boys and girls who are launching out to raise better pigs, an acre of corn, or other project, I have collected together opinions of three who

prizes, and honors, is ex-president of the State Organization of Club Boys and Girls. He is a breeder of Duroc Jersey swine, and naturally his interests are chiefly along the lines of a live stock worker.

He says, "First decide upon the project you are going to follow. Select one that will be of use on the farm, as well as one that will aid in training yourself."

Second, you should aim to produce or raise the best. The new club member should keep his records accurately, become interested in and enthusiastic over his work, and aim to produce that superior good at the least possible cost.

It is of interest to notice that these

opinions while coming from those in widely different parts of the country, are decidedly alike, and show that the projects as outlined and carried out produce uniform results along educational lines. Club work has developed leadership in these three workers, who evidently have brilliant careers before them. Club workers mold their minds along similar lines. They are ever after men who believed in the true, the beautiful and the good.

of a boy (smart or dumb) can get ahead of me in school work. One boy in my class got 56 in physiology. I will be in the seventh grade next year, and still intend to keep my motto, "Work to Win."

Well, I will close, hoping to succeed.—Your niece, Alta Swinehart, M. C., Edwardsburg, Mich.

Boys, here is a challenge. Come across and show she is wrong.

Dear Uncle Frank:

It seems like I've answered a dozen contests and haven't won yet, so I'll try again.

Well, Uncle Frank and cousins, I'd like to invite you to see me, but perhaps you would be afraid of the bear. There is one that stays in the woods around here. One day a gentleman was walking along the road and saw one in a tree. He started and ran and afterwards someone asked him how large it was. He said he didn't stop to see.

There are lots of rabbits up here, too. One man said they weren't any bother at all. All he had to do was put a kettle of hot water on the stove, open the door, and the rabbits ran right in the kettle.

Well, I guess I'll have to close.—Your niece, Zetta Graves, Billings, Mich.

Some wild country you must live in. At least you have given us some "bear" facts about it.

FUNNIEST THING I EVER HEARD.

By Ida Cryderman, Twining, Michigan.

"Hey, hey, you come help-a-me queek, my Johnny he hass fell into the deeth." Looking up from my book I saw a neighbor, a foreign woman, ridiculously fat, come puffing toward me.

I jumped up and ran to the "deetch" which at that time of year had not much water in it, but lots of nice soft mud. I found that "her Johnny" had obligingly pulled himself out and scampered home.

"Well," I said, "I don't see how he managed to fall in there."

"Why, you stupid," said she, "it was like thees. Now watch. He went out



In Rain on Mule-back," by Melton Lee Clark, New Haven, Mich.

on thees board like thees," and she proceeded to waddle out on a board that reached from bank to bank on the ditch, "and when he got right here, see, he went right down a-ker-plunk, like thees," and a-ker-plunk, down she went into the nice soft mud. There she sat, her large, foreign-style skirts spread around her fat form, making her look just like an animated balloon, and a much surprised one at that.

I never expect to have anything else so clearly explained to me.



UNCLE FRANK.

From Frieda Leach, Hartford, Mich.

have won out, as to what they consider to be the chief factors to success in club work.

Fannie Moog, of Branch county, has won for herself many honors, trips, and a state championship in her line of work. She claims perseverance, or "bull dog tenacity," as the most important of those talents which a successful club worker must exhibit. Second, initiative and the knack of striking out for yourself, which club work also tends to develop. As Miss Moog says, "We all like a game loser; good sportsmanship is not without its value. We can not all win, you may not win. If you do win, forget about it.

If you do not win, remember that you are not going to lose again. There is nothing so disgusting as a poor loser, unless it is a poor winner. The successful winner bares his honors modestly, the poor winner lets the world know he won."

Mary Francis Jones, of Tennessee, has made rather an unusual record. She is a member of one of the liveliest baby beef clubs in the country. Showing her calf last year, along with the exhibit made by her club, her calf was the heaviest winner. On this one entry she won five loving cups, two medals, and a watch.

First among the factors to success she considers organization among the members or the entire club working for the same ideals. Have a definite aim at the beginning.

Second, she names cooperation of your parents, local citizens, and business men, to give to the work its necessary "dignity." Last, but, as she says, not least, comes individual "pep," or the putting of one's entire efforts into the work, for he who does more than is expected of him will be repaid doubly, while he who does less never rises high.

Sidney Phillips, who has won many



Dear Uncle Frank:

I received my Merry Circle pin and membership card and thank you very much for it. If you use this letter to fill the waste basket half full, I will send another one to fill it up the rest of the way. Say, Uncle Frank, how would it be to have a Merry Circle flag? Can anyone send in a poem whenever they want to?—Your nephew, Robert Asch, Redford Mich., R. 3.

The waste basket was full already so I had to leave your letter out. Maybe a Merry Circle flag would be O. K. What do other M. C.'s think about it? Yes, one can send in poems any time, but we can't always print them.

Dear Uncle Frank:

I don't think it fair that Rex Ellis should get a prize every time there is a contest, nearly, and I believe some of the rest of the Merry Circleers think that same way.—With love, Eleanor Frederickson, M. C., Petoskey, Mich., R. 2.

I agree with you. I wish others would send in better papers so Rex would not get so many prizes.

Dear Uncle Frank:

I can't tell what you really think about bobbed hair and knickers by what you say, but do tell us what you think about bell trousers. The first time I saw a young man in a velvet suit with bell trousers split up the side and paneled with red satin, I ran right home and got into a pair of overalls. If the men are going to dress like parakites it is time for us girls to get ready to shoulder the rough work.—Your loving niece, Evelyn Batten, M. C., R. 1.

Bell trousers may be all right in Mexico or some such place, but not in our neck of the woods. They must be the masculine for slit skirts.

Dear Uncle Frank:

Thanks ever so much for the button and membership card. I was very much surprised and pleased to get them.

Are planting corn and beans good "reducing stunts?" That's what I have been trying, anyway.

Well, I must close my chatterbox or the waste basket will surely get this

—Your niece, Ada Tabberer, Kingsley, Mich.

Can't tell you about reducing stunts, because I've never had to reduce. I'm interested in fattening stunts. I wonder if eating corn and beans would fatten?

Dear Uncle Frank:

Here I am again! I received the button and membership card all O. K., but when I was away, so I didn't have time to answer it.

Uncle Frank, I wish we could have some movie contests, we've never had any yet. I'm simply crazy over actresses and actors. In my room last year we girls all played some actress. I was Norma Talmadge. We got all the pictures of the different actresses and actors and took them to school and showed the others. I must have about one hundred. I had some movie magazines here and I cut all the pictures out of it. You can get a lot of them.

Well, I must stop my chatter and close.—Your niece, Anna M. Sprague, Kent City, Mich.

Maybe you're right in saying you are crazy over actors and actresses. A person wants to be careful about getting crazy over anything. I wonder what others think of a movie contest.

Dear Uncle Frank:

Here I am again, as big as life and twice as natural.

I received my membership card and pin. Thank you very much, Uncle Frank, they are nice.

I read Versel Galley's account of his year's work, so I thought I would give mine, as you said you would like to hear them.

I am fifteen years old and in the eleventh grade. My average was 96. My lowest mark was 91. My highest mark 100.

There it is. What do you think of it?—Your niece, Helen Lardie, M. C., Garnet, Mich.

Good marks, I say. Keep the good work up. Glad you are an M. C.

Dear Uncle Frank:

My highest mark in examination was 100, and my lowest 90. No kind

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Cockerels—White Leghorns, Barred Rocks, Cock Birds—White and Barred Rocks; R. C. Reds; White Leghorns. These Cock birds should be selected and bought this month, if you want Cock birds for next year.

All stock is guaranteed to be satisfactory to you. Write to us for description and prices.

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Best Paying, Heavy Laying, Purebred Strains. Tom Barron, English S. C. W. Leghorns—25, \$2.50; 50, \$5.00; 100, \$10.00; 500, \$45.00; 1000, \$90.00. Park's Strain Barred Rocks; S. C. Rhode Island Reds—25, \$3.00; 50, \$6.00; 100, \$12.00; 500, \$55.00; 1000, \$110.00. Good strong broiler chicks \$3.00 per 100. Place your order at once; avoid disappointment. Get your chicks when you want them. 100% live delivery guaranteed postpaid. Instructive catalogue free. Prices on mature stock, 8-12 weeks old pullets on request.

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SELECTED YEARLING BREEDERS

S. C. W. & Br. Leg. & Anconas. All good stock from our breeding flocks to make room for growing stock. Also 8 wk. pullets. Write for prices on what you need.

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GREENLAWN CHIX AFTER JUNE 15th

White Rox, Barred Plymouth Rox, R. I. Reds, or Black Minorcas, 13¢ each. White Leghorns, Anconas or Broiler Chix 12¢ each in 100 lots. All chix less than 100 lot 14¢. Order now for June, July and August. Our 13 years producing chix that please. Sept. Chix 15¢ straight. Greenlawn Poultry Farm, South of High School, Fenton, Mich.

Baby Chicks \$12.00 per 100 and up
Hatching eggs, \$1.50 per setting to \$5.00 per 100. We are listing 17 varieties of pure bred fowls: Chickens, Geese, Ducks & Guineaas. Also breeding stock. Send for prices and circular. Booking now for early delivery. **CLINTON HATCHERY & POULTRY FARMS,** Wilmington, Ohio.

RHODE ISLAND WHITES
win over all breeds at the egg laying contest. 30 eggs 50¢; 50 eggs 100¢; 100 eggs 150¢. Some chicks H. H. JUMP, 175 Prospect Blvd., Jackson, Mich.

Correspondence Scramble

By Uncle Frank

SO many boys and girls have asked me to ask other boys and girls to write to them. It is impossible for me to do this or to print the list of all who want to correspond, so I have thought of the following plan as a substitute which we will call "The Merry Circle Correspondence Scramble." It will take the place of the contest for this week.

This is the way it is to work: If you want to join in the Scramble write a letter, addressing it "Dear Friend," or to Uncle Frank, Michigan Farmer, Detroit, Michigan. In the lower left hand corner of the envelope be sure to put "Correspondence Scramble." Also with your letter put a stamped envelope addressed to yourself.

We will keep all the letters that come until August 10, when we will open them and put some other boy's or girl's letter in your envelope and your letter in somebody else's envelope and send them out. Then you can answer the letter you receive if you wish.

This way you have two chances for starting a correspondence, the one you receive and the one you may hear from. You may hear from a boy or a girl. The letter may come from your neighborhood or from some far part of the state. We will do no selecting but will take them as they come.

Please be sure to enclose an envelope addressed to yourself, with your letter and please do not send a letter to me in the same envelope, as it may get lost in the scramble. I don't want any letters for me to get lost.

If you like this Scramble we will have others.

THE LUCKY TEN.

YOU must have thought that this last Read-and-Win was a hum-dinger. It really was a little harder

than usual, and for that reason quite a few did not get their answers correct. The next time we will make the question a little less puzzling.

Here are the winners and the prizes they won:

Pencil Box.

Evelyn Nelson, Leroy, Mich., R. 1.
Thornton Woodman, Cloverdale, Mich.

Pencil.

Frances Ruesink, Adrian, Mich., R. 4.
Helen Hartwig, Elba, Mich., R. 1.
Bernice M. Ball, Charlotte, Mich.

Map.

Hazel Crofts, 1109 North Pennsylvania Avenue, Lansing, Mich.
Leal D. Parker, Rochester, Mich., Hamlin Road, R. 1.
Mary L. Walbridge, Paw Paw, Mich., R. 1.
Ruew Rippey, Sturgis, Mich., R. 3.
Donald Cooper, Lacota, Mich.

THE CORRECT ANSWERS.

FOLLOWING are the correct answers to the Read-and-Win Contest announced two weeks ago:

1. Organized growers at Hart, Ludington, Scottville and Onkama—Page 53.
2. To save brooder fuel in spring and to produce eggs early in the fall—Page 62.
3. 200,000—Page 64.
4. A wheel tray—Page 58.
5. From Europe—Page 49.
6. Rosen rye, Red Rock wheat, Worthy and Wolverine oats, Duncan and M. A. C. Yellow Dent corn, Robust beans and Hardigan alfalfa—Page 49.
7. A condition of the scalp when sharply defined areas become bald—Page 68.
8. Mrs. J. C.—Page 58.
9. Twenty to twenty-five pounds—Page 64.
10. Twenty-six per cent—Page 53.

The Clarkston Hampshire Pig Club is going to hold an auction at Park View Farm, Clarkston, Michigan, on August 15. The club members will sell fourteen sows, three boars, twenty sow pigs, and thirty-six feeding boars.

Summer Poultry Hints

(Continued from page 91).

treating with sodium floride. This is most easily applied dry. There are two common methods of using it in the powder form.

The Pinch Method.—The bird is held by the legs and pinches of the powder dusted into the feathers about the vent, in the loose fluff feathers and along the body feathers extending from the thigh forward.

The Shaker Method.—This is similar to the pinch method except that a can having a perforated top is used in place of using pinches. This requires much more material and consequently it is frequently diluted with some fine substance such as flour or flowers of sulphur.

Dip Method.—In addition to using the sodium floride as above, it is sometimes used as a dip. This requires more labor but is a thorough method of cleaning up a flock. A warm sunny day should be chosen and the work done during midday to give the birds a chance to get dried off before going to roost. This practice is rapidly becoming more common among poultrymen as they are overcoming a fear of wetting the birds.

Beach and Freehorn give the following directions for making the dip: "The solution should be prepared in a wooden container, avoiding contact with galvanized iron. The ordinary wooden wash tub is excellent for this purpose. One ounce of commercial sodium floride, or two-thirds of an ounce of the chemically pure salts should be dissolved in each gallon of tepid water. The best method for dipping the birds is to hold them with the left hand by both wings. They are then placed feet foremost in the

warm dip and submerged until only the head remains above the surface. They should be held in this position for twenty or twenty-five seconds, while the feathers are ruffled to permit penetration of the liquid. Just before removal the head should be ducked under the surface. Hold the birds above the tub for a few minutes to allow them to drain. One hundred birds will use up approximately five gallons of dip on which basis material should be available at the start of the operation to keep the dip replenished.

Summer Feeding.

During the long warm days our ration can be changed quite materially from the one used during the short cold days of winter. The hen no longer requires an abundance of heating food. These must be supplied in quantities sufficient, however, to maintain body weight. She does require, however, a liberal feed of mash and animal protein to keep up production.

If the houses are warm, put the mash hoppers out in the shade where the hens will consume more. The standard mash mixture is used for summer feeding, consisting of equal parts ground oats, ground corn, bran, middlings and meat scrap. Sour milk or buttermilk may be used to replace about one-half of the meat scrap. The birds make excellent use of such dairy by-products.

The grain mixture may be slightly changed, reducing the quantity of corn in favor of a little more wheat. The quantity can be materially reduced. We usually recommend feeding about seven pounds per day to one hundred hens at this time of year. This will

(Continued on page 107).



Dog Days—

"Dog Days" are at hand when dairying is most difficult without a separator, and when the increase in quantity and improvement in quality of cream and butter are greatest through the use of a good separator.

A De Laval Cream Separator bought now will easily save its cost before the end of the year, and it may be bought for cash or on such liberal terms as to actually pay for itself.

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Registered Aberdeen-Angus 10 heifers, 6 bulls from eight to fourteen months. Best of breeding. The growthy kind that make good. Reasonable. Inquire of F. J. Wilber, Olio, Mich.

Registered Guernseys

A fine Bull ready for light service, special terms if you wish. J. M. Williams, No. Adams, Mich.

Forest Hills Guernseys

Yearling bull for sale. Fine individual. Dam making good record. Will take note in payment. M. HOMPE, Forest Hills Farms, R. 5, Grand Rapids

For Sale Reg. Guernsey Bull Calf, 8 mos. old. A show bull May Rose breeding sire and Dam. Dam on A. R. test. Accredited herd. Price right. Gilmore Bros., Camden, Mich.

For sale Registered Guernsey cows, May Rose Breeding also bull calves \$50 each. Registered A. R. dams. JOHN EBELS, R. 2, Holland, Mich.

GUERNSEYS for Sale: Reg. Cows 4 & 5 years old, 2 Bulls A. R. Breeding, Bull calves & Grade females. Accredited Herd. L. L. Barney, Watervliet, Mich.

WINNWOOD HERD

Registered Holsteins

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Ask us about a Real Bull a
Maple Crest or an Ormsby.

JOHN H. WINN, Inc., Rochester, Mich.

The Traverse Herd

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

TRAVERSE CITY STATE HOSPITAL
Traverse City, Mich.

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

Pure Bred Holsteins One and two years old freshening between Sept. and Jan. One 20 lb. 11 years old. Approved note accepted in payment. Geo. D. Clarke, Vassar, Mich.

HEREFORDS

Young Cows with calves by side consisting of blood from America's foremost herds at prices that enable them under Earle's Hereford Beef Plan to pay for themselves within a year to 18 months. Bulls including prize winners at the larger shows at practical prices. Herd headed by Straight Edge 1189796, one of two sons of perfection Fairfax out of a daughter of the famous Astor, T. F. B. Sotham & Sons, (Herefords since 1839), St. Clair, Mich.

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10 extra nice Repeater and Fairfax heifers from 14 to 20 months old for sale, also 10 cows.

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616 So. West St., Kalamazoo, Mich.

Brookwater Jerseys

Ready for service bulls for sale from Register of Merit dams.

Herd sire: MAJESTY'S INTENSE 127191.

Herd on federal accredited list as tuberculosis free.

BROOKWATER FARM, Ann Arbor, Michigan.

H. W. Mumford, Owner. J. B. Andrews, Lessor.

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

FOR SALE: Jersey bulls ready for service. All cows Register of Merit. Accredited herd. SMITH AND PARKER, R. 4, Howell, Mich.

Registered Jersey cattle, young bulls, for sale. Tuberculin tested. Lake Odessa, Mich. J. L. CARTER.

30 Head of Jersey cows and heifers for sale. Chance to select from herd of 70. Some fresh, others bred for fall freshening. Colon C. Lillie, Coopersville, Mich.

JERSEY BULLS FOR SALE from tested dams, Majesty breeding. Notton Farms, Grass Lake, Mich.

Francisco Farm Shorthorns

and Big Type Poland Chinas. One 2 yr. old bred Heifer, \$200. Two choice yearlings, \$150. each. Three bulls, \$100. up. 3 boars, \$25 each. Lots of spring pig of March farrow. P. P. Pope, Mt. Pleasant, Mich.

Two Scotch Shorthorn Bulls For Sale J. A. BARNUM, Union City, Mich.

BIDWELL Shorthorns

Revolution Jr. 573938 heads accredited herd 28917. Now offering 2 January roan bull calves of exceptional merit, reasonably priced.

BIDWELL STOCK FARM, Box D, Tecumseh, Mich.

HURON County Shorthorn Breeders' Assn. can supply your needs with high class individuals. Write for list to E. E. Twing, Bad Axe, Sec.-Treas.

Milking Shorthorns priced reasonably. An accredited herd selected for beef and milk. Beland and Beland, Tecumseh, Michigan

FOR SALE Registered Roan Durham cows and heifers. Write for particulars. W. O. Raymond, R. 1, Beaverton, Mich.

HOGS

Woodlawn Farm Duroc Hogs meet present day requirements, length, size and quality. Young stock for sale at reasonable prices and fully guaranteed. Write your wants. W. E. BARTLEY, Alma, Mich.

I AM OFFERING BRED SOWS

fall yearling and spring gilts, bred for March and April farrow, that are tops. Mated to O. C. K. Col. 2nd and Orion Giant Col. Write for price list. W. C. TAYLOR, Milan, Mich.

Is It Worth While?

A real boar pig sired by Woodford Sensation, Dams of Defender or Pathfinder breeding.

If so, we have them of Sept. farrow, not only showing extreme quality, but greater size than you will expect to find. Follow M 29 to

Kope-Kon Farms, Coldwater, Mich.

DUROC JERSEYS Spring pigs either sex of March April and May farrow, sired by three outstanding herd boars. If you want size type and quality combined come and see or write us. F. J. Drott, Monroe, Mich. R. 1

Pure bred Duroc sows and gilts bred for August and September litters, also spring pigs. Now is the time to get in the hog business, not out. Michigana Farm, Pavilion, Mich.

Duroc—Jerseys A few Pathfinder Gilts bred to a good son of Foust's Top Col., E. D. Heydenberk, Wayland, Mich.

DUROC JERSEYS AND DELAINE MERINOS. CAREY U. EDMONDS, Hastings, Mich.

Durocs, Apr. farrow \$15.00 reg. for short time. Fall gilts \$20 to \$25 breeding and quality. Satisfaction or money back. B. E. Kies, Hillsdale, Mich.

FOR SALE A few Duroc Gilts bred to the best sire in Michigan. CLARENCE B. CALKINS, Wayland, Mich.

Benjamin's BIG TYPE CHESTER WHITE'S Early maturing, prolific, heavy weight, prize winner kind from bloodlines of Champions and Grand Champions, now making big money for thousands. I have started more breeders on road to success than any living man. Let me help you. Easy to start. Costs little. G. S. Benjamin R. F. D. 10, Portland, Mich.

CHESTER WHITES WATCH our ad for fall bred sows and gilts. WEBER BROS. 10 Mile Rd. West Royal Oak, Mich.

Boars—Chester Whites. The big kind Cholera Immuned and guaranteed. Ship on approval or C. O. D. Fred L. Bodimer, Reese, Mich.

Chester Whites Gilts bred for fall, also spring pigs, C. O. D. recorded free. Albert Dorr, Clinton, Mich.

O. I. C's and Chester Whites

Gilts sired by Mich. State Fair Gr. Champion 1921, and bred for March and April farrow to Mich. State Fair Jr. Champion 1922, the common sense type and price.

ANDY ADAMS, Litchfield, Mich.

Live stock AND DAIRYING

MACOMB HAS 'HOLSTEIN TOUR.

THE Holstein tours started Monday in Macomb county in great style. Beginning with twenty at the first stop, the crowd totalled seventy-five at noon. Breeders came from as far as Calhoun county, Ingham, and a large delegation of eight carloads from Oakland county.

From the start at Baynewood Farms, north of Romeo, where the bunch saw the cow that was grand champion at Detroit last year, the second prize aged cow and other show individuals, as well as Empress Prilly Rosewood, Michigan champion, ten months' junior four-year-old, to the wind-up at O'Hara's farm, south of Utica, the crowd was busy looking at good Holsteins.

The picnic at noon was held at the picnic grove of the Detroit Creamery Company farms. J. G. Hays, fieldman for the State Holstein Association, outlined the coming tours for different countries.

At the Detroit Creamery Company farms, after lunch, H. E. Dennison, head of the Dairy Extension Department of M. A. C., gave a talk on selection of herd bull, using two bulls of the Detroit Creamery Company herd to talk on. One of these, Sir Hengerveld Pieterje Ormsby, the son of the world's youngest cow to complete three 1,000-pound records, drew forth great admiration from the crowds. Mr. Dennison also demonstrated good type of uniform character with a ring of five classes of females from the string the Detroit Creamery farm are fitting for the fair circuit.

The most common remark heard among the crowd was that it surely did a fellow good to tear loose from home once in a while and see what the other man had and how he was handling it.

Breeders of the Black-and-White put in a great day, and the series of tours got off to a good start.—J. G. Hays.

TENDENCY TOWARD FALL PIGS.

THE tendency seems to be to increase the fall breeding of hogs more than spring breeding. This tendency has been evidenced both by the market receipts and farm reports for the past two years, especially in the corn belt, and is making for a more uniform monthly distribution of market receipts throughout the year.

The probabilities are that the commercial market supply of hogs, over four-fifths of which comes from the corn belt, from the spring crop of 1923, will be about as large as that from the spring crop of 1922. If expressed intentions as to fall breeding are carried out, even to the proportional extent of last year, the fall crop of this year, which will be marketed next summer, will be larger than that of last, both in the corn belt and in the country as a whole. There is a possibility of a falling off of the fall pig crop in the south where cotton has replaced corn and peanuts to some extent.

DEVELOPING THE LAMB CROP.

PROFIT derivable from mutton growing on the farm lies largely in bringing the lamb crop to early maturity. I find that this can only be done by giving the lambs the best of care after being weaned. Lambs that have been well nursed during the suckling period have made large bone and flesh development and come to the weaning time prepared to shift for themselves.

Lambs as soon as separated from their mothers should be provided with tender, palatable pasture. This some-

times is quite difficult to provide as drouth invariably prevails throughout the country at this season. Then, too, a great many farms are not well fenced so that pasture that might be available can be utilized to the best advantage.

The flock owner must keep looking ahead in order to meet conditions of the season and provide the essential pasture the flock requires at all times of the year. Where the fields are well fenced, second-growth clover and June grass meadow pasture is available it makes the finest kind of feed for the developing of the lambs. Being second growth, tender and nutritious the lambs make splendid growth.

I find it a good practice to change the pasture for the lambs as frequently as possible as it not only gives the lambs a change of feed, but I think the pasture supply can be kept up for a longer length of time. Feeding a light grain ration of oats, corn and wheat bran is necessary in order to balance up the pasture and to induce rapid bone and flesh development.—L. C. R.

STATE HOLSTEIN ASSOCIATION TO MEET.

THE Michigan Holstein-Friesian Association and the Genesee County Holstein-Friesian Association are working together on plans for a Grand Round-up and Picnic of Holstein cattle breeders and dairymen at the farm of D. D. Aitken, just west of the city of Flint, Michigan, on Saturday, August 11.

Mr. Aitken was president of the Holstein-Friesian Association of America for seven years, from June 3, 1914, to June 1, 1921, and has done more for the Holstein industry than any other man, and it is proposed to hold a great meeting in his honor.

Coming as it does as the last day in a series of tours through twenty-four southern Michigan Holstein counties, it is expected that this will be the greatest gathering of Holstein breeders and dairymen that Michigan has ever seen.

The forenoon will be spent in inspecting the herd, which has produced many noted animals, including a number of world's record holders.

For the afternoon program, Editor A. J. Glover, of Hoard's Dairyman, will be the principal speaker and will have a real message for the breeder and dairyman.

Arrangements have been made with the extension service for a pair of the models of True-type Holsteins which the true-type committee has been working on for the past year. These models, the work of the Japanese sculptor, Gozo Kawamura, have never been exhibited before except at the annual meeting of the Holstein-Friesian Association of America held at Cleveland last June, and the breeders will be greatly interested in them.

Another feature of the program will be a demonstration of the work of the cow-testing associations.

Other features are being arranged for the program, and Mr. James G. Hays, who is a very versatile master of ceremonies, promises that there will be something doing all the time.

A large tent with tables and chairs will be provided for the basket lunch at noon and for the afternoon program, so that every one may be taken care of regardless of the weather.

When Solomon Kuhn got home from business college he told his folks he wanted to get up in the world and do something big that would stand out. Next day they set him to painting the barn.—Sunshine Hollow Correspondent.

State Cow Testing Work

Satisfactory Results Obtained Through Associations

IN a report to the Dairy Extension Department, Michigan Agricultural College, from the fifty-four cow-testing associations operating in Michigan, under date of July 10, 1923, many interesting facts are to be gleaned. Comparing the number of associations operating in Michigan under date of July 10, 1922, with those operating under date of July 10, 1923, there is a growth of 300 per cent—from eighteen associations to fifty-four; likewise in the total number of cows under test in these fifty-four associations, 12,584 compared to 3,690 cows, indicates that a big advance has been made for better dairy conditions in Michigan. For the month of June, 1923, seventy-five unprofitable cows were sold out of the fifty-four cow-testing associations, and thirteen pure-bred sires were purchased by association members.

The highest monthly association average on ten cows was made by Lapeer county; Mr. P. F. Peabody, cow-tester. This association, with 472 cows, had a monthly average of 27.5 pounds of fat and 773 pounds of milk. Hillsdale county and Genesee No. 3, both comparatively new associations, came in second and third place with a ten high cow average of 67.5 and 67.2 pounds of fat respectively.

Under the high herd averages for all the associations during the month of June, 1923, the distinct honor goes to Mr. Ernest Loehne, of the West Antrim Cow-testing Association. A bit of interesting history is connected with this association and this herd. For a number of years a group of aggressive dairymen have been maintaining this cow-testing association in northwestern Michigan. Mr. E. Loehne, a comparatively new man in the keeping of Jerseys, joined the association a year ago when Mr. B. C. Mellenkamp, a graduate of M. A. C., took up the testing duties. Mr. E. Loehne, with his eight pure-bred and grade Jerseys, has consistently tried to follow through and carry out the suggestions of Mr. Mellenkamp for greater efficient production. After a period of eleven months the award came to this man in his herd of eight Jerseys averaging 54.48 pounds of fat and 1,046 pounds of milk, leading all of the associations in Michigan for the month. Mr. John Nulty, of the South Kent Cow-testing Association, came in a close second. His herd of seven grade Jerseys averaged 52.45 pounds of butter-fat; and Mr. Claire Bloss, of the Genesee No. 2 Association, with six pure-bred Jerseys, averaged 51.3 pounds of fat and was in third place. Another Jersey herd from Hillsdale county, owned by W. Hayward, came in fourth highest for the month, while a pure-bred Guernsey herd from Ogemaw County Cow-testing Association, owned by Mr. Holbeck, was fifth high.

In the high cow class, a comparatively newcomer in the cow-testing association work, representing Arenac county, produced the highest amount of butter-fat for the month. Mr. D. L. McKendry, of this county, with a grade Holstein, made 106.2 pounds of butter-fat, tested by Mr. J. W. Hoffman. The North Clinton County Association, with another grade Holstein owned by Mr. C. L. Shafley, and tested by Mr. M. L. Flory, produced the second largest amount of fat for the period, namely, 99.96 pounds of fat and 2,173 pounds of milk. The highest milk flow recorded for the June testing period was made by a pure-bred Holstein owned by Mr. H. Marshall, of the Hillsdale Association, tested by Mr. C. Mathiesen. This cow, milked three times daily, made 2,631 pounds of milk and 81.3 pounds of fat for the month.

The West Antrim Cow-testing Association has finished a highly successful year. Mr. B. C. Mellenkamp, reports that 147 cows that completed

graduate of M. A. C. in 1922, tester, the year's work averaged 263 pounds of butter-fat and 6,059 pounds milk.

The high herd in both milk and butter-fat production was owned by Mr. J. A. Brown. His ten pure-bred and grade Holsteins averaged 10,050 pounds of milk and 379.7 pounds of butter-fat. Other herds that made excellent herd averages were: Ernest Loehne, five pure-bred and grade Jerseys; Wm. Hooper, five pure-bred and grade Guernseys; Edward Fox, four pure-bred and grade Guernseys; E. Burns and Sons, eight grade Guernseys; and Tony Shooks with seven grade Holsteins. These herds averaged above 300 pounds of butter-fat for the year. The four lowest herds in butter-fat production averaged below 200 pounds of butter-fat. These four herds comprised thirty-eight cows, of which twenty-two were pure-bred and grade Shorthorns.

The high cow in butter-fat production was a grade Holstein, owned by J. A. Brown. This five-year-old cow made 518 pounds of fat and 10,153 pounds of milk.—A. C. Baltzer.

SHORT-FED SPECIALS.

THE International Live Stock Show at Chicago, will have the Short-fed Special classes in connection with the car-lot feeding competition. The rules are the same as last year. Entries should be filed between August 1 and 15, with B. H. Heide, Secretary of the International Live Stock Show.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

Advice through this column is given free to our subscribers. Letters should state fully the history and symptoms of each case and give name and address of the writer. Initials only are published. When a reply by mail is requested the service becomes private practice and \$1 must be enclosed.

Peculiar Lameness.—I have a mare about ten years old. In September she went lame in left front leg. I thought it was located in foot or fetlock joint. At end of two weeks we removed the shoe, which had become somewhat twisted, and in doing so had perhaps sprained fetlock joint. I have been using her lately plowing and she goes lame, sometimes in front and sometimes one hind leg, and again stiff all over (acts like rheumatism), and not fit to work. I noticed while plowing she started slow and stiff, but would soon limber up, but one day is about her limit. L. H. R., Dimondale, Mich.—A shifting lameness indicates infection affecting the joint articulations, therefore it would be no mistake to give her a rheumatic remedy. Give two dram doses of sodium salicylate in feed three times a day for ten days, then give a teaspoonful of nitrate of potash in drinking water three times a day. Her sore joints should be rubbed with equal parts of turpentine and olive oil daily.

Enzootic Ophthalmia.—About two weeks ago I noticed one of my best ewes with white film over eyes and found she was blind and is still blind. Since then I have had three more the same way. Their eyes run very little and some not at all. They are in the best of condition, run out in pasture and are put in nights. Can you tell me a cure for them and cause of this? E. H. G., Durand, Mich.—Enzootic ophthalmia in sheep and cattle usually attack one or several herds or flocks in a locality, at any season and without apparent cause, excepting proximity. The symptoms are those of simple ophthalmia, but of a severe type, with much fever and complete clouding of the eye from exudation into the whole thickness of the transparent cornea, followed sometimes by ulceration of this membrane. When corneal opacity is of recent origin, apply yellow oxide of mercury ointment to upper lid once daily (gr. i. ii to one dram), or blow calomel into eye once a day. Either one of the two mentioned remedies should clear the eyeball. It is considered good practice to give a dose of epsom salts to open the bowels, besides the animals should be kept in a darkened place until well.

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You Buy It For \$2.00



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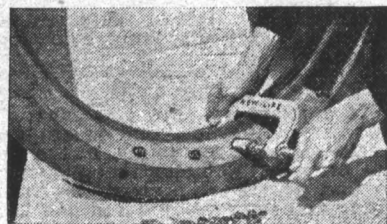
Finest pocket automatic made. American value \$25. Use American cartridges. Closing out stock, 32 or 25 cal., at this low price. Instructions and cleaning rod. Send no money; pay postman \$10.95.



Famous Mauser 12-Gauge Shotgun, Bolt action 2 shot repeating. Full choke, 27-inch Krupp steel barrel, pistol grip. Hard shooting, strong and finely balanced. Best value ever offered. Send no money; pay postman on delivery.

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Eggs, etc.—Small consignments from very attractive prices NOW. Prompt returns always. Refer to Dun or Bradstreet. Ship us your next case. ZENITH BUTTER & EGG CO., 170 Duane St., New York, N. Y.

COAL

Blue Ribbon Lump. Get our attractive carload prices. Farmer agents wanted. Theo. Burt & Sons, Melrose, Ohio

HOGS

O. I. C. Spring pigs, single or in pairs. Price right. Satisfaction guaranteed. E. C. Badgley, Jackson, Mich. R. F. D. 1.

O. I. C. March pigs, single or in pairs, also bred gilts for August farrow. CLOVER LEAF STOCK FARM, Monroe, Mich.

O. I. C's One yearling boar and March pigs. Young Brown Swiss bull. Milo H. Peterson, Elmhurst Farm, Ionia, Mich. R. 2.

O. I. C's 3 last fall gilts to farrow in August and Sept. 75 spring pigs, not akin, good big stock recorded free. Otto B. Schulze & Sons, Nashville, Mich.

Quality Poland Chinas

Sired by a good son of Orange Clansman. Now offering a few fall gilts and spring pigs of either sex. S. S. BURRILL, Reese, Mich.

Line Bred Liberators

By Revelation and Peter, The Great, boars. The last word in Poland China Breeding. Bred sows and spring pigs of either sex. Prices right. Vaughan's Seed Farm, Ovid, Mich.

Complete Dispersal Sale

of the L. H. WABER Accredited Herd of

36 REGISTERED HOLSTEIN FRIESIAN CATTLE 36

at the farm one mile north of Kendall, and 15 miles west of Kalamazoo, Michigan, on the South Haven Division of the Michigan Central Railroad.

Wednesday, August 15th, 1923. at 12:00 noon

2 Great Herd Bulls, One a son of Champion Echo Sylvia Pontiac with a double cross to the noted cow May Echo Sylvia 41.01 lb. butter in 7 days, his 10 nearest dams average 33.48 lb. butter and 683.37 lb. milk in 7 days. The other sire is a son of the famous \$50,000.00 bull King Segis Pontiac Alcartra. His 6 nearest dams average 28.60 lb. butter in 7 days. Both herd sires are excellent individuals and should be seen to be appreciated. There will also be one male calf and one yearling male out of 29 lb. dam and sired by the May Echo Bull. The larger percent of these cattle are under 6 years old and all females except the 4 bulls. The most of the older cows are daughters of the Alcartra bull, while the younger cows and heifers are from those daughters and sired by the May Echo bull. The most of the cows are fresh or will be soon after the sale. If you are in the market for cattle you cannot afford to miss this sale. Lunch may be obtained on the grounds. Write for catalog to, L. H. Waber, Kendall, Mich.

Big Type P. C. some very choice boars double in Dmune, out 100 lb. sire and mammoth sows from Iowa's greatest herds. E. J. Mathewson, Burr Oak, Mich.

RADIO GIANT

Represents the world's largest strain of Poland China Hogs. Boars, Sows, Pigs at bargain prices from Mich. pioneer herd. We have bred them big for 30 years. We can furnish what you want. JNO. C. BUTLER, Portland, Mich.

L. T. P. C.

Choice Gilts \$25 to \$40. Boars \$30. Fall Pigs \$15. HART AND CLINE, Address F. T. HART, St. Louis, Mich.

BOARS READY for service, Spring boars at weaning time and gilts bred to (Ambition Again) for Sept. farrow. They are priced to sell, and shipped on approval. Dorus Hover, Akron, Mich.

Large Type P. C. Largest in Mich.

A few fall pigs for sale. Sired by "The Wolverine" a grandson of "The Rainbow and Big Bob" the greatest yearling boar I ever owned has size combined with quality. Come and see the real kind. W. E. LIVINGSTON, Parma, Mich.

Large Type P. C.

The Real Kind. A few of those big, smooth, stretchy, bred gilts for sale. Bred for March, April and May farrow. Priced right. N. F. BORNOR, Parma, Mich.

Large Type Poland Chinas

For sale Fall Boars, Gilts bred or open. Herd headed by two Grand Champion boars, A. A. FELDKAMP, Manchester, Mich.

B. T. P. C. Fall Sows, Big Bob and Peace and a son of Alaska. M. C. Mount, Mayville, Mich.

Large Strain P. C. 2 nice gilts with pigs by side, also pigs at weaning time. H. O. SWARTZ, Schoolcraft, Mich.

WALLNUT ALLEY Big Type Poland China Boar pigs ready for new homes. Give me a chance to tell you about them. A. D. Gregory, Ionia, Mich.

Ione Maple Farm L. T. P. C. Spring pigs ready. Also yr. boar. Write for description and prices. F. R. Davis & Son, Belding, Mich.

Large Type P. C. Pigs for sale. Registered \$15. Enquire Sunnyside Farm, Hillman, Mich.

AUCTION SALE REGISTERED HAMPSHIRE

14 Sows 3 Boars 20 Sow Pigs
35 Feeding Barrows 35 to 75 Lbs.

Wednesday, Aug. 15

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Located on Dixie Highway Between Pontiac and Flint

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Clarkston Hampshire Pig Club,
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Hampshires A few bred gilts left. Place your order now for your boar pig. Pairs not akin. 10th year. JOHN W. SNYDER, R. 4, St. Johns, Mich.

SHEEP

Breeding Ewes In car lots. 2 yrs. old, to solid months, mostly black faced. In good condition, \$8.00 each or \$700.00 per hundred. A. B. CHAPMAN & SON, So. Rockwood, Mich.

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THE LATEST MARKET REPORTS



GRAIN QUOTATIONS

Wheat.

Wednesday, August 1.

Detroit.—No. 1 red \$1.02½; No. 2 red \$1.01½; No. 2 mixed \$1.01½; No. 2 white \$1.01½; No. 3 red, 98½c.
Chicago.—September at 98½¢@98¾¢; December at \$1.01¼@1.01½; May \$1.05¼@1.05½.
Toledo.—Cash \$1.01@1.02.

Corn.

Detroit.—Cash No. 2 yellow at 95c; No. 3, 94c No. 4, 92c.
Chicago.—September 77½¢@77¾¢; December 63½¢@63¾¢; May 65¼c.

Oats.

Detroit.—Cash No. 2 white at 48c; No. 3, 46½c; No. 4, 45c.
Chicago.—September at 35½¢; December 37¾¢; May 40c.

Beans.

Detroit.—Immediate and prompt shipments \$4.80 per cwt.
Chicago.—Choice \$6.25; red kidneys at \$7.50.

New York.—Choice pea \$6.25@6.75; red kidneys \$7.50@7.60.

Rye.

Detroit.—Cash No. 2, 69c.
Chicago.—September 64¼¢; December 67½¢; May 71½c.
Toledo.—Cash 69c.

Barley.

Detroit.—Malting 70c; feeding 66c.

Seeds.

Detroit.—Prime red clover cash at \$10.25; October \$11.25; alsike at \$9; timothy \$3.30.

Hay.

Detroit.—Old, No. 1 timothy \$19.50@20; standard and light mixed \$18.50@19; No. 2 timothy at \$17.50@18; mixed \$17.50@18; rye straw \$11.50@12; wheat and oat straw \$10.50@11.

Feeds.

Bran \$29.50@30; standard middlings \$33.50@34; fine do \$36; cracked corn \$41.50@42; coarse cornmeal at \$40@40.50; chop \$35@35.50 per ton in 100-lb. sacks.

Fruit.

Apples.—Michigan, Transparents at \$1.75; Duchess \$1.50 per bushel.

Plums.—16-qt case \$1@1.25; basket 75c.

Cherries.—Michigan, 16-qt. cases at \$2.75.

Berries.—Blackberries \$1@1.50 per 16-qt case; gooseberries \$2.50@2.75; black raspberries 16-qt case \$1.50; red raspberries at \$1.25@1.50 per 24-pint case; blueberries, cultivated \$4.50@5; general run less.

WHEAT

Belief that prevailing wheat prices discount most of the unfavorable conditions and that further declines, if any, will be relatively small, is becoming more widespread. Crop reports from the spring wheat states and Canada are distinctly less favorable and with the change of attitude on the part of the grain trade, reports of damage by rust and extreme heat have had more effect marketwise. The flour business has picked up as large buyers have been disposed to take advantage of recent depressed conditions. Export demand is persistent and sales are probably larger than the amounts reported, but buying lacks the breadth needed to advance the market. The world's wheat crop in 1923, counting the last harvests in the southern hemisphere, is placed at 3,318,000 bushels, or 214,000,000 bushels over last year, according to a compilation by the International Institute of Agriculture.

CORN

The corn crop is at the most critical stage of growth, with a shortage of July rainfall which is all important for this cereal, and some damage done in parts of the main corn belt. Some moisture has arrived in the last day or two, however, and a three million bushel crop may yet come through. Corn prices are still around the high point for the year to date. The visible supply at terminals has been cut down to such a small figure that it provides no balance wheel. Sales by producers have not increased enough as a result of higher prices, nor has demand been curtailed enough to relieve the tension. Prices may weaken slightly during the late summer and early fall, but the continuance of a relatively high level compared with other grains appears assured. Demand is almost exclusively for domestic use as Argentine corn is 15 to 20 cents a bushel cheaper than ours.

OATS

Oats prices have had a substantial recovery in sympathy with the strong corn market and greater firmness in wheat. The new crop is not coming

on the market in large volume as yet, but the movement is about to start.

SEEDS

Prices for red clover seed advanced sharply last week as a result of dry weather and impaired prospects for the new crop. No estimate of the yield has been made as yet. Alsike and timothy seed prices remain unchanged.

FEEDS

Another slight advance in feed prices occurred last week. Interior demand is still reported as dull, however, and jobbers are not stocking up at present prices. It is doubtful if the gains in the last two weeks will be maintained. Both bran and cottonseed meal for future shipment are quoted at sharp discounts below spot prices.

HAY

Receipts of new hay are increasing at western markets and prices have weakened at these points. In the east, the crop is light and receipts small, so that prices are steady. Much low grade and improperly cured hay is arriving at some markets.

POULTRY AND EGGS

Good eggs are gradually becoming scarce and are widening their premium over ordinary grades. This process is likely to continue more or less steadily during the rest of the summer and fall. Receipts of all kinds are gradually falling off and are but little above the consumptive requirements at prevailing prices. It will probably be necessary to begin drawing upon stocks in storage early in August. These holdings are enormous and will be a strong competitor of low-grade fresh eggs.

Chicago.—Eggs, miscellaneous 22½¢@23c; dirties 20¢@20½c; checks 20c; fresh firsts 23½¢@24c; ordinary firsts 23½¢@24c. Live poultry, hens at 21c; broilers 27¢@29c; springers 34c; roosters 14c; ducks 24c; geese 21c; turkeys 20c.

Detroit.—Live poultry, broilers 38c; heavy hens 25c; light hens 18¢@20c; roosters 15¢@16c; geese 12c; ducks 25¢@28c per pound.

BUTTER

Buoyed by a sharp decrease in the make due to unfavorable weather conditions in the principal producing sections with subsequent defects in receipts, a shortage of more than 5,000,000 pounds in holdings at the four leading cities as compared with last year, and higher foreign markets, butter prices advanced sharply last week.

With continued decreased receipts and shortage of butter suitable for storage, and the buying of operators who had been waiting for stocks to accumulate and the market to weaken, butter prices appear firmly entrenched on the higher level.

Prices for 92-score butter were: Chicago 40c; New York 42c. In Detroit fresh creamery in tubs sells for 37¢@38c.

POTATOES

Potato prices were irregular in the leading markets last week, but the long decline seems to be coming to a halt. Carlot shipments from the commercial sections have been increasing gradually and home-grown stock is furnishing a substantial supply to the consuming centers, but the peak of the carlot movement of early potatoes probably has been reached. Irish Cobblers are quoted at \$4.50@5.50 per barrel and early Ohio at \$1.75@2 per 100 pounds in consuming markets.

PEACHES.

Shipments of peaches have increased sharply and prices have been declining. Georgia and California are loading most heavily but a few cars are coming from the northern states. Albertas are quoted at \$2@3.50 per six basket carrier, and North Carolina Belles at \$2@2.75 in consuming markets.

APPLES

Apple shipments have been increasing steadily for the last six weeks. Prices have declined and No. 1 Duchess and Yellow Transparents are quoted at \$1.25@1.50 in Chicago.

BEANS

The bean market has been inactive in the last few days with neither buyers nor sellers showing anxiety to do business. Choice hand-picked whites are quoted at \$5.15 f. o. b. Michigan shipping points for immediate shipment. Most sections report that the crop is making excellent progress but some dry spots have developed.

WOOL

The wool market continued to show an improved tone last week. Mills are shopping around for particular grades and a little speculative buying by dealers has taken place. Opening prices on spring goods by the American Woolen Company showed advances of 10 to 15 per cent and are expected to exert a stabilizing influence as wool is not high compared with cloth. There has been no rush to place orders such as occurred last January at the opening on fall goods, but a substantial volume of business is expected.

Live Stock Market Service

Wednesday, August 1.

DETROIT

Cattle.

* Receipts 608. Market is steady on good, slow on common; bulls are 25c lower.

Fancy light yearlings... \$ 9.50@10.00
Best heavy steers 8.00@ 9.00
Handyweight butchers .. 6.50@ 7.00
Mixed steers and heifers 6.00@ 6.50
Handy light butchers.... 4.50@ 5.50
Light butchers 4.00@ 4.50
Best cows 5.25@ 5.50
Butcher cows 4.00@ 4.50
Cutters 2.50@ 3.25
Canners 2.00@ 2.75
Choice bulls 5.50@ 6.75
Bologna bulls 4.75@ 5.25
Stock bulls 4.00@ 4.25
Feeders 5.50@ 6.00
Stockers 4.50@ 5.00
Milkers 4.00@80.00

Veal Calves.

Receipts 637. Market opening very slow.

Best \$13.00@13.50
Fair to good 5.00@12.50

Sheep and Lambs.

Receipts 415. Market slow.
Best lambs \$ 12.50
Fair lambs 10.50@11.50
Light to common 8.00@10.00
Fair to good sheep..... 6.00@ 6.50
Culls 1.50@ 2.50

Hogs.

Receipts 958. Market 10¢@30c higher.
Mixed hogs \$8.10
Yorkers 8.25
Roughs 5.75
Pigs 7.50

CHICAGO

Hogs.

Receipts 20,000. Market good, lights active, 10¢@20c higher; good to choice 170 to 220-lb average \$7.80@7.90; tops \$7.90. A few 260 to 300-lb butchers \$7.35@7.55; packing sows mostly at \$5.85@6.15; strong weight pigs \$6.75@7; big packers holding back.

Cattle.

Receipts 10,000. Market is active; most killing classes 10¢@25c higher; yearlings and in-between grades, and weighty steers showing full advance; top matured steers \$11.75; numerous loads at \$11.10@11.65; yearlings are scarce; bulls 10¢@15c lower. Other classes generally steady; stockers and feeders slightly more active.

Sheep and Lambs.

Receipts 12,000. Market on fat lambs strong to 15c higher; others and sheep generally steady; bulk western lambs \$12.50@13; tops \$13; natives most \$12@12.25; culls \$8.50@9; medium and handyweight ewes \$5@6.25; light weights \$7; heavies \$3.50@4.25.

BUFFALO

Cattle.

Receipts 30 cars. Market is slow. Calves \$14.

Hogs.

Receipts 30 cars. Market strong. Heavy \$7.75@8; yorkers \$8.35@8.50; pigs \$8.35.

Sheep and Lambs.

Receipts two cars. Market steady. Top lambs \$13.50; yearlings \$9@11; wethers \$8@8.50.

ed. In addition many mills will still be busy for two or three months on old orders for heavyweight goods. In the bright wool states, wool is gradually changing hands at a range of 45 to 50 cents, with some delaine clips held at 53 cents. Consignment is the order of the day in the west, although a few sales at 40 to 48 cents are reported.

DETROIT CITY MARKET

Potatoes have become heavy in supply, especially new, which caused a drop. Old potatoes are selling for \$1.75@2 per 150-pound sack on track. Kentucky Cobblers sell around \$4 per 100-pound sack. Most farmers' potatoes are selling around 65¢@90c. Local new potatoes bring \$1.75@2 per bushel. Transparent apples shipped in at \$2@2.25 per bushel. The market is steady. On the farmers' market, Transparent and Duchess are at \$1.50@2.50 per bushel. Sixteen-quart cases of cherries are bringing \$2.75@3 at commission houses; sweets the same. On the market cherries sell for \$4.50@5.50 per 24-qt case. Berry supply is light; farmers are getting \$6.50@7 for reds; huckleberries \$2.50@3 per 16-qt case at commission houses. Dewberries bring \$2@2.25 per 16-qt case at jobbers. Farmers are getting \$6@8 per 24-qt case. Cucumbers are \$3.50@4.50 per bushel; tomatoes \$7@10 per bushel; cabbage at 75c@1.25; peas at \$3.50@4.50 per bushel; beets 40¢@60c per twelve bunches; carrots 50¢@75c per dozen bunches; local sweet corn 30¢@35c per dozen; Kalamazoo celery 40¢@50c per dozen stalks; eggs, wholesale, at 29¢@33, retail at 35¢@45c per dozen. Poultry is in light supply. Roosters wholesale at 20¢@24c per pound; old hens 25¢@28c, retail at 27¢@30c; broilers at 30¢@40c per pound.

CHEESE

Following declines in country markets, cheese prices at the distributing points were lower last week. The decline was not as much as anticipated by many dealers who look for still further lowering of country quotations. Trading throughout the week was slow, as buyers confined their purchases to small lots only. Quality of receipts was irregular and unsuitable for storage.

Prices on No. 1 American cheese were:

Chicago.—Flats 23c; twins 21½¢@22c; single daisies 21½¢@22c; double daisies 21½¢@22c; longhorns 22½¢@23¼c; square prints 22½¢@23c; Swiss No. 1, 33c; selected 35¢@36c; limburger, fancy, 27c; brick, No. 1, 22c. New York. Flats 25¢@26c; twins at 24½¢@25c; single daisies 22½¢@23½c; double daisies 22½¢@23¼c; young Americas 24¢@24¼c.

CITY PROSPERITY TO CONTINUE.

Urban prosperity appears likely to continue for the rest of the year at least. Manufacturing communities are still operating close to capacity, wages remain at the peak, in most lines goods have not accumulated, and the seasonal expansion of buying during the fall will probably keep the wheels of industry humming and the channels of trade flowing freely. This spurt should help to maintain broad domestic consumption of most farm products, but it promises but little real improvement in the farmer's position.

Beyond this fall and early winter, conditions do not look so favorable. Another wave of demands for increased wages is starting. If granted, these will mean either higher prices to consumers, who already show some signs of balking, or a lack of profit for the employer who will take the alternative in some cases of closing down. In either case, some unemployment appears to be in prospect.

A great deal of pessimism over European affairs has been generated in the last few days. German finances are deplorable. Her thirty trillions of marks have depreciated until they are worth only about twenty-five million American dollars, providing her a circulating medium equivalent to less than fifty cents per capita. Other countries are not making much real progress toward normal industrial output.

COMING LIVE STOCK SALES.

August 15—Clarkston Hampshire Pig Club, C. J. Cheeseman, Leader, Park Lake Farm, Clarkston, Mich.

EGG-LAYING CONTEST.

THERE was a general decline in egg production during the week ending July 24. Some of the hens are beginning to moult, while others show broodiness. However, the decline has not been as great as expected.

Mr. Shaw's pen of White Leghorns still holds the lead by a good margin. It has the high record for the week, with a production of fifty-three eggs. Other high-producing pens are those of the Lewis Farms, Davisville, with fifty-two eggs; O. S. Thompson, of Allen; Grandview Poultry Farm, Zeeland, and the Ontario Poultry Farm, with fifty-one eggs each.

The high pens in the contest are as follows:

E. E. Shaw, South Haven, (Leghorns)1,765
Northland Farms, Grand Rapids, O. S. Thompson, of Allen, (Leghorns)1,609
G. B. Ferris, Grand Rapids, (Leghorns)1,528
E. D. Taylor, Kalamazoo, (Leghorns)1,504
Brummers' Poultry Farm, Holland, (Rocks)1,409
Mrs. W. H. Chilson, Grandville, (Rocks)1,381

GETTING BY THE DRY PERIOD.

(Continued from page 86).

There is even a vague notion in the minds of some that the manure is worth more for soil improvement than is the food from which the manure is made. It is also very generally believed that pasturing land increases the fertility of the soil. The fact is that the most important and least appreciated method of maintaining or increasing the supply of organic matter in the soil is by the use of green manure and crop residues. This is best understood by considering the digestibility of common foodstuffs and by applying mathematics to the data.

Average digestibility of animal foodstuffs, columns one and two, give per cent digested; columns three and four give amount recovered in manure.

Foodstuffs.	Dry Matter.	Nitrogen.	Per Ct.	Pounds Per Ton.
Pasture grasses	71	70	29	580
Red clover, green	66	67	34	680
Alfalfa, green	67	81	33	660
Mxd. meadow hay	61	57	39	780
Red clover hay	61	62	39	780
Alfalfa hay	60	74	40	800
Oat straw	48	30	52	1,040
Wheat straw	43	11	57	1,140
Corn stover	60	45	40	800
Shock corn	63	42	37	740
Corn-cob meal	79	52	21	420
Corn ensilage	64	49	36	720
Oats	70	78	30	600
Corn	91	76	9	180
Wheat bran	61	79	39	780

These figures are before losses occur by fermentation and decay.

SUMMER POULTRY HINTS.

(Continued from page 103).

tend to increase the amount of mash consumed. A moist mash fed at noon will also tend to increase mash consumption and aid in holding production up.

Do not forget green feed. So often when the hens are out we neglect the green feed. If they have access to a good alfalfa pasture or some green annuals, as rape or oats, they will fare very well. However, during midsummer the green supply from grass runs low and it will pay you to find some supplementary greens. Sprouted oats are excellent and can easily be grown in summer. Rape makes a good summer feed, but must be fed in small quantities as it is very apt to cause "green" or "dark" yolks. Chinese cabbage sown about August 1 makes excellent greens for fall feeding. Give hens in confinement a feed of greens the first thing in the morning and again in the forenoon, and also in the afternoon during the hot weather. They enjoy salads for summer rations just as much as we do.

During midsummer the water supply becomes warm and stale. You will be repaid for the trouble of frequently changing the water. Keep the pans clean, and particularly when milk is being fed. Foul drinking dishes are

not conducive to good health and the birds will drink more water if it is clean and cool. Remember, eggs are 65.9 per cent water.

KANSAS STUDIES THE VALUE OF MULCH.

MOISTURE determinations in the western part of the state, where rainfall is quite deficient, indicated little, if any, more moisture was conserved when mulch was maintained than on land kept free of weeds but not mulched. These observations led to a more thorough investigation of the problem on the experimental farm at Manhattan. A three-inch mulch was maintained on one portion of a silt loam soil, a six-inch mulch on another, while a third area was kept free of weeds but no mulch produced. The results of moisture determinations made at regular intervals from early spring to late fall showed practically no difference in the amount of moisture stored in the soil of the three areas.

AGENTS WANTED

For State of Michigan

You do not need experience in selling. We send at no expense to you one of our state instructors who will teach you how to sell

Pioneer Fire Extinguishers

Fire chiefs, newspapers highly indorse our extinguishers.

We have saved Michigan farmers thousands of dollars from fire loss. Testimonials on our files open for inspection.

Among our agents are several farmers who are making a splendid income selling fire extinguishers for us. You can do the same. We have some splendid Michigan territory open and want a few more honest men to represent us.

Write for Particulars at Once

Pioneer Chemical Co. of Ithaca, Mich.

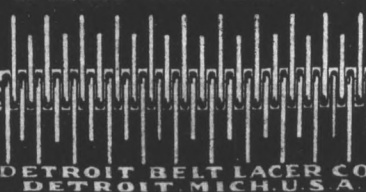
Manufacturers of Automobile and Portable Extinguishers

WIRE HOOK BELT LACING OUTFIT \$5.00

Detroit wire hook staggered grip-lacing is the nearest approach to an endless belt. Easy to apply. Saves time, belts and money. Tool for applying lacing \$3.50 or, together with assorted box of lacing as shown—complete outfit postpaid \$5.00. Laces belts for 1c an inch. Money back if not satisfied.



"DETROIT" BELT LACING



Big Profits Selling Hardy Michigan Grown Trees also grape vines, berry bushes, roses and shrubs, spring delivery. Our stock is fast selling, healthy and true to name. Write now for our handsome color catalog and liberal Agency proposition. Prudential Nursery Co., Box 306 Kalamazoo, Mich.

CLASSIFIED ADVERTISING

This classified advertising department is established for the convenience of Michigan farmers. Small advertisements bring best results under classified headings. Try it for want ads and for advertising miscellaneous articles for sale or exchange. Poultry advertising will be run in this department at classified rates, or in display columns at commercial rates. Rates 8 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order. Real estate and live stock advertising have separate departments and are not accepted as classified. Minimum charge, 10 words.

Rates in Effect October 7, 1922

Words	One time	Four times	Words	One time	Four times
10	\$0.80	\$2.40	26	\$2.08	\$6.24
11		2.64	27	2.16	6.48
12		2.88	28	2.24	6.72
13		3.12	29	2.32	6.96
14		3.36	30	2.40	7.20
15		3.60	31	2.48	7.44
16		3.84	32	2.56	7.68
17		4.08	33	2.64	7.92
18		4.32	34	2.72	8.16
19		4.56	35	2.80	8.40
20		4.80	36	2.88	8.64
21		5.04	37	2.96	8.88
22		5.28	38	3.04	9.12
23		5.52	39	3.12	9.36
24		5.76	40	3.20	9.60
25		6.00	41	3.28	9.84

Special Notice All advertising copy discontinuance orders or change of copy intended for the Classified Department must reach this office ten days in advance of publication date.

MISCELLANEOUS

NATURAL LEAF TOBACCO. Chewing 5 lbs., \$1.75; 10 lbs., \$3.00. Smoking 5 lbs., \$1.25; 10 lbs., \$2.00. Pay when received, pipe and recipe free. Farmers Co-Operative Tobacco Union, Paducah, Ky.

LEAF TOBACCO, five pounds chewing \$1.75; ten, \$3.00; twenty, \$5.25; five pounds smoking \$1.25; ten, \$2.00; twenty, \$3.50. Pipe and Recipe free. Send no money, pay when received. United Tobacco Growers, Mayfield, Ky.

TOBACCO—Extra Smoking, 5 lbs., \$1.00; 10 lbs., \$1.50; 20 lbs., \$2.75. Chewing, 5 lbs., \$1.50; 10 lbs., \$2.75. Quality guaranteed. O'Connor Smokehouse, S-133, Mayfield, Ky.

FOR SALE Steam Trashing Machine Engine used 2 years. Grain and bean machines in fair condition. Will sell reasonable. George Beadore, R. 4, Pinconning, Mich.

MONEY TO LOAN ON FARMS, 6% interest. No commission. No mortgage tax. Security Mortgage Corporation, 1018 Majestic Building, Detroit.

RAILWAY POSTAL CLERKS—Start \$133 month; railway pass; expenses paid. Questions free. Columbus Institute, R. 6, Columbus, Ohio.

PURE CLOVER HONEY—Five-pound pail, \$1.25 postpaid. Kenneth E. Farmer, Mt. Pleasant, Mich.

The Real Estate Market Place

Special discount given when used in combination with 7 other Capper Publications. Write for special real estate advertising rates on these papers which reach over a million and a half families

PAY NO ADVANCE FEE; do not give option or tie up real estate for any kind of contract without first knowing those you are dealing with are absolutely honorable, responsible and reliable.

40 Acres near Lake with Horses, 9 Cattle, 36 Acres Crops

Including 2 a. alfalfa, 8 a. wheat, 12 a. clover, 5 a. oats, 5 a. barley, 4 a. corn, large garden, poultry, tools, ice, hay, feed, cream separator, etc.; big demand at farm for poultry, truck, dairy products; 40 acres near beautiful lake, 32 acres tillage, pasture, woodland; 32 fruit trees, berries, good 6-room house, porches, delightful view, 50-ft. barn, stables, granary, store building, etc. Owner called away makes low price, all \$3,800, only \$1,500 needed. Details page 10-S Illus. Catalog Bargains—many states. Copy free. Strout Farm Agency, 427KH Marquette Bldg., Chicago, Ill.

State Road 140 Acres, Valuable Timber Lot, Horses, Cows, Tools, \$1000 Cash.

On state road, 3 miles to town with high school, banks, stores, R. R. depot, etc., motor bus service, mail delivered, telephone, 50 acres productive tillage, 50 acres stream watered pasture, 40 acres wood and timber, estimated 40,000 ft. saw timber, 2,000 cords wood; timber lot pays for farm. Comfortable 8-room house, painted, cellar, electricity available, near neighbors, well water, large shade; 40 ft. basement barn, other buildings, quick buyer gets 2 horses, 2 cows, 135 chickens, farm tools. Price \$6,500, only \$1,000 cash needed, balance easy. Write or see L. E. Lott, Elmdale, Mich., or Michigan Farm Agency, 628 Ford Bldg., Detroit, Mich.

160 Acre Equipped Farm with 7 a. Apple Orchard; Only \$3,500

In midst of beautiful fruit farm and resort country, on improved road, near town and lake; 100 acres productive loamy tillage, 15-cow pasture, estimated 2,000 cds. wood, 7-acre apple orchard; attractive 2-story, 6-room house, substantial barn, granary, poultry house. Only \$3,500 and to settle affairs, horses, 4 cows, implements, tools, vehicles, crops included. Part cash. James & Trude, 153 1/2 E. Front St., Traverse City, Mich.

50c ACRE CASH: 50c ACRE MONTHLY BUYS TEXAS—ARKANSAS grazing, oil, farm, or timber land. Get particulars. No obligation. Gulf Realty Company, 1021 Bedell Bldg., San Antonio, Texas

Sell Your Farm by my quick and easy method, small expense. It brings cash buyers. Send for particulars. Albert J. Shirley, Box 386, Kalamazoo, Mich.

Farm Wanted Sell your farm quick for cash. New method, small expense. Weaver Sales Co. Majestic Bldg., Dept. 5, Detroit, Mich.

For Sale 40 A. farm, good soil, large orchard, good frame bldgs., good water, near good fishing and hunting. \$2,800.00. Bert Fales, Sterling, Mich.

Send for new land bargains. We have what you want. Jenkins and Jones, Ava, Mo.

WANTED To hear from owner of land for sale O. K. Hawley, Baldwin, Wis.

FARM WANTED—Immediately, send particulars. MISS W. BLACK, 620 Chestnut, St. Louis, Mo.

DOGS

AIREDALES—Eight pure-bred female pups three months old, from registered stock. Sired by half brother Pres. Harding's Laddie Boy. \$10 each. R. G. Kirby, Route 1, East Lansing, Mich.

FOR SALE—Collie Pups, 3 mos. old, from pedigreed stock, natural heel drivers. Jno. A. Litwiller, Ithaca, Mich., Route 2.

GERMAN Shepherd, Airedales, Collies; Old English Shepherd dogs; Puppies; 10c illustrated instructive list. W. R. Watson, Box 35, Macon, Mo.

FOR SALE—Pedigreed Airedale Pups, Oorang Strain, \$10 and \$15. F. H. Aldrich, Saranac, Mich., r. f. d.

SCOTCH COLLIE puppies from registered stock Robert Stewart, Britton, Mich.

POULTRY

RHODE ISLAND REDS—Rose Comb Cockerels, hen-hatched, farm raised. Big, thrifty dark colored birds from prize winning strains, \$4 to \$7.50. Two specials at \$10 each. Careful attention to mail orders. Bidwell Stock Farm, Tecumseh, Michigan.

BARRON STRAIN S. C. White Leghorn Pullets 10 wks. old. Especially developed for egg production. \$2.00 per bird. Special prices on large lots. Nelson D. Boutell, R. 2, Ypsilanti, Mich.

BARRON STRAIN S. C. White Leghorn Cockerels 10 wks. old. Selected Birds for utility type, \$2.00 per bird. Nelson D. Boutell, R. 2, Ypsilanti, Mich.

S. C. BUFF LEGHORNS. Old and young stock for sale. Willard Webster, Bath, Mich.

BABY CHICKS

QUALITY CHICKS, prices cut. Leghorns, 10c; Rocks, Reds, Orpingtons, Wyandottes, 12c; Assorted, 9c. Prompt free delivery. Catalog. Missouri Poultry Farms, Columbia, Mo.

HELP WANTED

WANTED—RELIABLE, ENERGETIC MEN to sell "Hagenfritz" fruit trees and shrubbery. Unlimited opportunities. Every property owner a prospective customer. One of our men drew over \$3,500 in 1922. Outfit and instructions furnished free. Steady employment, cash weekly. Write for terms. J. E. Hagenfritz Sons Co., The Monroe Nursery, Dept. "C," Monroe, Mich. Established 1847.

RATES

For Real Estate Advertising On This Page

35c a line per issue on 4 time orders
40c a line per issue on 1 time orders

Special discount given when used in combination with 7 other Capper Publications. Write for special real estate advertising rates on these papers which reach over a million and a half families

For Sale - by Owner

Improved Farms—Tracts 40 to 1000 Acres in OKLA., ARK., LA., N. MEX., Small cash payment, balance on time, low interest rate. Buy now while lands are cheap. Lands are already going up. Send for booklet describing 200 Farms.

American Investment Company

Oklahoma City, 603 Colcord Bldg., Okla.

Don't Wait for Cold Weather.

Plan now to make money next year on a farm near the Nation's Capital. 5 to 500 acres of fine farmland, within an hour's ride of Washington, on very reasonable terms. Maryland farmers are making money on all kinds of farming. No crop failures; no floods; no cholera; no chinch bugs. Ideal farming climate. Big city markets at your door step. Don't put it off! Land is cheap now, but not for long. Send today for the whole story.

Southern Maryland Immigration Comm., COLLEGE PARK, MARYLAND

80 Acres Improved \$65 per acre \$1000 cash. 160 acres improved \$67.50 per acre \$1000 cash. THE ALLEN COUNTY INVESTMENT CO., Iola, Kansas.

MUST BE SOLD AT ONCE

Four large orchards (1000 acres) of the

Peninsular Fruit Company, Bankrupt

about 15,000 Fruit trees in bearing located at Empire, Michigan; trees about 10 years old and in excellent condition. An opportunity of a lifetime. For full particulars write FRED MAICHELE, Trustee, 1217 Dime Bank Bldg., Detroit, Mich.

CASH YOUR PROPERTY QUICKLY, location immaterial. Give best price. Universal Sales Agency, Box 43, N. Topeka, Kans.

Want to hear from party having farm for sale. Give particulars and lowest price. JOHN J. BLACK, Capper St., Chippawa Falls, Wis.

IF YOU WANT TO LIVE in California, write Kings County Chamber of Commerce, Hanford, California, for free booklet.

FOR SALE Southeastern Colorado—irrigated and non-irrigated farms and ranches. Write for free information. Gregg Realty Company, Lamar, Colorado.

Sell your property quickly

for cash, no matter where located. Particulars free. Real Estate Salesman Co., 515 Brownell, Lincoln, Neb.

Farm Wanted Near school; at spot cash price. Mean business. Fuller, Wichita, Kas.

Wanted Farm at once. Near market. Describe. Mean business. J. W. Houck, Triffin, Ohio

Please Mention The Michigan Farmer when writing to advertisers

TRY a Michigan Farmer Classified Liner—They cost little and bring big results.

1800 AUGUST Bargains

Sears, Roebuck and Co's Big Sale Ends August 31st

Millions of people are buying at big savings during this value giving Sears, Roebuck and Co. August Sale.

We spent six months preparing for this great event. In every department our buyers combed the country for extra values—articles useful the year round. Now they spread before you an array of bargains such as you cannot match anywhere!

Remember, this sale positively ends August 31. Look over your "Midsummer Sale Book," of which we have mailed out 9,000,000 copies. If you haven't one, borrow your neighbor's copy—or write us on the coupon below. You can order direct from this advertisement—there are 1,800 more equally attractive bargains in our Midsummer Sale Book—sent FREE.

Sale Price.

\$1.00

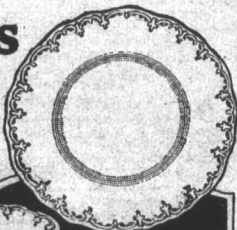
Gingham House Dress

This sensible, comfortable House or Porch Dress is made of good wearing GINGHAM. Women's regular sizes, 34 to 46 inches bust measure. Stout women's sizes, 39 to 53 inches bust measure. State bust measure. Shipping weight, 1 3/4 pounds.

Regular Sizes.
31J315A—Blue and white check.
31J316A—Tan and white check.
Sale price... **\$1.00**

Stout Sizes.
31J317A—Blue and white check.
31J318A—Tan and white check.
Sale price... **\$1.29**

48 Pieces White Dinner-Ware



\$3.75

Until August 31st you can buy this wonderful Dinner Set of first quality, pure white semi-porcelain for only \$3.75. Ordinarily it would cost you \$6.00 per set. Just one of 1,800 similar bargains offered in our Midsummer Sale Book.

12 Dinner Plates. 12 Tea Cups.
12 Sauce Dishes. 12 Tea Saucers.
Forty-eight pieces of finest quality pure white semi-porcelain. Prettily embossed edges. Safe delivery guaranteed; we will replace any breakage free of charge.
35J9706A—48-Piece Assortment of **\$3.75**
White Dinnerware.
Special Sale Price.....
Weight, packed for shipment, 35 pounds.

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Order Direct From This Page. See Book for Other Bargains.



Genuine Gillette Safety Razor.

Here is an unbeatable bargain—a genuine Gillette Safety Razor, in a case, for only 48 cents!

We placed a very large order with the Gillette Razor Company for these razors, which enables us to give you an amazing value for this August Sale.

Put up in a neat box, with one blade (two cutting edges). This bargain is for this sale only. Shipping weight, 6 ounces.
6J10958A—Sale price..... **48c**

48c

Extra Gillette Blades.
Genuine Gillette Blades for all styles Gillette Razors. Shipping wt., 2 oz.
6J10959A—Sale price, per package of 6 blades..... **41c**



Women's Slipper Genuine Kid

15J73441A—Sizes, 2 1/2 to 8. Wide widths. **\$1.59**

Neat One-Strap Comfort Slipper. Black genuine kid leather, with cushion innersole and springy rubber heel, insure the wearer solid comfort.

Sale Price. **\$1.59**

Be sure to state size. Shipping wt., 1 1/4 lbs.



Set of Four Aluminum Pudding Pans

Useful twenty times a day in the kitchen. Don't miss this bargain.

99J400A—Shipping weight, 2 pounds.

\$1.20

Sale Price, Set of Four.



Mail Coupon for Book

Sale Price,

4 Pairs 89c

Women's Guaranteed Hosiery

4 Pairs for **89c**

Guaranteed to Wear Four Months.

86J4032A—Black.
86J4034A—Dark brown.
86J4036A—White.

Made of a very fine quality combed cotton yarn. An extra thread of selected combed cotton is knit into the soles, heels and toes. Double garter tops. Fully seamless. Medium weight. Sizes, 8 1/2, 9, 9 1/2, 10 and 10 1/2. State size. Shpg. wt., four pairs, 12 ounces.



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