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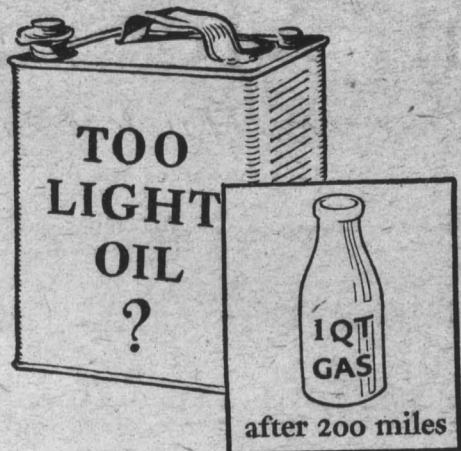
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THE St. Mary's River and the locks at the Soo attract thousands yearly. The picture above shows a large freighter entering St. Mary's River and heading toward the locks. Michigan people should get acquainted with this world famous Michigan attraction.

Michigan is envied by other states for its many fine beaches, unsurpassed for bathing and other healthful recreations. This view, taken from the lighthouse at Port Huron, shows the fine tourist camp near by.

Winter dangers lurk in "light" oil



Would you deliberately increase your engine wear to permit easy starting? No. But you may if you carelessly accept any "light" oil offered you because it gives easier starting in cold weather.

Many such oils are offered you today. While they make starting easier they fall seriously short in providing the margin of safety necessary to prevent dangerous gasoline dilution of lubricating oil.

Too thin an oil fails to seal your piston rings adequately. In 200 miles of driving you may easily get a full quart of gasoline mixed with your lubricating oil.

Then comes extra wear—serious wear—costly wear.

How to meet this serious winter problem



Gargoyle Mobiloil Arctic is especially manufactured to meet this problem of winter lubrication in most cars. Although fluid enough to provide easy starts on coldest days, it has an exceptional richness that gives unusual protection against dilution.

Mobiloil is made by the world's leading specialists in lubrication. The Mobiloil Chart is approved by 609 makers of automobiles, trucks, tractors and other automotive equipment.

A week's running in cold weather with the wrong oil may cost you as much as a whole year's supply of Mobiloil. It's a good idea to make sure *now* that you have the right oil in your crankcase.

If your car is listed in the Chart on this page, Mobiloil Arctic is the oil for your car. For other cars consult the complete Chart at all Mobiloil dealers'.

SPECIAL WINTER CHART

Mobiloil Arctic

should be used in Winter (below 32°F.) in all cars marked*.

PASSENGER CARS	1927	1926	1925	1924
Auburn all except Models 4-44 & 6-66	*	*	*	*
Buick	*	*	*	*
Cadillac	*	*	*	*
Chandler except Special Six	*	*	*	*
Chevrolet	*	*	*	*
Chrysler 4-cyl.	*	*	*	*
Dodge Brothers	*	*	*	*
Elcar all except Models 6-65 & 4 cyl.	*	*	*	*
Erskine	*	*	*	*
Essex	*	*	*	*
Flint	*	*	*	*
Hudson	*	*	*	*
Hupmobile	*	*	*	*
Jordan	*	*	*	*
La Salle	*	*	*	*
Locomobile	*	*	*	*
Marmon 8-cyl.	*	*	*	*
Moon	*	*	*	*
Nash	*	*	*	*
Oakland	*	*	*	*
Oldsmobile	*	*	*	*
Overland & Overland Whippet	*	*	*	*
Packard Six	*	*	*	*
Eight	*	*	*	*
Paige	*	*	*	*
Peerless Models 60, 80 & Eight	*	*	*	*
Pontiac	*	*	*	*
Reo	*	*	*	*
Star	*	*	*	*
Studebaker	*	*	*	*
Valco	*	*	*	*
Willys-Knight	*	*	*	*

If your car is not listed above, consult the complete Mobiloil Chart at Mobiloil dealers' for your winter grade of Mobiloil.

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MICHIGAN FARMER

AND LIVE STOCK JOURNAL
PUBLISHED WEEKLY
ESTABLISHED 1843

A Practical Journal for the Rural Family
MICHIGAN SECTION THE CAPPER FARM PRESS

QUALITY
RELIABILITY
SERVICE
NUMBER IV

The Story of a Club Member

Few Boys Have Had More Experience in Club Work than Has Raymond Laser

By Himself

I WAS the first member to join the Wright Stock Club of Waldron, Hillsdale County, Michigan. I entered the pig club with a Chester White gilt which I purchased of Andy Adams, one of Michigan's best known Chester White breeders.

I made the same mistake most first year pig club members make and overfed my pig and had it much too fat to show well in the breeding classes at fair time. I was only able to win fourth on her at the state fair.

During the summer I attended a number of judging demonstrations held by Mr. Matthias, our County Club Leader, and Mr. Pearson, Assistant State Club Leader, and was made a member of our county judging team which won seventh at the state fair at Detroit. At the close of the club year I was chosen as county pig club champion which meant a trip to Club Week at Lansing the following July.

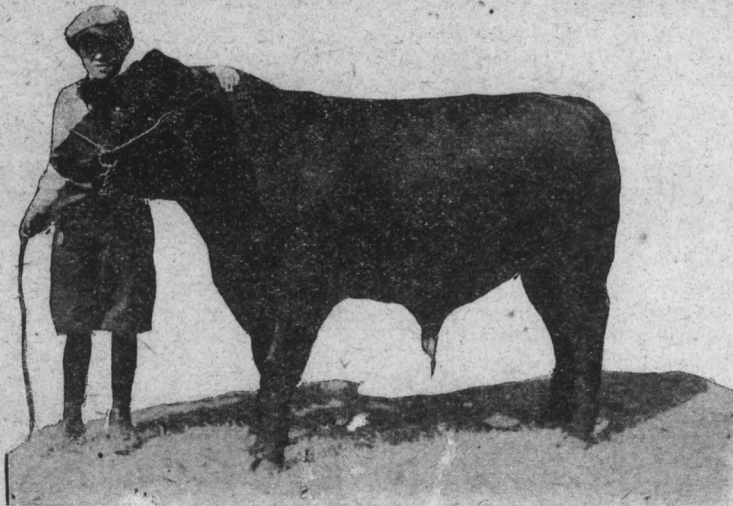
The next year, 1923, I carried two projects with a Duroc gilt and a Holstein heifer. Although my pig and calf were well fitted, I was unable to win any of those much coveted blue ribbons. At our county fair I won the calf showman's cup which I also won the next two years for permanent possession. At the annual county roundup I was chosen as president of our club association and was made all-around county champion which included a short course scholarship at Michigan State College.

In 1924 I continued in club work with my Durocs in the herd project and a junior Holstein heifer calf. I was with our county exhibit five weeks, and we showed at Detroit,

Grand Rapids, and Hillsdale fairs. My calf won third at Detroit and second at Grand Rapids and Hillsdale, standing just below my brother who was made state champion that year. I entered the judging contest at Grand

Contest I was chosen as the Michigan entry.

Nineteen twenty-five was the first year I was able to win a blue ribbon on any of the stock I exhibited. At a local farm sale I purchased an out-



Raymond Urges Every Parent to Give His Son or Daughter a Chance to Become a Club Member

Rapids and won first and a trip to the National Club Congress at Chicago. That year Coe Emens of our local club was chosen as America's healthiest farm boy and my sister as state champion health girl. That year our local club had four state and one national champions under the leadership of our local leader, Bertie McFate, and county leader, L. H. Matthias. In the competition for the Moses Leadership

standing heifer at about beef prices and won grand championship on her in both club and open classes at the county fair and was reserve state champion in the yearling heifer classes. I showed four pigs of my own breeding and won first, second, and third on females in the club classes at the state fair at Detroit and in both club and open classes at the county fair, also state championship

in the sow and litter project, which included a scholarship at Michigan State College.

I was chosen by the State Club Leaders to be the Michigan boy delegate to the International 4-H Leaders' Training School at Springfield, Massachusetts. This school is financed by Mr. Horace A. Moses, president of a paper company, and two delegates (one boy and one girl from each of fourteen states and the providence of New Brunswick, Canada) were present. All expenses of the delegates were paid.

The school lasted two weeks and was held in connection with the Eastern States' Exposition. The program consisted of lectures and educational trips. On one of the trips we passed Amherst College where President Coolidge went to school. At Massachusetts Agricultural College we were addressed by Director Willard who was in charge of Extension Work in Massachusetts and who shortly afterward came to Michigan State College. This school, its lessons and its friendships are worth all the effort any boy or girl can put forth in club work to win an opportunity to attend it.

Nineteen twenty-six was my last year in club work as I had reached the age limit. I won first on my two-year old heifer in the club classes at the state fair and grand championship in both club and open at the Hillsdale County Fair. Durocs of my own breeding won second on senior yearling, junior yearling and junior sow pig in female classes in open class at the

(Continued to page 117)

Chris Hansen Becomes Interested

Finds that Gravity Has Robbed His Land of Lime

By C. A. Millar

CHRIS HANSEN'S farm was neat and attractive; but in recent years the crops did not satisfy the owner. He had called in Dick, the county agent, to learn what could be done. The writer was invited along. We were looking over a wire fence at a fourteen acre alfalfa field.

"Have you seen Jim Simpson's marl bed, Chris?" asked Dick.

"No," he replied. "Planned to drive over, but never got to it. Jim dotes on that marl—says it is great stuff for alfalfa. He piles it to stand over winter and then puts about five spreader loads on an acre. When harrowed in, he says, you can just bank on an alfalfa catch. He may be right, but I'm not sold on the stuff yet."

"Well, Jim has the alfalfa, Chris," was Dick's rejoinder. "When I first came here he was buying hay. Now he supplies all his needs. His neighbors also get good results from the marl. I think the subject calls for a careful investigation."

"Where did that marl come from, do you suppose?" reflected Hansen, after a thoughtful pause in the conversation.

"What about it?" said Dick, turning to me.

I explained the theory, that water had dissolved the lime from the higher

land and carried it to the swamps and small lakes. Here certain plants and shell-forming animals changed the lime to a solid form again.

"Then marling land gets some of the lime back on the land from which it originally came," was the reply after some rapid thinking by this rugged farmer.

"Exactly so, Mr. Hansen, and sour

soils are due to nothing more than the constant washing of the lime from them."

"Yes, yes—That explains why clover grows on the low spots of my field but not on the highland." He was still thinking.

I then made point of the difference between marl and limestone, stating that marl is collected in beds as soft

material, while lime is the same except that it has been subjected to tremendous pressure from movements of the earth surface, long ages ago.

Turning to Dick, I asked how much limestone the farmers in this county needed.

His prompt answer was, "Two to three tons on strongly acid land; occasionally more is necessary; but, in most cases, two tons are sufficient."

"Brad Thompson, our dealer over here," broke in Chris, "says he has an extra strong, easily soluble lime that would give good results when put on at the rate of 500 to 1,000 pounds per acre. He called it hydrated lime, and it looks like a labor saver to me."

"Well, Sam Smith used it last year and lost his seeding," went on Dick. "The alfalfa looked fine in the fall but by spring it was mostly all dead. We tested his soil and found it still strongly acid. I know of several other farmers who have had the same experience. Still, occasionally I have seen a farmer use 1,000 pounds of hydrated lime and succeed with sweet clover or alfalfa. What do the men at the college think about hydrated lime?"

Our observations agree with yours,
(Continued to page 100)



The Marl in the Bed on Jim Simpson's Farm Is Very Easily Removed

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VOLUME CLXX

NUMBER FOUR

DETROIT, JAN. 28, 1928

CURRENT COMMENT

A Matter
of Trans-
portation

ITS 1,600 miles of shore line makes Michigan unique among the states of the Union. This shore is an asset in many ways, especially from the tourist and resort standpoint, but in one respect it is a liability. It is a handicap in the matter of land transportation.

Only through its southern boundry does Michigan make direct contact with other states. Therefore, the extreme southern part of the state is the only section that benefits from trunkline or through rail transportation. This situation has made Michigan a problem from the standpoint of economic rail transportation, and is a great handicap to farming and industrial activities in the northern part of the state. It has also developed an unorganized trucking activity which is still of doubtful value.

Other states, competing with Michigan, have preferential freight rates to consuming centers. This is made possible by the Esch-Cummins bill which allows railroads to fix their rates to assure a certain percentage of dividends on their stock. The railroads therefore charge higher rates from and to Michigan points. This discrimination is unfair to Michigan and is hindering the very activities which would increase railroad business.

From an agricultural standpoint, Michigan potato and fruit growers are keenly feeling this handicap, and the Michigan Fruit Growers, Inc., has petitioned for a fair adjustment of rates on grapes and other fruits shipped to eastern consuming markets. The state administration has been

aroused to this situation and Gov. Green personally joined the fruit growers in this petition.

Michigan has too many natural assets to let a few handicaps stop its constructive development, but the fair adjustment of freight rates will eliminate one great hindrance to the state's advancement.

The
Business
Outlook

THE signs of improvement in general business which appeared around the turn of the year are still multiplying. The first quarter of 1928 promises to show substantial improvement over the last quarter of 1927, but it will not come up to the high pace maintained in the first part of last year.

Prices of important groups of steel products were advanced \$1 per ton in the past week and steel mill operations have increased 20 per cent or more over the low point of several weeks ago. Automobile production has risen rapidly and is 20 to 25 per cent greater than a year ago, making a sharp increase in steel requirements. Sustained activity in the farm implement industry, in building, and in the railway equipment industries also is supporting steel trade.

The firmer trend in money rates which appeared a short time ago seems to have been checked. Although federal reserve bank reports show a further liquidation of securities, the effect of which is to reduce credit and tighten money. The Bank of France reduced its rediscount rate to 3½ per cent compared with 4½ per cent in December, a change which will reduce the tendency to export gold from the United States.

Business failures in January have been larger than a year ago, reflecting the smaller margins of profit or larger losses in 1927. This is the season of the year when liquidations usually run largest. For 1927 as a whole, business failures were slightly larger than in 1926 and the second largest on record. The liabilities were about the same as in 1926. Bank suspensions, however, numbered only 393 in 1927 compared with 608 in 1926 and 464 in 1925.

The European outlook is better than a year ago. In France, England, and Germany currency changes and the international debt situation seem likely to work out in a manner that will favor, rather than hamper, world trade in the coming year.

With this business background, we might well hope that the year 1928 will be more favorable to the farmer. The situation does not justify expansion in production, but does justify efficiency and economy.

Co-opera-
tive Rural
Churches

MORE than one church in a small rural community is a mortgage on the farm life of that community," says Professor R. A. Felton of Cornell University. Further, he believes it to be the imperative duty of denominational leaders to work out some plan to relieve farmers of the burden of financing several churches when they cannot adequately support one.

Late statistics would indicate more than one hundred thousand rural churches in this country supported by farmers. An active rural church is the most essential organization in a community, but, in the majority of cases, a second competitive church is an unnecessary tax on the pocketbooks of those who must support it.

In a study of nearly three thousand farm families, located in eleven

states, the average cost of living for each family was \$1,597.50 annually. No pastor should be asked to live on less than the average family in his parish. Yet more than one-half of the rural communities in America support two or more churches. During the recent agricultural depression, the average rural community has been financially unable to support two pastors adequately, with the result that pastors have been underpaid, their usefulness crippled, and money spent that might otherwise have been used more effectively.

It has been proven that farmers can co-operate in business affairs successfully, for memberships in farm co-operatives have increased three fold since 1915. Those who take the lead to devise plans for co-operation of rural churches are making a worthy contribution to our national farm life.

Good Mar-
ket For
Skim Milk

THERE are two lines of agriculture that have been outstanding in growth and profitability. They are dairying and poultry raising. And it so happens that they go together nicely.

The common practice in the past has been to feed the skim milk to pigs, but recent tests at Ames, Iowa, show that skim milk when fed to poultry will return three to six times as much as when consumed by pigs. It has also been found that milk fed chickens will outlay tankage fed birds 25% to 50%, especially during cold weather, and will net two dollars a hundred for the milk.

The value of this dairy by-product in poultry feeding is so great that many poultry specialists advise keeping only as many hens as one can supply milk. However, commercial milk products enable one to extend beyond the limitations of the skim milk supply. It seems wise, though that every dairy man ought to keep enough hens to get the two dollars a hundred for skim milk that good hens will make for him.

Signs
of
Progress

SINCE that memorable day in August, 1914, when war was declared, remarkable changes have taken place. Civilization has made more progress since then than in any other similar period of the world's history.

Farming, with other industries, has had changes that have upset old methods and traditions, and progress has been made despite the depression.

The Secretary of Agriculture, Jardine, recently said that since 1919 the American farmer tills 13,000,000 less acres and yet has made a gain of 5% in production. The efficiency of farm workers has increased 15%, and 15% more milk is produced from only four per cent more cows.

Greater attention is also given to the installation of home conveniences, and to the improvement of the home surroundings. Whole communities are co-operating to make farm life more worth living.

And here is the latest sign of improvement. There is a definite program, fostered by the post office department, to encourage the use of more efficient and beautiful rural mail boxes. Postmasters in all parts of the country are getting behind this campaign, even the postmasters of large cities that have rural routes.

It is estimated that there are 44,729 rural carriers delivering mail to 31,698,700 boxes. If these can be improved it will add greatly to the impression one gets of the rural highways.

We feel sure that most Michigan farmers will co-operate in the improvement of that little receptacle through which so much of the outside world enters the home.

Winter Sports

THE other day I was coaxed to go out and see if I was as young as I used to be. So now I'm considerin' whether it wouldn't be best for me to retire as far as skatin' is concerned.

No, I wasn't coaxed by no girls and etc., but by the weather. It was one of them nice moonlight nights that we used to go to bob sled parties, etc., when I was in my romancin' days. But now in my rhumatin' days, I kin only get a kick out of such days from recollections.

I can't glide along so nice no more, no more fancy stuff and graceful



turns, etc. No more goin' two's with the best girl you ever saw and laughin' and feelin' fine while you're keepin' in step goin' lickity scoot over the ice, and goin' over to the fire at one side of the ice and jokin' and laughin' and then goin' to someone's house and havin' some good eats. Gosh, but wasn't life athrillin' them days. But now I know they're only memory days. I've tried and I can't bring them back.

Well, I got on the ice O. K., but before I knew it, I was settin' down. There was some of the high school girls there and they helped me up and they all wanted me to skate with them, so I skated with several all at once so they could hold me up. I had some fun, of course, but ain't it funny the way girls flock around a old man tryin' to be young. I think they just enjoy seein' how much a fool they kin make of him.

If they'd only done that flockin' around me when I was twenty I would o' felt like Nero when Rome was burnin', or something like that. But now I don't know whether they was just makin' a fool out of me or really enjoyin' my company.

But I had lots o' fun anyhow and I guess they did, so we'll call it fifty-fifty. They said they wanted me to come out again—but I don't know.

I noticed when they got their boy friends around, they kinda go in twos, but when they're with me we go in fives—one on each side, one in back, and one in front and me in the middle. It kinda makes me feel like one of them Turkish harem fellows.

If my ankles ain't too stiff and sore, I'm goin' out again. I'll feel alright about it as long as they don't call me "grandpop." I ain't ready fer that yet, but when I am maybe I'll enjoy it. There's one thing I find about gettin' old—a fellow kinda gets lots o' enjoyment lookin' back on life.

Oh! I forgot—one o' the girls says I'm one of the best winter sports there is, and I've been tryin' to figure what she meant by it. HY SYCKLE.

Soil Programs—It is hoped that this year definite plans will become effective to make greater progress in spreading the gospel of soil fertility in this state. There is much valuable information on this subject which should be presented in an effective way to farmers. During Farmers' Week a soils program in Room 101, Agricultural Building, Wednesday and Thursday mornings, and also the muck farmers' meeting on Wednesday, Thursday, and Friday mornings in Room 100 of the same building, will afford one a real opportunity to get valuable information on this important subject.

**Farmers' Week, Michigan State College, East Lansing,
January 30th to February 3rd**

Books for Farmers

This Farmer Gives Some Practical Suggestions and Comments

By Harley Gibson

AS a rustic votary of bookworm pleasures, it pleases my fancy to believe that we rural people are especially endowed with that serious, earnest nature so essential to the appreciation of the best in books—and the best in anything, for that matter—a quality of mind that ought to persuade us to leave the shams of frivolous literature to our more sophisticated city cousins.

That we really are more serious, and earnest-minded than our urban relatives may be a half-truth merely—still it is an idea that we may entertain and cultivate to advantage; a bit of mental suggestion that will stimulate us to grasp more eagerly the opportunity for profitable study which our rustic leisure and security so invitingly affords. For what class of people are better circumstanced for extracting the pleasure and profit of books than we country-folks, surrounded as we are by the quietude of the fields and the snug seclusion of long winter evenings, and comparatively free from the lure of public amusements and distractions of city life?

We have autos, of course, to take us city-ward and radios to bring the audible side of the cities into our homes. As to the latter, however, it has been my experience that the finest entertainment is not so continuously broadcast that I cannot find time to open a good book. Carlyle declared that a true university is a collection of books—how about a farm homestead furnished with a well chosen library? Often as not our opportunities are where we are and locomotion is only lost time.

In our preoccupation with periodicals and daily papers—which are indispensable in their way—we unwittingly overlook the value of books. We need the broad backgrounds and comprehensiveness of books, which are the ultimate repositories of the world's choicest knowledge. It does not suffice that we have a copy of the Bible, the dictionary, a few catalogues, a medical adviser, etc., etc. We should choose our reading carefully—read purposefully and systematically—know what we want to know and where to find it when we want it.

I do not wait for a book agent to come along and tell me what I need—in sumptuous bindings at an exorbitant price. I order my books either by mail from the publishers or from a bookstore—not infrequently a second-hand bookstore; and when I buy a book it is one that I feel assured will be worth reading more than once—an unfailing source of reference and recreation. Consider for a moment what a few dollars and a little discrimination will purchase. For a sum (\$5.00) that will buy only a fragment of an automobile which is worn out and junked in two or three years, one can obtain all of Shakespeare's work in a single volume—a life-time of incomparable entertainment. Let us readjust our sense of values.

It is not my intention, however, to belittle the fact that books cost money. Their cost, and remoteness from large libraries are the two chief difficulties in the way of more extensive reading of books by country people. Can these difficulties be overcome? Easily!—parcel post and rural delivery solve the problem.

When I want books, I send a list to the Detroit Public Library giving a number of desired substitutes in case the particular books I desire are not at the moment available; in other words, I usually request four or five books out of a list of perhaps a dozen. A few days later I find a package of books in my mail box. I may retain them for four weeks, or one or two weeks in the case of timely books in

great popular demand, the date of return being stamped on the date slips in the backs of the books. When I am done with the books, I wrap them up in the same wrapping paper in which they came, readdress, and lick on the same amount of postage that brought them to my door.

While I am making these explanations, I must not omit to state that I am not a citizen of Detroit; my membership in the parcel post privileges of the Detroit Public Library was granted in response to a written recommendation by two men of standing in my community, and the sum of \$1.00 which I pay annually, and a small deposit to take care of the postage at the sending end. Originally I obtained books from the State Public Library at Lansing to which every citizen of Michigan has access free of charge except for the postage. Farmers may obtain what are called package libraries (bundles of clippings, pamphlets, and bulletins on subjects relating to agriculture) free from the M. S. C. library, the borrower paying the postage both ways. Surely, the means of obtaining books are within the reach of all.

Late last fall, when the work was easing up, I began to think about my winter's reading. What should I read? What books does the farmer fail to read which he ought to read? Which would prove most stimulating and interesting? I began to dream about a farmer's five-foot shelf packed with books that would help him in his business—not the rustic poems of Robert Frost, the nature essays of

Henry Thoreau and John Burroughs, the delightful fiction of David Grayson, though these books and many others might fittingly claim a place on such a shelf—but I was thinking particularly about technical reference works, books on soils, fertilizers, crops, plants, insects, farm management, etc.

So I wrote to the U. S. Department of Agriculture and to the Michigan State College for suggestions for a small private library that would meet the needs of the general farmer. The librarian of the U. S. Department of Agriculture sent me two lists of books: one compiled by the College of Agriculture, University of Illinois; the other compiled by the American Library Association. In the list suggested, by the Michigan State College the following were recommended as of special interest to Michigan farmers.

Fertility and Crop Production, S. F. Hinkle, 1925. Author, Editor, and Publisher, Sandusky, Ohio.

Crop Production and Soil Management, Joseph Cox, 1926. Wiley & Sons.

Feeds and Feeding, Henry and Morrison. The Henry Morrison Co.

Outlines of Agricultural Economics, Harry C. Taylor, 1925. MacMillan.

Farm Management, George F. Warren, 1913, MacMillan.

Marketing of Agricultural Products, B. H. Hibbard. Appleton.

The Agricultural Situation, Warren and Pearson, Wiley and Sons.

Farm Economics, Taylor, Tapp, and Tolley, Misc. Cir. 132, U. S. D. A.

Rural Sociology, John Morris Gillett, MacMillan.

I have written this article in the hope that the results of my inquiries may prove as helpful and suggestive to others as they have been to me.

Ontario Alfalfa Seed Short

Must Secure Seed from Other Sources

By C. R. Megee

Farm Crops Dept., M. S. C.

UNFAVORABLE weather conditions have caused a great reduction in the supply of Ontario alfalfa seed available to Michigan farmers for this spring's seeding. The bumper crop of 1926, of 8,000,000 pounds, dwindled, in 1927, to about 500,000 pounds. This latter figure is less than the estimated consumption of Ontario for 1928 so that there is but little Ontario seed available.

The Ontario Variegated has filled an important place in Michigan's al-

falfa program. This seed is quite winter hardy, produces good yields of hay, and the price has been somewhat less than that of some of the other winter hardy strains.

Regardless of Ontario's shortage, there will be available an ample supply of dependable alfalfa seed from other sources. It is reported that there will be a fair supply of dependable, known origin Grimm seed available. For several years Grimm has been considered one of the most de-

pendable winter hardy strains of alfalfa for the northern corn belt states. In a series of tests at the College, Grimm has consistently, year after year, yielded among the best strains. Many farmers have thought that the high price asked for Grimm was prohibitive of its use. At the same time they will pay \$12.00 per bushel for unadapted seed and sow it at the rate of 15 pounds per acre, at a cost of \$3.00 per acre for seed. Far better results would have been secured by sowing seven pounds of Grimm seed at a cost of \$3.15 per acre for seed. Many farmers are only sowing seven or eight pounds of Grimm seed per acre and are securing excellent stands. A rate of seeding test was started at the College in 1922, the seed being sown at the rate of 3, 6, 9, 12, 15, 18, 21, and 24 pounds of seed per acre. There has been no appreciable difference in either the yield or quality of hay secured.

The Hardigan is a superior seed producing strain which was developed at the College. Since it has been introduced only a short time, the supply of seed is limited. Those who are interested in alfalfa seed production would do well to consider the Hardigan. As a hay producer, it is slightly superior to the Grimm when both are allowed to stand over a long period of years.

The Cossack is very similar to the Grimm in winter hardiness, yielding ability, and price of seed. The amount of seed produced is limited.

The supply of Michigan grown seed is not great but in several sections locally grown seed is available. When well cleaned and free from weed seeds, it is usually a good "buy." Seed from fields that have withstood, successfully, three or four Michigan winters, should be adapted to this state.

Utah and Idaho both produced good crops of common seed this last season. This seed is produced in high altitude sections and is good for stands of three or four years' duration provided conditions are not extremely severe. It is reported that the Montana and Dakota crops of common are considerably less than normal.

There will be available a considerable quantity of seed, not winter hardy, not adapted, and of very low value for Michigan. This seed comes from Arizona, Southern California, and New Mexico and is of both the common and Peruvian strains. Word has been received of this seed working northward. It is responsible for many failures and will cause heavy financial loss when used in this state.

For a number of years, the Farm Crops Department of the Michigan (Continued to page 120)

Adjust Tariff to Farmer's Needs

Is the Position Taken by Senator Capper

I SUPPORTED Senator McMaster's resolution for revision downward of certain excessive tariff schedules because I believe the farmer is not receiving his share of benefits resulting from the protective tariff system.

Reduction of excessive tariff rates would materially reduce the prices farmers are obliged to pay for things they need and must have.

Since the World War ended, farmers have struggled against unfair discrimination in price levels. They have been buying in a protected market and selling in a market governed largely by world price levels. They buy high, they sell low. There are many articles necessary to the farmer's household and business on which he has to pay a high duty. The tariff on aluminum, for example, is an indefensible gift of millions of dollars annually to the aluminum trust.

I see no justice in compelling the

rural people of America to pay inflated prices for industrial products necessary to their business when they are not receiving equal benefits from this system. If the farmer's pay and his standard of living are to be placed on an equality with others, he should have benefits equal to those bestowed upon the manufacturer and the working man.

I believe in the principle of the protective tariff system. In well-being, in wages and living, the people of no other country in the world live on as high a plain as the American people, thanks to this system. It has brought prosperity to industry, to labor, to business, and has put them all on a higher level. I believe the tariff has given the farmers the best consuming home market in the world by making a high standard of living possible through high wages.

Nothing should be done which will destroy or weaken fair, legitimate

tariff protection. American economic policies should be based on the purpose to maintain the present high standards of living. But the farmer is still a victim of inequalities which should be corrected by revision of the tariff act in a way that will establish a closer parity between agriculture and industry. The farmer's economic status today is such that he needs all the help that can be given him. He is entitled to an increase in tariffs on corn, wheat, dairy products, vegetable oils, and a few other commodities produced on the farm, and the stockman should have a duty on hides.

All we ask is that agriculture be brought up to the high average level of prosperity which exists in the nation. A reasonable, sensible revision of tariff schedules in the interest of agriculture will contribute to that end.

Arthur Capper



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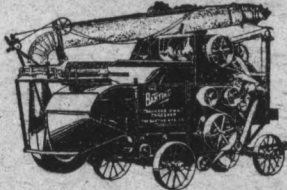
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News and Views

From INGLESIDE FARM—By Stanley Powell

ONE of our daily adventures is seeing what the mail-man has brought. It may be only papers and circulars, but there is always the thrill of many possibilities. Sometimes there are notices of bills payable, once in a while checks are enclosed, often inquiries about some live stock which we may be advertising at the time. These mean work for us in replying, but you may be sure we are pleased to get them.

Then once in a while there is a letter way out of the ordinary. Such a letter came a few days ago from a high school lad down in Hammond, Indiana. Here is what he wrote:

"I am a high school student. Being especially interested in agriculture, I applied for information at the Michigan State College of Agriculture, and they referred me to you as being the proper person to give me information along that line.

"What do you think of farming as an occupation? Would you advise anyone to follow that occupation? Why? How long have you been in the occupation? How are the chances of succeeding?"

Now, how would you have replied to such a letter? I thought about that boy and his questions off and on for a few days and then one evening, tired in mind and muscle after an unusually exhausting day, I wrote him as follows:

You will pardon me, I trust, for not replying more promptly to your inquiry. The questions which you ask are indeed profound ones and cannot be answered off-hand and without careful thought.

Without further information as to your training and likes and dislikes, it is obviously impossible for me to advise you wisely regarding your choice of a life work. I am happy, however, to give you my views concerning a few phases of the agricultural situation.

Despite the constant trend of population from the farms to the cities, there seems as yet to be no shortage of farmers. In fact, as you are undoubtedly aware, one of the biggest problems confronting American agriculture today is that we farmers are producing a surplus of several important farm commodities. On these crops of which we produce an exportable surplus, our protective tariff is ineffective. The price received for the portion of the commodity which is exported, virtually establishes the price for that consumed domestically, so for these crops we receive a world price rather than an American one. I didn't start out in this letter to discuss "Farm Relief" legislation, but referred to these matters only to illustrate my observation that there is apparently no shortage of farmers menacing our nation.

Not Quantity But Quality

Personally, if I ever become depressed regarding the rural situation in America it will be not because the number of people living on farms is decreasing, but for fear of a possible degeneration in the type of our rural citizenship.

In all history no nation has flourished very long that did not have a prosperous agriculture and satisfying rural life. Truly, the farms are the seed plot and balance wheel of our nation.

Every day in every way farm life is becoming more complicated. A couple of generations ago a farmer required relatively little capital, equipment, or scientific knowledge. Today quite the reverse is true. Modern agriculture is characterized by an intensified use of power and machinery.

Hence the inventory of a well equipped farm reaches surprising figures and considerable practical experience and natural aptitude is necessary to properly operate and care for all of this machinery.

On most of our farms the virgin fertility has been more or less depleted and hence the successful farmer today must understand green manuring, the use of barnyard manure, commercial fertilizers, lime, etc. Insect pests and plant and animal diseases, unknown to our forefathers, further complicate the situation.

I cannot help but feel that a person who has not been reared on a farm is sadly handicapped for taking up an agricultural career. There is nothing farther from the truth than the idea that if a person is too stupid or witless to do anything else, he had better be a farmer. The facts of the case are quite the opposite.

Farming Not a Simple Matter

In practically any industrial establishment there are three quite distinct branches of the work, each in charge of specially trained men. These are production, financing, and distribution. In a business of any size each of these branches is subdivided considerably. However, on the average farm the proprietor must personally direct each phase of the enterprise and do quite a proportion of the actual work.

Here are some of the things which a successful farmer on a diversified farm should know: Soils; fertilizers; proper tillage methods; rotations; varieties of farm crops; selection and care of seed; planting; harvesting; care, management, and breeding of all the various kinds of live stock to be kept; gas engines; tractors; spraying; fencing; carpentry; marketing of farm products; management of hired help etc. This list is by no means complete, it is only suggestive.

I would not want anyone to take up farming who had a narrow, personal view of his job. One of the greatest needs of rural life today is for real leaders—men who are not only good farmers, but who realize their responsibility to their craft and to their craft and to their community and try to make both better.

If you are considering taking up farming as a life work, I suggest that you get all the classroom instruction that you can afford and season it with a lot of actual practical experience. And remember, a man isn't likely to make much of a success as a farmer without the assistance and encouragement of a loyal and sympathetic homemaker as his partner.

Some men fortunately endowed by nature, training, and experience are making a fair living farming today, but many farmers are becoming discouraged at high operating costs and low prices for their products. To one who loves rural life, it affords certain satisfaction, difficult to explain, but nevertheless very real and potent. Personally I come from a long line of rural ancestry and although I have lived in the city from time to time I have never experienced anything which has quite the fascination for me as life here at my birthplace—Ingleside Farm.

HEARING ON SURPLUS BILLS

CONSIDERATION of the McNary-Haugen agricultural surplus disposal bill was begun before the House committee on agriculture January 17, with a large number of representatives of the Western and Southern farm organizations in attendance.

In opening the hearing for a large group of farm organizations, President

Sam H. Thompson of the American Farm Bureau Federation, said that after an extended conference the farm organizations of which he was the spokesman had come to the conclusion that the policies which will best solve the problem of the surplus are those contained in the McNary-Haugen bill.

It was explained by Chester H. Gray, Washington representative of the American Farm Bureau Federation, that the revolving fund in the new bill was merely a loan to be repaid to the government at 4 per cent interest; that the loan is protected by the stabilization fund. The farmers are not asking for any gratuity from the government.

Several changes were suggested by Mr. Gray as representing the most recent conclusions of the farm organizations. First, they want the farmers to have more effective control over the activities of the Federal Farm Board than is provided for in the new McNary-Haugen bill.

Instead of having an advisory council of seven members for each commodity, it is proposed that the advisory council be composed of seven members from each Federal Reserve District. These seven members would represent the producers of all commodities within the district.

A new surplus disposal bill introduced by Representative Aswell of Louisiana, is similar to the McNary-Haugen bill with the equalization fee eliminated. Whatever losses there may be from the transactions of the Farm Board would be met from a revolving fund provided by the government.

News of the Week

The American Lutheran, a religious paper, will give as a prize a trip to Europe for the best religious slogan submitted. The thought is that material things are advertised by slogans, and so can religion.

It is reported that Gen. Augustino Sandino, the Nicaraguan rebel leader, was killed during a U. S. marine airplane bombing raid.

Television has been established between London and New York, thus making it possible to see the person one is talking to at the other end of the line.

Lieut. Leonard Flo and Austin Bement made a non-stop flight from Detroit to Havana, Cuba. The distance is about 1,700 miles.

Adolph Hotelling, of Owosso, confessed slayer of eight-year-old Dorothy Schnieder, of Mt. Morris, was sentenced to life imprisonment, with hard labor and solitary confinement at the Marquette prison. He was sentenced 45 hours after his arrest.

The Standard Oil Company and the Royal Dutch Shell Company, of Great Britain, have declared an oil price war because of disagreement regarding Russian oil concessions.

U. S. Prohibition Commissioner Doran has issued an official order against the use of champagne for sacramental purposes.

The Manitoba government liquor control commission made net profits of \$1,366,901 during the last fiscal year.

On the windows of the Pickens County Court House, Alabama, etchings of two faces of negroes, who were killed trying to evade the law, have appeared. They cannot be eradicated by acid or other means. They are thought to be manifestations from the spirit world.

President Calvin Coolidge was received with great acclaim when he opened the Pan-American congress at Havana, Cuba. His speech was broadcasted throughout this country. He was the first American president to broadcast from a foreign country.

Regular airplane service has been opened between Key West Florida and Havana, Cuba. Two planes carrying twelve passengers each will make regular trips.

Leon Trotzky, former leader of the Russian soviet government, has been sent to Wjerry on the frontier of China and Turkestan as an exile.

Rumors are persistent that President Diaz, of Nicaragua, will resign on account of ill health.

Making Gooseberries Go

Oceana County Farmers Make Gooseberries a Specialty

By C. W. Wood

UNDoubtedly, you have heard the remark that if the State of Michigan were cut off from the rest of the world, it has been so bounteously blessed by Nature, it could keep right on in its self-supporting way. And after visiting the New Era district of Oceana County, I am ready to testify to the fact that we surely would not go hungry for gooseberry pie. Gooseberries to the right, gooseberries to the left, gooseberries everywhere can be spoken truthfully of this county. Exact figures on the 1927 crop were not available at the time of preparing these notes but from the data furnished it probably will run better than a hundred tons.

Let's see—a pound of berries to a pie, 20,000 pies to the ton. But, why continue? The figures are stagger-

tural methods. When we started growing gooseberries here, small fruit culture was in rather a chaotic condition. Either definite information was not available or if it were to be had, few of us knew where to get it. So we 'dug out' the essential facts as best we could.

"A plantation comes into profitable bearing three years after planting and will continue to bear worthwhile crops almost indefinitely if it is given proper care. Proper care, in our case on this light sandy soil, means (1) adequate fertilization, (2) clean cultivation, (3) careful pruning, and (4) spraying."

Mr. Harvey uses barnyard manure, poultry manure when available and sulphate of ammonia. The animal manures are applied directly around



Picking Gooseberries in George Harvey's Patch

ing; the thought of consuming that quantity of pies is even more so.

Remembering the labor of picking enough gooseberries for just one pie and preparing them for the cook, I have often marveled at the infinite pains it must take to harvest and can a crop of the size grown in the New Era county. But, worry no more. Practically everything except the picking is done by man's servant—machinery.

The picking is done even as you and I do it. And you will quickly believe me when I say there are a good many backaches in the acre after acre of gooseberries in this district. After the berries are off of the vines, hand work is entirely eliminated. Machinery washes the berries, separates the poor from the good, removes the adhering blossom end and sharp spines, cooks the product, cans and seals it ready for the consumer.

The cultural practices of Mr. George Harvey are typical of the good growers of the district and, I believe, we can profit by considering them for a moment as he outlined them to me. Mr. Harvey, known throughout state horticultural circles as the "Gooseberry King" is one of the pioneer gooseberry growers in the New Era territory.

Said he, in reviewing his experience in the gooseberry business: "The first problem to be solved when gooseberry culture was started around here was the selection of the most profitable variety. Repeated trials along this line have shown that the variety Downing is best suited to our needs. Its individual berries are very large, the fruit is a handsome, pale green, ideal for canning purposes and the bush is a strong grower, unusually resistant to mildew.

"We quickly learned that the gooseberry does not do well on our low wet ground but that the dry, sandy upland was an ideal situation for it," continued Mr. Harvey. "You will observe that nearly all plantings in our district are now confined to the high ground.

"Our next problem was correct cul-

ture. When we started growing gooseberries here, small fruit culture was in rather a chaotic condition. Either definite information was not available or if it were to be had, few of us knew where to get it. So we 'dug out' the essential facts as best we could.

Clean cultivation answers the same purpose here that it does in any case, i. e., keeps down weeds and conserves moisture. Careful pruning consists of taking out dead and diseased canes. Mildew was long the bane of gooseberry growing and it is still bothersome in the home garden where gooseberries are grown in shade or in situations providing insufficient air drainage. But under the field culture practiced in the New Era district very little trouble is experienced in that quarter. But it is different with "currant worms."

"Worms are the worst enemy we have to contend with," said Mr. Harvey. "They must be watched closely as a few days' delay at the critical time may mean irreparable loss. Formerly, we used a liquid spray but since the advent of dust and dusting machines, we have adopted the latter as both cheaper and more efficient. The dusting medium that we are now using contains about 82% sulphur and 14% lead arsenate.

Dusting is done as occasion demands but one application soon after all the worms have hatched is usually sufficient.

Like many of our highly specialized fruit producing districts, the New Era gooseberry area has not met with the prosperity during the last three or four years which the growers normally expect. Possibly this is more readily noticeable because of the high prices prevailing during the World War and directly thereafter. However, it is a fact that prices have not kept pace with the increased cost of production. During the war and directly afterward, the price paid to the grower kept pretty close to 9 cents per pound but during post-war defla-

(Continued on page 101)

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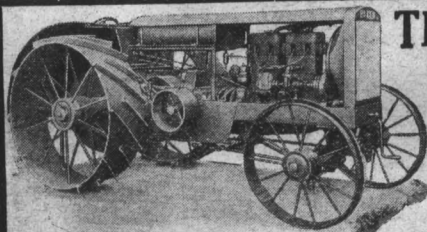
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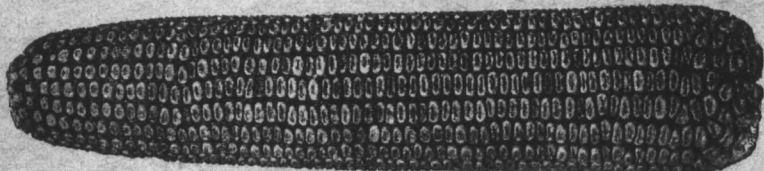
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CHRIS HANSEN BECOMES INTERESTED

(Continued on page 95)

I replied. But wherever a man uses a small amount of hydrated lime successfully, you will find his soil is not badly in need of lime, or else there is lime in the subsoil at no great depth. Our experiments on soils strongly acid to a considerable depth, have showed small applications of hydrated lime to be of little value. It is only with the use of a ton, or a ton and one-half to the acre that the results have equaled those obtained with ground limestone or marl. Our only objection to hydrated lime is its cost, which leads farmers to use small amounts with unsatisfactory results, and prejudice them against its further use. Then they fail to continue their soil building program. Hansen saw the point and showed he had changed his mind by asking the price of limestone.

"You can buy ground limestone delivered at the station anywhere from \$2.35 to \$5.50 per ton in carload lots, Chris," said Dick.

"That's a big difference in price! What makes it?"

"The fineness of grinding and the method of shipping. Some is shipped in bags and some in bulk."

"Well, how should it be ground for best results?"

Dick explained that limestone ground so from 35 to 40 per cent will pass an 80 or 100 mesh screen will give immediate results and not be expensive. Coarser stone would need to be used in larger amounts, while finer stone is excellent but costs a little more.

"Do you think it pays to get it in bags?"

"That question," said Dick, "you must answer for yourself. Some farmers think the ease of unloading from the car, storing, and handling in the field is well worth the charge for bagging. Others do not think so."

Seeing that this farmer was convinced on the need of lime, I asked "When do you think you will apply your lime, Mr. Hansen."

"I don't know. Have you any suggestions?"

"Why don't you put it on this sod before plowing for corn? Then seed in the oats or in wheat the year after. Or, put the lime on the ground you fit for wheat next summer and then seed in the spring. In this case the lime should go on after plowing and be thoroughly harrowed into the soil."

"But why can't I put it on my oat ground this spring and then seed alfalfa in the oats?"

"If the season proves very favorable, you could probably get a seeding, but, if the spring is a little dry, the results would probably be disastrous. You see it takes time for lime to go into solution and correct the acid condition of the soil particles. This is especially true if moisture is scarce."

"I see. Now, if you are sure lime is what my soil needs, I'll order a car, and follow your suggestions about applying it."

"There is no question about the need of your soil for lime, and it will be one of the best investments you ever made. Liming is one of the first steps in a soil building program. Now, let's have a look at your wheat field."

"I had planned to seed clover in the wheat, but I guess it wouldn't be worth while without lime since the soil is sour. How about putting some lime on this winter or early spring and then seeding?"

"You would just be wasting your seed. The lime has to be worked through the soil and given some time to correct the acid condition if you are to get good results. It took a great many years for the lime to wash out of the soil particles leaving them acid, and so we must give the lime we apply a reasonable length of time to go into solution and unite with the

soil to correct the acidity. Are you satisfied with the way your wheat looks this fall?"

"It looks pretty well. We have had a fine fall for wheat. But it is in the spring that any wheat looks sickly. It takes on a yellowish shade and doesn't start growing early enough."

"That sounds as though it needed a little stimulant. Let's look around over the field a bit and then maybe we can make a prescription."

(In the next story you will learn how the soil doctor learned what prescription should be used.—Eds.)

Service Department

SOME RENTAL QUESTIONS

What would be a fair division between landlord and tenant of the income from a farm where the landlord furnishes everything. Also, what would be a fair charge for pasture for each head of stock? The pasture in question would be the ordinary bottom ground natural wood such as you find in southern Michigan.

Where the landlord furnishes everything except the labor it is rather difficult to tell just what portion the tenant should have, much depends on the size of the business and the type of farming carried on. If one knew the labor costs and also the approximate farm income, it would be possible to figure out a reasonably fair percentage that each should have.

There are several ways of figuring pasture charges. One is on the investment basis, taking into consideration taxes, interest, and fence repairs. This method works best on tillable land. Another is based on the going charges in the community. The quality of pasture varies so much that it is impossible for one to make a fair estimate of how much to charge unless he knows all conditions. Again, no matter how good pasture one has the price will depend very materially on the demand for it. As a whole the usual price charged for pasture ranges from \$0.25 to \$0.50 per head per week depending on the quality of pasture and class of stock.—F. T. R.

DOG LICENSE

What is the law in Michigan on taxing a farmer's dog? Can an officer demand either the money or the dog?

On or before the 10th day of January, the owner of any dog four months, must apply to the county treasurer in writing for a license for the dog kept by him, stating the age, breed, sex, color, and marking of the dog, and the name and address of the owner. The sheriff may collect the tax from the owner. After the 15th day of June, the unlicensed dog is a nuisance, and it is the duty of the sheriff to kill all unlicensed dogs, and failure to do so is a breach of the duty of his office. The fee is \$3.00 for male dogs and \$6.00 for female dogs.

DIVISION OF STRAW

A rented land from B, furnished seed, did the work, and threshed the grain. B was to have a third. Does B get any share of the straw or should A have it all? A threshed the grain on his own farm as he wanted the grain in the barn.—G. S.

Straw is generally considered the same as grain, therefore it should be divided in the same proportion. It is common practice for the landlord to bear his share of the seed and threshing bill which would be the same as the general division of grain.—F. F.

A STAR QUESTION

On which side of the polar star does the lesser or twin star appear? Is this star above or below the one visible to the naked eye?—E. A. R.

The fainter star near the polar star appears in all directions with reference to the polar star during each interval of twenty-four hours.

ORCHARD AND GARDEN

WINTER VS. SUMMER PRUNING

LITTLE difference has been noted between winter-pruned and summer-pruned apple trees on the grounds of the New York State Agricultural Experiment Station at Geneva where a comparison of winter and summer pruning has been in progress for several years. The Station horticulturists advocate pruning apple trees in winter, however, when the operation can be more carefully and easily performed.

At this season of the year there is no foliage to prevent the orchardist from seeing at a glance just which branches should be removed. Moreover, as soon as the trees commence to bear it is always difficult to take out wood which should be eliminated because of the crop of fruit.

Baldwin, Boiken, Esopus, Hubbardston, McIntosh, Spy, and Greening have been pruned both in the summer and in the winter on the Station grounds. There are no differences to be noted in the size or shape of the trees, it is said, all being equally good, stocky, stout trees with large heads and typical of their respective varieties. The general shape and size of the tops of both summer and winter-pruned trees is the same, and pruning at different periods in the year seems not to have affected the growth, shape, or character of the trees in any respect.

Either practice of pruning will prove satisfactory while the trees are young, but for sake of convenience, fruit growers may well adhere to the usual plan of winter-pruning when the framework of the tree is entirely visible and when other farm operations are less pressing.

PLANTING FOR EARLY VEGETABLES

WE have had onions, radishes, spinach, lettuce, cress, and mustard long before our neighbors by the simple method of sowing the seeds during the winter or before the ground freezes in the fall. If we do not get around to planting before the freeze we just watch our chance during the winter, for if the garden is in a protected place or has a sunny south slope there will be times when it will be in ideal condition to work. It matters little when the seeds are sown just so they are in the ground long enough before spring that the spring rains will not catch us. Nearly always weather conditions are unfavorable in very early spring, and often before it would be possible to work the ground the winter sown seeds are up and coming fast. Onion sets we always use instead of seeds, and sometimes we plant some of the multipliers, which make usable onions quickly many times before spring, for they grow during any mild spells in winter.—A. H.

AN OLD TREE

TEN years ago I purchased a farm and there was only one old apple tree in the back yard which I supposed was dead. But when I cut into it and saw signs of life, I proceeded to see what could be done with it. I cut off all the old stubs, painted the ends and as it was hollow, I cleaned all the rotten wood out which went well up into the main limbs. This left the shell not more than one and one-half inches thick. I gave the inside a coat of tar and filled it with cement and commenced spraying.

I succeeded in killing the San Jose Scale and the tree at once commenced to put on a new top. Two years later I picked apples from it, and last year

I picked seventeen bushels. In all I have picked seventy-five bushels of good cooking apples. I am not sure what the kind is. I took some to the Washtenaw County Fair and received first premium on what they named Greasy Pipin. Some have the idea that to get nice fruit you must have young apple trees. This is not so, as I have an orchard set out the same spring. I gave it good care and was able to pick apples off from the Wealthies, twenty-eight months after they were set out and the trees have been loaded every year since. But this old tree has done just as well. It makes no difference as to the age.

The new orchard I speak of is ten years old and I got 1,200 bushels this fall. I cultivated eight years and then seeded it two years ago. I was bothered with fire blight and I believe an orchard that age will be less subjected to fire blight in sod. Cultivating stimulates the growth and the tender shoots are attacked. Since it is in sod I have but very little fire blight and before I was in the orchard most of my time clipping out the wilted shoots. I know this is contrary to our experiment station, but it is my experience.—O. S. Sturtevant.

ABOUT LEMON LILLIES

I READ Alex Laurie's answer to Mrs. A. G. Mc. about Lemon Lillies. They are much more often called Lemon Lillies or Yellow Day Lillies than Hemerocallis Flava, which is the right name. They do best in a moist, partially shaded place, but will grow in almost any kind of soil.

I think Mrs. A. G. Mc's. Lemon Lillies are crowded and am sure if they are replanted they will bloom satisfactorily. They are hardy.—Edith M. Ewald.

In regard to the Lemon Lillies Mrs. A. G. Mc speaks of, I have the Lemon Lillies and I do not think they belong to the Amaryllis Family. They are an outdoor plant and resemble the Corn Lillie more than any other plant. They blossom about the same time as the Iris does. They throw up their blossom stalks the same as the Corn Lily does. They do well in any kind of garden soil.—Mrs. D. R. Haughey.

MAKING GOOSEBERRIES GO

(Continued on page 99)

tion it dropped down to 4 cents and has not been able to get much above that figure since that time. Deducting 2 cents per pound paid for picking, the grower has but 2 cents left to cover his entire production cost—taxes, labor, interest on investment, etc.

With no statistics available, it is rather difficult to arrive at an average yield. In 1925, Mr. Harvey harvested 25 tons from a five acre field. This, we must remember, is a phenomenal yield from a splendidly kept plantation. Mr. Harvey is a master-craftsman in his chosen field and climatic conditions were all in his favor that year. I presume that half that quantity would be much nearer the average yield for the district. A little arithmetic will show that the gooseberry growers are not getting a just reward for the time, labor, and money expended on their project.

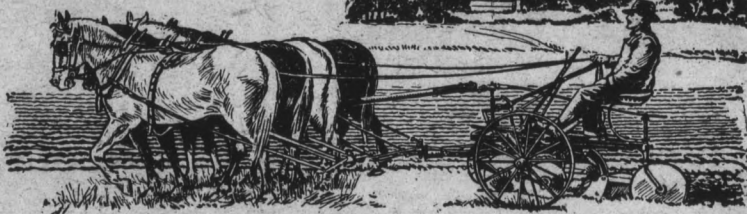
Co-operative, or at least, semi-co-operatives canning may help them reach their goal. These growers are a progressive lot and they surely will yet come into their own.

For practical method of raising chicks that will assure results, send self-addressed stamped envelope to Poultry Department, Michigan Farmer, Detroit, Mich., for its new chick raising bulletin.

"Back in 1838"

My Father Carried Our First Grand Detour Home on His Shoulder."

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Samuel Ray—prominent seed grower and co-operator with the U. S. Dept. of Agriculture—on his new Grand Detour Plow.

"THAT WAS ONE of the first steel plows manufactured by the Grand Detour Plow Works, and the same plow was used every year until 1905."

Then in 1889, Mr. Ray bought a Grand Detour "Little Yankee" Riding Plow from James A. Barden, Grand Detour dealer in Oregon, Ill. Mr. Ray remarks as follows about this purchase in a letter dated April 18, 1927:

"At that time (1889) I was in the hardware and implement business and was selling goods and the plows as a distributor in the 8 northwest counties of Illinois. I bought the Grand Detour because I knew it was the best plow made. And that plow is in just as good working order today as it was 38 years ago."

Think of it! Here was a man sell-

ing two other well-known plows, yet when he needed a plow for use on his own farm, he bought a competing make—a Grand Detour—"because it was the best plow made".

Long life and top-notch performance have been outstanding characteristics of Grand Detour Plows for nearly a century.

Now, when you buy a Grand Detour Tractor or Horse-Drawn implement, you get the result of 90 years of specialization on tillage tools alone—you get an implement that can't be beat regardless of price.

See coupon below for list of Grand Detour implements, check off those you're interested in and mail it in now. Attractively illustrated booklets will be sent you free. See your Grand Detour dealer for complete information.

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Please send me free literature on implements I have checked. (If interested in others not listed, write them on margin of page.)

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is the nitrogen that is immediately available. Fertilize your corn, oats, wheat, barley, truck crops or fruit trees with the proper amount of Nitrate of Soda and you will make more money than you ever made before. Your crops are better able to come through bad weather. You get a bigger yield and a better yield.

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Fur Coats \$22

Made from Hides Supplied by You. No better protection from cold winter blizzards. Long years of wear—fully guaranteed. Ship us your cattle and horse hides and other raw furs; we will convert them into furs, fur coats and robes at considerably less than the usual prices. We also make and have in stock a full line of ladies' fine fur coats. Buy from us and save money. Catalogs and other prices gladly sent on request. Hillsdale Robe & Tanning Co., Hillsdale, Mich. (Oldest Galloway Fur Dressers in U. S.)

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Cambria Fence
—a hinge-joint,
cut-stay fence.

BETHLEHEM STEEL COMPANY, manufacturer of high quality iron and steel products, has been making CAMBRIA FENCE at the Cambria Plant, Johnstown, Pa. for many years.

Cambria Fence is a standard, hinge-joint, cut-stay field fence made of the finest quality selected steel wire, heavily coated with zinc by our own special process.

Bethlehem controls every step of manufacture, from ore to finished product. It is this careful and thorough supervision that assures the best in Bethlehem products and that gives to Cambria Fence distinctive qualities that keep it ever new and uniform.

CAMBRIA STEEL FENCE POSTS are also made at Cambria Plant. They are the strongest posts obtainable for erecting farm, poultry yard, orchard and garden fence.

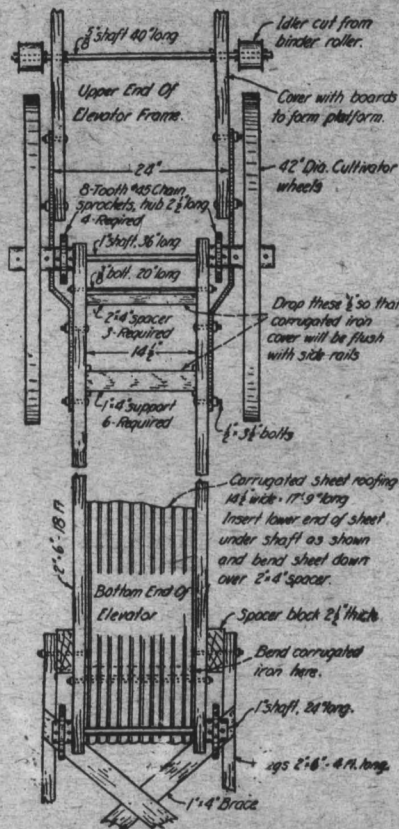
BETHLEHEM STEEL COMPANY, Bethlehem, Pa.

BETHLEHEM

THE HANDY MAN'S CORNER

PORTABLE BARN ELEVATOR

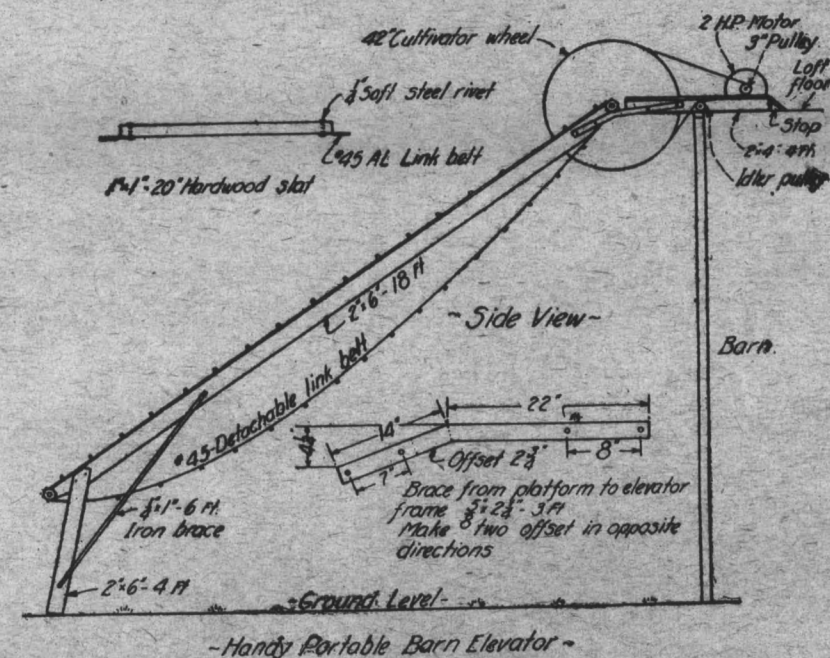
ONE of the most useful home-made devices we have seen for some time is the portable barn elevator for heavy objects shown in the accompanying diagrams. This device was worked out by Prof. Parks, Missouri College of Agriculture, Columbia, Mo.,



and was built largely of material salvaged from the junk pile.

List of Required Materials

- 10 ft. No. 45 A-1 detachable link belting.
- 70 ft. No. 45 plain detachable link belting.
- 4 No. 45 set screwed sprocket wheels, 8 teeth, 15-16 inch bore.



—Handy Portable Barn Elevator—

- 14 ft. 3-ply rubber covered belting 2 1/2 inches wide.
- Hardware
- 4 1/4 x 1 inch set screws.
- 7 doz. 1/4 x 1 1/4 inch rivets.
- 4 pcs. 1 inch galvanized pipe, 2 inches long (bearings)
- 4 1 inch washers
- 6 5/8 inch washers.
- 1 pc. corrugated sheet roofing 14 1/2 inches x 17 1/2 feet.
- 8 1/2 x 3 inches carriage bolts.
- 2 1/2 x 6 inches carriage bolts.
- 2 3/8 x 2 1/2 inch carriage bolts
- 3 3/8 x 20 inches machine bolts
- 1 1 inch shaft 3 feet long.
- 1 1 inch shaft 2 ft. long.
- 1 1/2 inch shaft 3 ft. 4 inches long.
- 2 pcs mild steel.
- Lumber
- 2 pcs. 2 x 6 inch x 18 ft. (fir)
- 2 pcs. 2 x 6 inches x 4 ft.
- 2 pcs 2 x 4 inches x 4 ft.
- 6 pcs. 1 x 4 inches x 14 1/2 inches.

- 2 pcs. 2 x 4 inches x 14 1/2 inches.
- 4 pcs. 1 x 12 inches x 2 ft.
- 2 pcs. 1 x 4 inches x 4 ft.

The elevator as built uses a 2 H. P. electric motor for power and this is the most convenient if electric power is available; but it can be operated very nicely by means of a 3 to 5 H. P. engine set on truck or skids under the elevator and belted around one of the large wheels. It is almost necessary that the drive be at the top in order to avoid too much friction and strain on the carrier chain. Two large wheels were used so the device could be moved around on them as a cart.

It can easily be seen what a time and labor saver this would be on many farms, where baled hay or straw, sacks of grain or feed, boxes or baskets of fruit, cakes of ice, and so on, are to be unloaded from wagon box or hay rack and stored on an upper floor. The cost for material should run from \$15 to \$50, depending on how much of it can be salvaged from the junk pile. Any farmer who so desires is at liberty to build such a device.

EFFECT OF HEIGHT OF AERIAL

Will an extra high radio aerial bring in signals stronger or from a greater distance? Will an extra high aerial bring in stations on the same dial readings as a low one? What is the best height for an aerial, considering cost, reception, trouble, etc.—F. E.

After the aerial is placed above nearby trees and buildings, say 35 to 40 feet, little is to be gained by going any higher. Possibly a very, very slight increase in signal strength and distance might be gained, but it would not pay for the extra cost and danger of working with the higher aerial.

With most sets, changing the length of the aerial will change the dial readings slightly; but if the height is changed without changing the total length from outer end of aerial to the ground connection, probably not much

difference in dial readings would be detected.

Under ordinary farm conditions, from 35 to 40 feet for the height of aerial gives about the best results for the cost of putting up the aerial.—D.

To prevent the cord which supports the radio aerial from cutting the bark of the tree, the cord may be run through a short length of ordinary garden hose where it comes in contact with the tree.

Send self-addressed stamped envelope to the Poultry Department, Michigan Farmer, Detroit, Mich., for your copy of the Michigan Farmer Chick Bulletin. It will help you succeed with your chicks.

INDOOR CISTERN LEAKS

I have a cistern built in the corner of the cellar. The four sides are made of cement with boards between the two sides of stone wall of cellar and cistern. This cistern leaks somewhere for the water will go down three feet perhaps in one night, and we cannot find where it goes as there is never a sign of it in the cellar. It doesn't leak in the bottom for there is always six inches of water in the bottom that does not go out. We have put three coats of melted paraffin on the inside but this doesn't do any good. The cement walls of the cistern are about ten inches through all the way around.—J. M.

By careful inspection determine if possible where the leak occurs. The fact that six inches of water remains in the bottom of the cistern indicates a leak at this level and the cistern may leak anywhere above this line.

The leak would most likely occur in a corner, but it might occur anywhere along the side wall of the cistern except on the two walls exposed in the basement where no water ever appears.

Even though the paraffining has been done quite carefully, it might not fill some of the large openings through the concrete wall. It is not practical to remove the paraffin which you have put on the surface and which, of course, has gone a considerable distance into the concrete to make the wall sufficiently clean to receive an application of cement plaster.

Repair can be done with paraffin or with asphaltum. In using paraffin care must be taken to fill all of the pores. If openings occur in the wall, which the paraffin will not fill, these may be covered by successive layers of muslin spread in hot paraffin. This method may be used whether the leak occurs in the corner or along the side wall. If asphaltum is to be used, the paraffin now on the surface should be scraped down as much as possible and the surface washed with gasoline to remove as much of the paraffin as possible, then asphaltum may be applied hot.—F. E. Fogle, M. S. C.

SKUNKS

Will you please tell us how to get rid of skunks around our premises?—F. H.

In the late fall and winter, skunks seek protected cavities in rocks or burrows and frequently pick their homes under the floors of buildings especially those which do not have basements and are built quite close to the ground. If the building is heated it forms a most attractive place beneath the heated floors and this accounts for the presence of skunks under homes and other buildings.

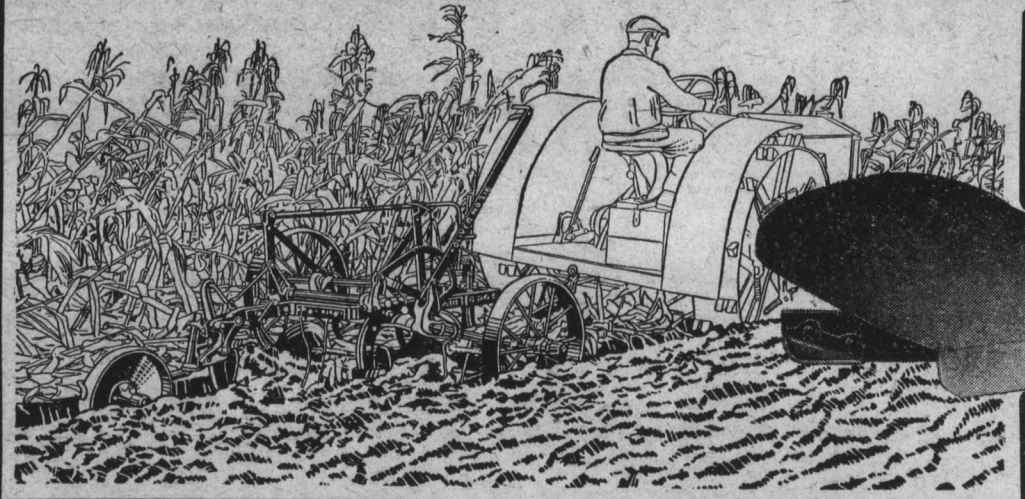
In Michigan the skunk stays in its den throughout the coldest part of the winter. Often during a thawing period they venture out in search of food. At such times it is comparatively easy to trap them by placing the traps in the runways with the entrails or other portions of a chicken. The bait is placed upon the pan of the trap or in the runway between the two traps which should be lightly covered with dead grass or leaves.

Carbon bisulphide, a highly explosive liquid, is used in place where the gas may be confined and where there is no chance of humans breathing or exploding the gas. It would not be advisable to use it around a home.

If the skunks under the house are not molested by other animals or man, they will not disturb the peace in the household, therefore if the skunk cannot be trapped it would be better to let it stay unmolested until early spring when it will leave of its own choice.

If the animal remains on the farm it will repay the owner many fold as the skunk feeds upon animal life, many forms of which are detrimental to agriculture. When insects are numerous they form the entire bill of fare. During August and September grasshoppers form the main diet.

Now-A GANG PLOW



with OLIVER BIG BASES

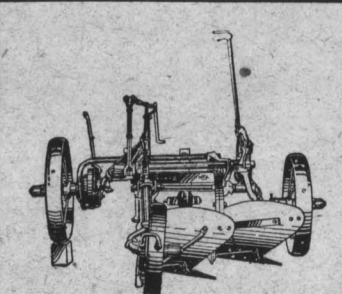
After seeing the splendid work of the Oliver 18-inch Big Base as a sulky plow many farmers asked for the same base on a gang plow. Oliver takes pride in offering to you the New—Different—Better Gang Plow.

The Oliver No. 218 is not just another gang plow. It is the most outstanding development in plow design in several decades and its many points of advantage are commanding the attention of farmers throughout all of the corn producing states. It has the same desirable features of great clearance and the same covering qualities as heretofore found only in the Big Base Sulky. In addition, it turns two furrows at the same time and thereby speeds up or doubles the amount of work done.


You will like the way this plow handles heavy trash and turns a clean, well-pulverized furrow slice. It will go into the heaviest growth of stalks or weeds on your farm and turn every particle completely under.

It gets the Corn Borer; you will not need to worry about European Corn Borer Control measures, if you use the Oliver Big Base plow. It does the kind of plowing that is recommended by experts and authorities as a control measure against this dreaded pest. Oliver Big Base plows turned thousands of acres last spring in the great war against the Corn Borer.

Ask your Oliver Dealer about the Oliver No. 218 Big Base Gang, also write us today for free literature on European Corn Borer Control. Oliver builds horse-drawn plows and plows adapted to all makes of tractors that can be equipped with these big bases.



When equipped with Big Bases, the No. 218 can be set so that each base turns 19 inches. If desired the frame can be narrowed and 14-inch bases used. It is adjustable for any width from 14 to 19 inches per base.



For 73 years the Oliver Chilled Plow Works has been building good farm implements, and there is in this famous line of implements a tool for every tillage need.

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GENERAL OFFICES and WORKS: SOUTH BEND, INDIANA

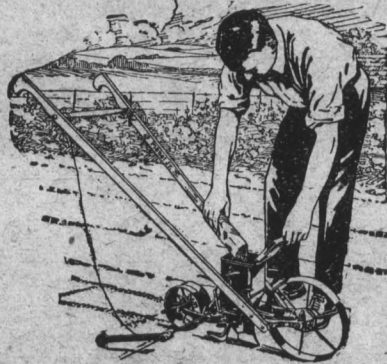
Rats, mice, and other harmful rodents are far less numerous where skunks occur.

Farmer's Bulletin No. 587, "Economic Value of North American Skunks" may be obtained from the United States Department of Agriculture, Division of Publications, Washington, D. C.—J. W. Stack

USE INSULATED STRANDED LEAD-IN

A VERY mystifying and annoying radio trouble is to have the insulated single strand copper lead-in wire break inside the insulation, due to continual whipping back and fourth in the wind. This gradually crystallizes and hardens the copper until it breaks. One day the set works perfectly and the next day it is dead. Tests show the tubes, A and B-batteries, ground, and so on, all right, and as the lead-in apparently is alright, it is difficult to find the trouble.

Many installers are now using weatherproof stranded copper wire for lead-ins in order to get away from this trouble, since these will not be so likely to crystallize and break as the solid conductor.—I. W. D.



Planet Jr. No. 4 Combination Seeder and Wheel Hoe is useful every day in the garden season. Equipment includes Seeder, pair of 6-in. hoes for weeding, 3 cultivator teeth, 1 plow, 1 leaf guard.



First on your garden list this year

Planet Jr.

BEFORE you order your seeds, send for the Planet Jr. catalog and garden booklet. You'll be amazed at how much more work you can do, how much better work, how much more ground you can cover with a Planet Jr. Seeder and Wheel Hoe to help.

Planet Jr. Seeders open the furrow, distribute the seed evenly at the right depth, cover and roll them. Planet Jr. Wheel Hoes plow, furrow, weed and cultivate. No matter how small or large your garden, it will pay you to have a Planet Jr.

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Grows Crops—Not Bull Frogs
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OWENSBORO DITCHER & GRADER CO. Box 15 Owensboro, Ky.

Mid-Winter Seed Show

At Michigan State College

THIS is the time of year when the interest of Michigan's farmers turns to the annual State Seed Show to be held during Farmers' Week, January 30 to February 3, at East Lansing. Nineteen twenty-eight marks the 16th annual occurrence of this show, which has grown to be one of the most important features in the Farmers' Week program. It is held at the time of year when our State College is acting as host to the farmers of Michigan and the program that is presented is the best that can be obtained in the agricultural field.

The seed grower, the fruit man, and the potato producer alike are beginning to make a study of the premium lists and are planning on doing big things at this show. Many of these growers have already won awards on their samples at the Michigan State Fair, their respective county fairs or at the 1927 International Hay and Grain Show at Chicago. The State Seed Show being the last one of the year, it is considered as the climax in the exhibition of the state's best produce and seed.

Many of our farmers are now selecting, preparing, and grading their choice samples in order to place them in competition for the liberal awards and the honors offered at this show.

At the same time we must remember that this annual exhibit is not held as a place for the so-called professional exhibitors to get together and carry off the bulk of the awards. It is, however, a show open to all of the farmers of the state and is conducted only for their benefit. As in 1927, the show will be open to corn growers from the entire state and these farmers will be allowed to send in their samples from both the infested and non-infested corn borer areas. The samples will be returned to them after the show, with the permission of the State Department of Agriculture.

As in 1927, the Michigan Crop Improvement Association will award a better seed trophy to the County Agricultural Agent having the largest number of exhibitors who win premiums in any of the grain, seed, and potato classes. This cup or trophy is an award made annually to County Agents for constructive and effective crop improvement work.

A special display will be made of all the samples of seed which won premiums ranging from first place to tenth place at the International Hay and Grain Show in 1927. At this show Michigan exhibitors won nearly one hundred awards, twelve of which were first premiums and three were sweepstakes honors over all samples from the entire United States and Canada. The exhibitors who won on their samples will be allowed to prepare and exhibit other samples of the same grain, but those winning at Chicago

will not be placed in open competition.

Of special interest to Michigan's legume seed growers will be a new class for Michigan grown alfalfa of any variety. The increasing interest on the part of many farmers in the production of alfalfa seed made necessary this new class. Michigan exhibitors took four of the five premiums offered at the International Show in the class for Eastern grown alfalfa.

In 1927 there were over two hundred

samples of seed in the grain show alone. Every year the show has grown considerably. This growth has not only been in the quantity but also in the quality of produce. The entries of the coming show are arriving in numbers and it is expected that the 1928 exhibit will be by far the best ever held.

All exhibitors should send their samples express prepaid to P. R. Miller, Superintendent of Exhibits, before January 30. Great care should be taken in placing the corn samples securely in crates or boxes and in double-sacking all samples of grain to be exhibited.—R. H. Morrish.

Our Readers' Corner

Facts and Opinions by Michigan Farm Folks

TOO MANY TAXES

IN your readers' views of many topics I think you sure can do lots of good if everybody would only give their ideas on taxation. Taxes are going up every year and now they have a new law in regard to Christmas trees. I think they intended it for a good purpose but it's like lots of other laws—just to give another bunch of people jobs.

When they pass a law that you cannot cut a Christmas tree or evergreen of any kind or dig up a wild fern without it first being inspected, that sure is the limit, I think. If the trees were for sale, it might make some difference, but to comply with the law, you have to have them inspected before they are cut.

The gas tax I think was fine but will they use it for a good purpose or is it just another increase in taxes instead? Real estate has always stood the blunt of taxation and now it seems they are starting on other things, but will they reduce the taxes on real estate when they start to tax gas for roads? I am afraid not by the looks of the money they want to spend on roads.

They don't seem to retire any bonds or talk of taking off any burden on anything only just add other taxes to make jobs. Farm products or farms have decreased in the last ten years. Taxes have increased 50 per cent or more, and more land is going back to the state every year because of taxes. The state doesn't pay any taxes, but it seems the township has to dig up as much even if the state is increasing its holdings. They talk of state and game reserves. Who are they for—the city people? They seem to think it's okay to tax the country people for them. But it seems the cities try to stop any bill which helps the country—the gas tax and the Escanaba idea of distributing the school tax money. With the laws governing schools, some poor districts couldn't have schools and comply with all the state laws, but it seems the ones who

make the laws expect somebody else to pay the taxes.

I think it would be nice if the roads were made self-supporting, especially the through routes and I will be in favor of one cent more gas tax to benefit the cities the routes go through, but I think they should reduce the taxation on real estate at the same time.

We spent four years in Florida and the whole country is trying to hand it to Florida, but when you can find a state that hasn't a bond issue, is building as many good roads, and has as small a valuation on real estate, you sure will have to look some. Our taxes have been reduced there but here are always higher. I didn't write this letter to try and hand it to anybody. What I am interested in is to make farming pay. I haven't seen as good a place to raise live stock as this part of Michigan, but the one thing it lacks is cheap taxes.—B. A. Hillson.

THE GAME QUESTION

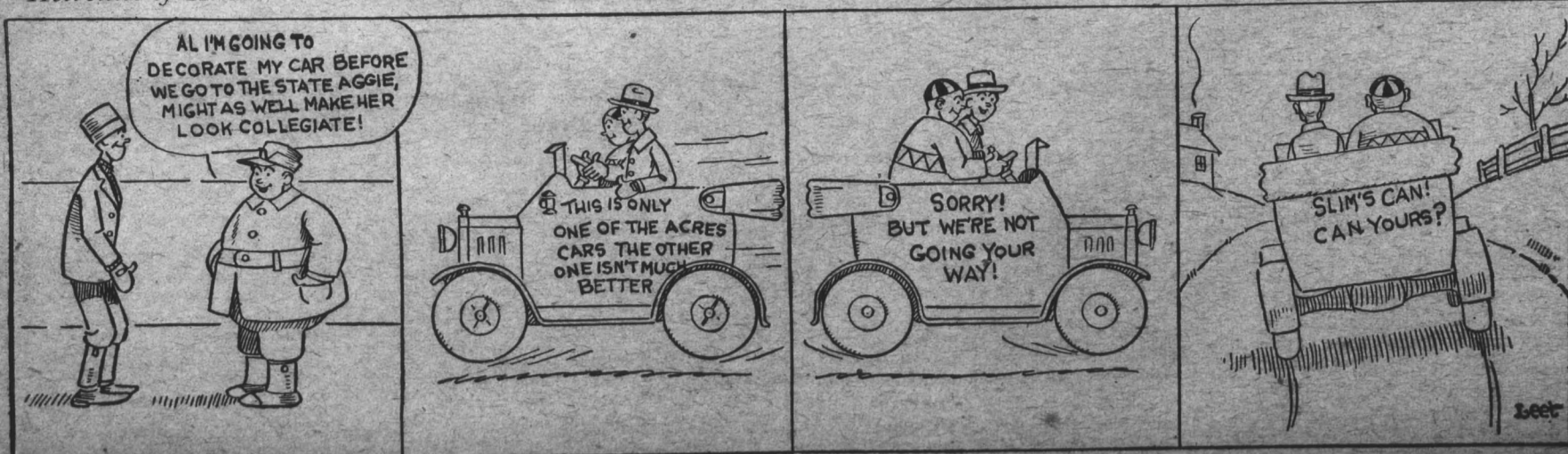
I SEE someone has asked why farmers do not let city sports hunt destructive game on their farms. I wonder if they allow that sort of game to go freely on the farm so that the farmer will be glad to have the outlaws come on his farm to kill, steal, or destroy everything that he's got.

Several have said that even with their full limit of pheasants, they found ragweed seeds, grasshoppers, and other bugs in their crops but no corn. At that time the pheasants could not find grasshoppers and bugs as the pheasant season is too late for that, and the land where the most hunters go is too poor to have a crop of corn.

The law says if a man takes in a stray dog, it is his and he has to pay the tax on it, but if he feeds pheasants and other game, it belongs to the government. It looks to me as if it was a poor law that works two ways.—R. S.

Frank R. Leet

Activities of Al Acres—Al and Slim Are on Their Way to a Week of College



RADIO BRIEFS

WALTER DAMROSCH, conductor of New York Symphony Orchestra, will broadcast a sample of his plan to teach music to the millions of school children in the United States on Saturday morning from 11:00 to noon on February 10 and 17. It is believed that the plan will prove of untold value to schools in out-of-the-way communities where a music teacher is not available.

"If you had to give up either music or talks on the radio, which would you prefer to retain?" This question was put to a number of farmers by the U. S. Department of Agriculture with the result that 2,358 chose the talks and but 1,538 voted in favor of music.

In the interest of better school music, Station WLS will broadcast on Wednesday evening the selections chosen for the State and National High School Band Contests for 1928. This will give the bandmasters and their pupils an opportunity to hear how another band plays the numbers they are working on.

If you are having an unusual amount of interference with your receiving and possess a home lighting plant, broadcast specialists advise that you first determine whether your trouble is not due to spark at spark plug of engine, spark at distributor, sparks at relays and governing mechanisms, or sparking at commutator of generator.

PROGRESS OF CO-OPERATION

THE last four or five years have been remarkable for co-operative grain elevator fatalities, according to the Department of Agriculture Bureau of Co-operative Marketing. The period of greatest activity in farmers' grain elevator association organization was the five years 1916 to 1920. During that period 1,495 associations began operations. Of the 316 associations that have gone out of business, the largest number of deaths occurred in 1922, the next largest number in 1924. While many local farmers' elevator companies have gone out of business, there has been great activity in the formation of large-scale grain associations since 1920.

If the growth of co-operative marketing is to continue it must be founded on well-established, sound business principles, says H. F. Buchanan of the Division of Co-operative Marketing. The responsibility which rests upon the manager and board of directors of each association is great and to meet this responsibility a thorough knowledge of sound business principles is necessary. Such knowledge can not always be acquired second hand from publications or from the experience of others. The management must protect itself against inefficiency by formulating its own business policies based upon facts as found in its own business.

TO CONTINUE BORER FIGHT

THE Department of Agriculture will continue a vigorous fight against the corn borer in 1928, said Dr. A. F. Woods, director of scientific work of the department, in opening the conference on corn borer control January 3, attended by deans of agricultural colleges, directors of experiment stations and other agricultural scientists from fourteen states.

Corn borer control is an economic, not an entomological question, declared Dr. C. R. Ball, in charge of cereal crops and diseases, Bureau of Plant Industry. It is not a question of extermination but of control, no method of extermination having yet been discovered. He predicted that the corn borer eventually will spread to

every section of the country where corn is grown, which includes practically the entire country. The main objective of the present fight is to put into effect such control measures as will enable the farmers to continue to grow corn in spite of the corn borer.

Reviewing the work of the International Corn Borer Committee which recently held a meeting in Washington, Chester Gray of the American Farm Bureau Federation, said it was the conclusion of the committee that the program for corn borer control should go on along the same line as last year. The belief was held by Department of Agriculture men that the corn borer control should be conducted as have been other insect infestations, the farmers doing whatever additional work is necessary on their part for their own protection without any compensation from the government. Every member of the committee, however, was in favor of the farmers who aided in the clean-up work receiving compensation. Some thought the farmers ought to receive \$4 or \$5 an acre in the 1928 clean-up campaign, but it was decided that \$2 should be about the limit. Last year they actually received an average of \$1.87 per acre instead of the \$2 they expected to receive.

Use Reliable Twine— It Pays!

THIS YEAR as ALWAYS, the careful man will put his faith in *McCormick-Deering* or *International* Twine. In the past he has benefited to the full by this wise policy. He has the most practical reasons for playing safe with the old reliable twine. The man who relies on *McCormick-Deering* or *International* is absolutely sure of **QUALITY**. Any saving he might possibly make in buying cheaper twines could easily be lost many times over in uncertain deliveries, faulty binding, grain wastage, and loss of time in the critical harvest days. He avoids risk and anxiety by buying twine that is *guaranteed* for *length, strength, and weight*.

International Harvester Twines have got to be good. The Harvester Company is the only company making both binders and twine. Poor twine would reflect on binder performance. All the reputation of *McCormick-Deering* machines is linked with the sterling reputation of the twine. Fifty-four lines of farm machines are tied up with the quality of the old, reliable twines. That is the best twine insurance.

Then there is the **SERVICE** which is always available through 12,000 dealers. Prompt shipment and liberal supply of *McCormick-Deering* and *International* Twine protect the grain grower wherever he is. Harvester quality and economy are effected by quantity production and the backing of the *International Harvester* organization. Don't gamble with the comparatively small expenditure needed for twine. It does not pay. Play safe with *McCormick-Deering* or *International* Twine.

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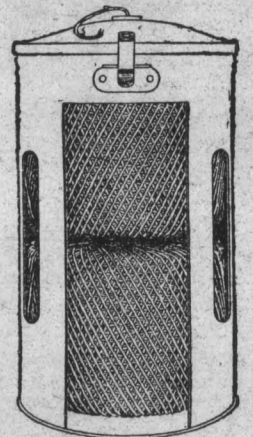
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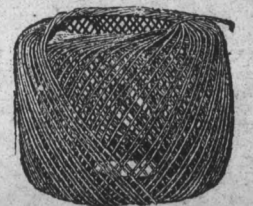
on "Big Ball" Twine is an exclusive *International Harvester* Twine feature!



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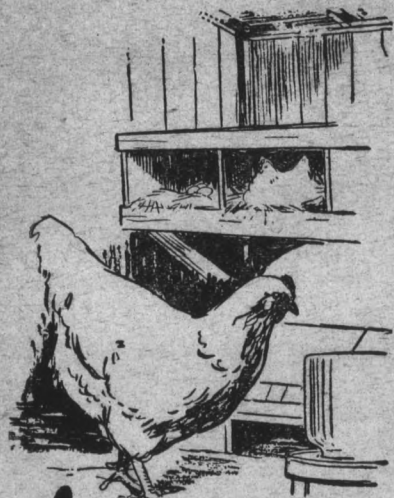
Customers say it exceeds all claims, "Pays for itself with custom work". Marvelous grinder as to Price, capacity, power and fine grinding.



— The Name Guarantees The Quality —

Practical Poultry Notes

By R. G. Kirby



Winter Eggs

Do you know that there are hundreds of farmers who are making big winter profits from eggs and poultry? Perhaps you are one of them. If not, it will pay you to provide proper protection and equipment for your flock and get some of these extra egg profits for yourself. An enclosed chicken run is inexpensive and easy to make with the new kinds of glass substitutes. Provide a water heater and sanitary metal nests, drinking fountains and feeders. The increase in eggs will surprise you. It costs so little to do this that it is a waste of opportunity not to.

Go to a "Farm Service" Hardware Store — you will find one near you — and get your poultry supplies there. This local hardware man knows what is being most successfully used by your neighbors and has the right equipment in stock for you. He also has grits and shells that you will want so that you can get everything in one place with the least amount of trouble and effort.

While you are in ask him about the incubators and brooders you may need next spring. He is always glad to show them to you.

Your
**Farm Service
Hardware
Stores**



MANY farmers do not like White Leghorns because of their nervous disposition. Recently a farmer friend, who had been keeping heavy breeds, changed over to Leghorns. He says, "Every time I go into the house with those Leghorn pullets, they act like I was trying to kill them with a club."

It is true that Leghorns are flighty and often not as friendly as other breeds, but there are ways that help to gain the confidence of Leghorn flocks so they will not be easily frightened by the presence of their caretaker.

Form the habit of giving a couple taps on the door before opening the door to a house containing Leghorns. This is of special value if the door is so placed that the birds cannot see through a window before the door is opened. The sudden opening of a door without warning startles a flock of Leghorns and will often send them into the air like a flock of wild birds.

Walk around the groups of Leghorns when they are feeding or scratching in the litter. Do not plow through the groups and frighten them. Wear the same clothes as much as possible when entering the houses. If you wear a red mackinaw when gathering eggs, feeding and scraping dropping boards, keep the red mackinaw as part of the regular poultry equipment. If you change back and forth from the mackinaw to a black overcoat, your Leghorns will consider you more or less of a stranger. Your dog will know you in any kind of clothes, but a Leghorn pullet seems to judge a lot by appearances and is startled by changes in wearing apparel.

Experiment stations, laying contests, and breeders who sell show stock and chicks have to display their birds to visitors as a part of the business. Poultry that are frequently inspected by visitors gain confidence and become less flighty. But on commercial egg farms it pays to reduce the visiting of the poultry houses as much as possible. The quieter the flocks and the less the disturbance around the buildings, the greater the chances of keeping the birds healthy and the nests full of eggs.

Feeding Snow

During the time of heavy snowfall with clean drifts around the poultry houses, the poultryman may feel like saving time and work by filling water pails with snow in place of water. Of course, this prevents the freezing of water in the pails. The hens will eat snow when water is not available but the snow does not wash down the dry mash like water. And water should either be changed often enough to prevent much freezing in the pails or given in heated fountains when the caretaker cannot visit the house several times each day.

When I have tried to feed snow to one section of my hens as a sort of farmer's experiment, I have found that the hens in that section did not eat as much mash as the hens with fresh water near the dry mash hoppers. The amount of snow eaten did not correspond with the amount of moisture the hens would have consumed from pails of fresh water. The hens must furnish the heat that melts the snow and the heat comes from feed which costs more per pound than water. I enjoy hot coffee for breakfast and believe it is better than ice cream on a cold winter morning. It is logical to expect the hens to prefer cool water to cold snow.

Heating Laying Houses

Poultrymen have usually hesitated to try any method of heating laying houses during severe winter weather. It has been considered a risk to the health of the birds on the theory that

the heat would weaken their vitality and yet there would not be enough heat available to influence egg production and give the hens plenty of fresh air at the same time.

One of the newest things in poultry equipment is a metal cabinet standing on legs to keep it above the poultry house litter and reduce the fire risk. An ordinary coal-burning brooder stove is placed in the cabinet and fired up in bad weather to help keep up the temperature of the house and dry out the dampness. Slots in the cabinet permit the warm air to circulate through the house. As yet there are few poultrymen heating their laying houses, but something new happens almost every year and all who think that the last improvement in poultry management has been discovered can have another guess.

Order Chicks Early

It is none too early to order chicks and make the first payment down to insure delivery at the specified time. Then the balance of the chick money can be saved from the egg money during the next two months. Many buyers of late hatched chicks put off their orders until late in the spring and then have to save up a little money to buy the chicks. Then they find that the best dates are all sold out. Of course, late hatched chicks sell for less money because they are worth less money.

When a hatcheryman can obtain orders early in the season, he is able to plan his season's work and be sure to have enough chicks to fill the orders. Day-old chicks cannot be produced at a moment's notice and they cannot be stored as day-old chicks. The hatchery can give the best service to the customers that anticipate their needs early in the season.

Trees in Poultry Yard

Occasional purchases of nursery stock are a help in making the poultry farm a pleasant place to live. Fruit trees help to furnish shade in poultry yards and on the range. Ornamental shrubs will also furnish shade for the poultry and add to the appearance of the farm.

Sometimes an evergreen windbreak can be developed where it will protect poultry buildings and enable the hens to use the range when otherwise they stay inside the buildings in the still air. Strawberries, raspberries, and asparagus are often good sidefines on a poultry farm and are useful in enabling the poultryman to take his mind off the hens for an occasional rest.

It never pays to buy so much nursery stock that it is hurriedly and carelessly planted and then given no further attention. A few plants or trees purchased each year and given the right kind of care will prove profitable. A large order given nothing but abuse is apt to be a total loss.

Get Males Soon

If you are hatching eggs at home and need more male birds it is best to locate them now and they will usually cost more money than last fall. So many more roosters are hatched than are needed that the male side of the family can stand the most rigid culling. If the male birds are of questionable merit, it will pay to sell them for meat. Then add a little egg money to the cockerel fund and try to obtain some birds with vigor and good breeding back of them.

POULTRYMEN MUST FIGHT RATS

ACCORDING to federal rodent specialists, every rat which boards on the farm runs up a bill of \$2 per year and never pays it. At that rate if a poultryman keeps 500 hens and makes \$2 per bird he makes \$1,000. In addition he keeps 500 rats at \$2

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Quality-bred and quality-hatched Lakeview chicks grow rapidly into real money. World's best strains in our supply flocks, all Michigan accredited — that means business. Officially culled, state inspected. Official records up to 255 eggs at Michigan egg contest, 1925. Silver cup winners, Holland fair, 1927. 215 egg hen at Mountain Grove, Mo., 1927.

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Cut down chick losses. Grow bigger profit-making fowl with famous American Brooder. Leading breeders and poultrymen on Pacific Coast, including holders of world's laying records, attribute phenomenal success to it. Direct oil burner, automatic regulator controls temperature within 2 or 3 degrees. Self ventilation. Finest materials and construction. Guaranteed. Greatest values in Brooders.

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New Cut Prices

Send for this 1928 Incubator and Brooder Book — see the dollars our New Cut Prices save you. Two big well-known firms — Wisconsin and Ironclad — have consolidated — to cut costs and sell at lower prices. Don't buy until you get this money saving book. 17 incubators — 14 brooders to select from. **WRITE FOR CATALOG TODAY**. Tells how to get eggs in winter; how to stop chick losses. 30 day trial offer. **WISCONSIN-IRONCLAD COMPANY** Box 239 Racine, Wis.

GET MORE WINTER EGGS WITH EGG a DAY

Results are positive and guaranteed. It never fails. Users report 4 times more eggs ALL WINTER. Try it! 65c pkg. supplies 250 hens a month. Order from your dealer — or direct from us TODAY. Look for the EGG a DAY sign on your dealer's window.

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S. C. W. Leghorn Baby Chicks

Buy Mich. Accredited Baby Chicks from Michigan's largest poultry farm. We buy no eggs to put in our incubators but produce them on our own farm from selected hens mated with 50% 200 to 336 egg Tancered males, pedigreed. All breeders have been bloodtested for BACILLARY WHITE DIARRHEA for the past 4 years which insures you chicks practically free from this dread disease. No better chicks at any price. Only one grade. Price 12c per chick.

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Egg contest winners for years. Guaranteed and insured. Also cockerels, pullets, hens. Catalog and special price bulletin free.

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See your chicks before you pay for them. Especially selected, accredited stock. BEAUTIFUL CATALOG FREE. Send for details, prices and catalog. Write today. Our chicks are highest quality.

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CHICKS AND DUX C. O. D. Fine pure-bred chicks and baby ducks at prices to fit your pocketbook. Pedigreed males and selected females make chicks of finest quality. Free poultry book and catalog. Get details of our liberal C. O. D. offer.

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per head he loses the same \$1,000. In other words it takes a good hen to keep a rat and if you have as many hens as rats you are just able to break even and make no profit on the poultry.

A poultry farm furnishes excellent cafeteria service to rats. Poultrymen must keep quantities of grain on hand at all times of the year. Dry mash hoppers in the laying houses and growing mash hoppers on the range are usually open to rats from May until October. If corn is left in the shock or the feed bins are not rat proof, the rodents receive plenty of free feed during the entire year.

The best way to control rats is to furnish no breeding places. Keep the farm free from scrap lumber heaps and brush piles. Colony house floors should be raised about a foot from the ground. Use concrete floors in permanent laying houses. The metal grain bins on concrete foundations are proving useful to many poultrymen who have had too limited storage capacity for scratch feed and laying mash.

Trapping and poisoning rats during the winter is a great help in raising the chicks the next spring. The pests steal many chicks from unprotected brood coops and may raid colony houses that are not closed at sundown and protected with a strong wooden floor.

ERADICATING TUBERCULOSIS

WHEN one is so unfortunate as to have his flock become infested with tuberculosis, the advice usually given is to dispose of entire flock, disinfect the poultry house and yards, and not keep any more chickens for at least two years.

It is possible to keep the flock free from tuberculosis, however, without going out of business at all. To do this, it is absolutely necessary to raise the young chickens till time to house them in the fall, on clean ground that has not become contaminated by the flock. What is left of the old flock must be disposed of and the poultry house thoroughly disinfected. The house should have a cement floor as it is hardly possible to remove enough dirt from a dirt floor to make it perfectly sanitary. The pullets should then be kept confined till spring when they may be given full range as there would not then be time enough for them to contract the disease before fall. Then they should all be sold to make room for the next flock of pullets.

In this way it is possible to keep hens year after year without danger. It pays to dispose of the old flock even when it is perfectly healthy as pullets lay much better than hens and the mortality is less. Although we have never had tuberculosis in the flock, we keep over only the very best hens for breeders. A hen must be a great deal above the average to earn the privilege of staying with us the second year.

We believe in culling the year round and not waiting till fall to sell those that will not more than pay their way. By so doing, we not only keep the flock healthy and free from disease, but also keep up a heavy egg production right through the summer till late fall.—Ray Normington.

COARSE STRAW IN BROODER HOUSE

ACCORDING to Roy Waite of the Maryland poultry department, the use of coarse straw without any sand as a base, gave good results on the brooder house floors. The coarse straws criss-cross and make a spring-like mat on which the chicks run around. The droppings fall on the straw and pass down through the loosely packed mass. A large part of the droppings filter down toward the floor away from the surface where

they can be pecked by the chicks. The pecking of infected droppings is one of the ways that white diarrhea can be spread through a colony brooder house.

We have been using straw as colony house litter in the way suggested by Roy Waite, but place about two pails full of sand around each brooder stove and about the outside edge of the deflector. This sand serves as grit as well as an absorbent of droppings. The fact that only a little sand is used in each colony house makes it much easier to clean the houses and cover the floors with fresh straw.

The chicks do not eat the coarse straw and become crop bound with litter as is sometimes the case when fine-cut litter is used around the brooder. Chicks need feed, not trash. If they have access to plenty of sand and fine litter before the starting mash is placed before them, they are apt to starve while full of indigestible material.—R.

Read Michigan Farmer Chick Bulletin and better your chick raising results. Get your copy by sending self-addressed stamped envelope to Poultry Department, Michigan Farmer, Detroit, Mich.

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Why both are required for Quality Bodies

Fisher Bodies are of wood and steel construction. Up to the present time, this is the only type of automobile body construction which permits of maximum strength, maximum resiliency and maximum safety.—In wood and steel construction, the wood reinforces the steel and the steel reinforces the wood. This results in the strongest kind of construction known to body builders. It also affords the necessary resiliency and the

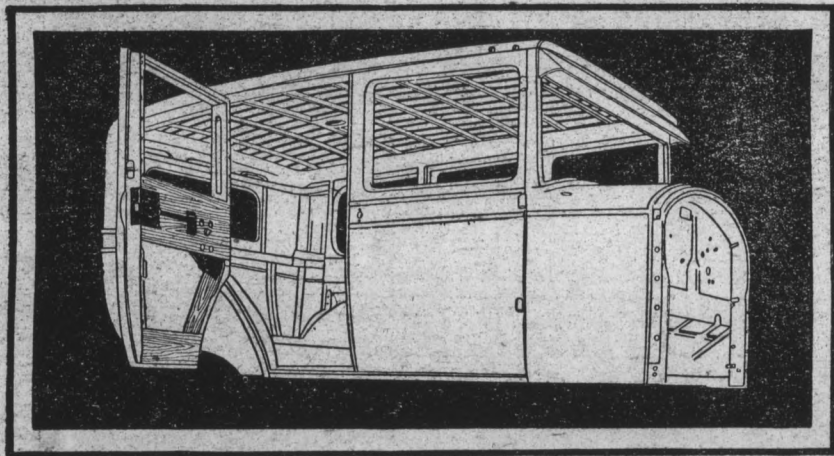
ability to absorb noise.—Resiliency in a body is necessary because the car body is continuously subjected to shocks and strains. There is no material which combines strength and resiliency as does wood. And there is no body construction stronger than that in which wood reinforces steel and steel reinforces wood. Because Fisher Bodies are so constructed, there are no stronger bodies than those which Fisher builds.



Bracing—Every Fisher Body is staunchly braced at all points subject to strain. That is one reason why a Fisher Body stands up month after month and year after year in the hardest kind of service.

Lumber—The lumber for Fisher Bodies is carefully selected and seasoned, and subjected to many close inspections, both before and after being cut for building into a body.

Clear Vision Corner Pillars—The narrow front pillars of a Fisher Body eliminate the "blind spot" in driving, enabling the driver to see objects in front and on the sides at all times—thus preventing accidents.



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Contains valuable information on all the Clovers, Alfalfa, Pasture Mixtures, Corn, etc. Its the best Seed Book we have ever offered. Tells how to Avoid Weeds. Directs you in the way of better crops and greater profits. Tells you how to Know Good Seed. Plainly written so any one can understand it. Every farmer should have a copy of this book.

O. M. SCOTT & SONS CO.

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Wonder Healing Compound FOR MAN OR BEAST

—It's CORONA Wool Fat Soothing Healing Ointment That Works Like Magic

Corona Wool Fat is made from the oil extracted from sheep's wool. It's different from any salve or ointment you ever tried. It heals and soothes, but will not smart or blister the most sensitive wound. It has healed thousands of stubborn wounds where other lotions have failed.

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LIBERAL SAMPLE FREE Corona is sold by nearly all druggists or direct from us on receipt of price—8 oz. tins 65c, 24 oz. tins \$1.25 postpaid. If you will send your name and address, we'll mail you a liberal sample and book of uses free. We want you to see for yourself the wonderful healing properties of Corona.

CORONA MFG. CO., 256 Corona Bldg., Kenton, O.



WOLVERINE S.C. WHITE LEGHORN BABY CHICKS

BLOOD 100% SAFE ARRIVAL
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FOR WINTER EGG PRODUCERS

Get our Large Leghorns, the birds with large combs that produce the Large Chalk White Eggs

Send for Our 1928 Catalog

Tells all about our chicks and breeding stock
EGG BRED SINCE 1910

For 18 years we have specialized in the production of S. C. White Leghorns, and breed no other variety. All our time, thought, and energy in selecting and mating has been devoted to our Leghorns. You are assured of very desirable stock.

100% LIVE ARRIVAL GUARANTEED

WOLVERINE HATCHERY AND FARMS

H. P. WIERSMA, Owner and Breeder, Dept. 3, Zeeland, Mich.

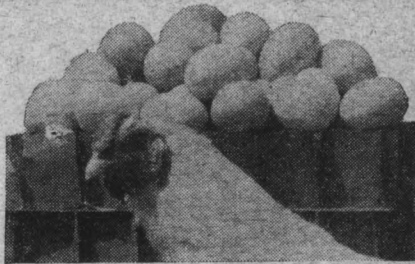
Chick Insurance

Our insurance plan protects Chick buyers during first thirty critical days. Fill your egg cases! Build productive flocks from "State Farms" White and Brown Leghorns, Barred and White Rocks, Rhode Island Reds, and White Wyandottes, Ducks, Geese, and Turkeys.

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Also Brown Leghorns, Anconas, and Barred Rocks. All large type Production Bred birds. Bred for 15 years for heavy commercial egg production. Every bird individually banded and inspected by an authorized inspector. In breeding up the Famous Townline Egg Laying Strain, we have bred, not for a few high record hens only, but for HIGH FLOCK AVERAGES. Our Direct from Farm to You Method, saves you 5 to 10 cents per chick on this High Quality Stock. FREE CATALOG tells how we hatch, breed, cull, inspect, and raise our stock. Tells what to feed and how to be successful. Full instructions on the Care of Baby Chicks. A genuine Poultry Guide. Write us.

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Michigan Accredited Chicks that are bred from proven blood lines. Every breeder wears a sealed leg band indicating official approval by authorized state inspectors. Immediate shipment. **BIG DISCOUNT NOW! PAY \$1.00 DOWN—BALANCE C. O. D.** Pay for your chicks when you get them. Send \$1.00 and we will ship C. O. D. Get our big new catalog. It is free. It will help you. Your choice of three profitable breeds. 100% live delivery guaranteed. **BRUMMER FREDRICKSON POULTRY FARM, Box 20, Holland, Mich.**

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Make money with poultry, buy Siler's Standard-bred chicks. Every breeder BLOOD-TESTED for the last four years for bacillary WHITE DIARRHEA. All flocks and hatchery MICHIGAN ACCREDITED. We make a specialty of two breeds:

Barred Plymouth Rocks and S. C. White Leghorns
Special discount on early orders. Write for free catalog and prices.
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It will pay you to investigate one of Michigan's oldest and best hatcheries. Twenty years' experience. Every chick hatched from rugged free range breeders officially accredited by inspectors, supervised by Michigan State Poultry Improvement Association. Large percentage of business to satisfied old customers. White Leghorns (English type and American), Barred Rocks, Anconas. Your Michigan Accredited chicks bought of this old reliable concern with an established reputation for square dealing are sure to please. 100% live delivery prepaid. Get our FREE catalog before placing your order. **VAN APPELDORN BROS., R. 7C, Holland Hatchery & Poultry Farm, Holland, Michigan.**

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This year we introduce to you our Record of performance pedigree male matings up to 316 egg records direct from British Columbia and Ontario, Canada, including bloodtested, trapnested pedigree White Leghorn matings, 220 to 313 egg records. Winners of many prizes. Every bird standard culled. Get FREE circular of chicks, hatching eggs, and brooders before buying elsewhere. Broiler chicks 9c up.

Beckman Hatchery, Box 57, Grand Rapids, Mich.

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Member International Baby Chick Association. S. C. White and Brown Leghorns, Anconas, Black Minorcas, and Barred Rocks. Order now for early deliveries. 1928 Catalog Now Ready. Write for your FREE Copy.

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DUNDEE CHICKS

STOCK ALL BLOOD-TESTED FOR WHITE DIARRHEA FOR THE PAST FOUR YEARS. You can save money by ordering Dundee Pure-Bred, Mich. Accredited and Blood-Tested Chicks. We hatch B. P. Rocks, R. I. Reds, and S. C. White Leghorns. Write for 1928 Catalog giving all details of our matings and full directions on how to raise baby chicks for greater profits. We guarantee 100% live delivery.

DUNDEE HATCHERY & POULTRY FARMS — DUNDEE, MICHIGAN

KARSTEN'S QUALITY CHICKS

Assure you large white eggs and lots of them, as the Karsten's are the breeders that offer you chicks from breeders from trapnested stock and at prices you pay for common Leghorns. Send for Karsten's new Leghorn book written by men who have been breeding S. C. White Leghorns for years and who know "Their Chickens." This free book fully explains Karsten's Famous Feed Formulas and gives full instructions on feeding and care of chicks and laying stock.

Karsten's Farm, Box 17, Zeeland, Mich.

How I Raise My Chicks

Information Furnished by Mrs. R. L. Beckwith

LAST year we bought 400 chicks which arrived on March 29. During the early spring, 110 of these died because of a delay in the shipment, during which they were either chilled or over-heated. However, a hatchery made good this loss. The chicks were of good quality as I believe it pays better to buy good quality chicks than the common kind.

When the chicks arrived, they were immediately put into the brooder which had been adjusted correctly for temperature. We watched them carefully until they learned to hover. The brooder was of 500 chick capacity and of the oil-burning type.

Previous to receiving the chicks, the brooder and brooder house were cleaned with cold tar tip and hot water. The floor was relaid to make it smooth and then covered with asphalt roofing in order to make it easy to clean.

The chicks were fed their first feed when about seventy-two hours old. Previous to this, they were given all the sour milk and water they wanted. Their first feed was made of the following: one raw egg, four handfuls of rolled oats, two handfuls of bran, a small amount of powdered charcoal, and a sprinkle of steamed and ground bone meal.

This was fed five times a day until the chicks were five days old, at which time, a commercial chick feed was alternated with the above rolled oats feed. The number of feeds per day were gradually decreased until three were given. However, we fed five times a day until the chicks were nearly five weeks old.

When they were ten weeks of age we changed them to a growing ration, which consisted of equal parts of cracked corn and wheat for a scratch ration. For the mash fed from the hoppers we mixed equal parts of ground corn, wheat, oats, and bran; also one-half part of meat scraps. This was thoroughly mixed with a little fine charcoal being added.

The chicks had before them at all times clear water which occasionally had a disinfectant in it and also sour milk. The litter used was alfalfa leaves which proved very satisfactory as it was a source of green food.

We kept our coop clean by frequently taking out the roofing on the floor and cleaning it thoroughly. We find this a labor-saving way of keeping the floor clean. We also gave the feed on paper and then removed the paper. This made it sure that the food would not be contaminated by coming in contact with the droppings. We used care in keeping the water vessels clean, and if any of the chicks got "stuck up" behind, we washed the part in warm water and applied carbolated or plain vaseline. Occasionally we put a little epsom salts in the water in order to keep the chicks in good condition. We had no chicks troubled with disease. When those weakened

by the delay in shipment died off, all our chicks were in good shape.

The males and surplus stock we sell as broilers and during the past year used two methods in disposing of them. On July 2 we sold one bunch to a local buyer as he gave us a special price. At the same time another bunch was given to a man to take to Detroit. He charged us a \$1.50 a crate to transport them. This bunch of twenty-five broilers shrunk five pounds in transit; those we sold to the local dealer were weighed at the farm. For that reason we got a little more for the broilers sold locally. Although we had to work to get a good price for them. The first price he offered us was four cents a pound lower than what he paid us.

The second lot of broilers was given to the same trucker to take to Detroit. As it was cooler, there was very little shrinkage and we received more than we would have from our local dealers as there was a difference of seven cents per pound between the local prices and those at Detroit. The trucker came after our chicks using his own crates, and our check was mailed to us from the firm in Detroit to whom he sold the broilers.

This is the first year since we started raising broilers for market that the price has been so low. We think this is because there are more farmers going into the business.

Our experience has shown that in order to make a profit in the poultry business, there must be constant watching, eternal vigilance, and a liking for the work.

POSSIBLY LIVER TROUBLE

I had some hens that were in fine condition but the first thing I noticed they commenced to act dumpy and would not eat. Then their combs began to turn black and finally they could not walk well. I noticed their bowels were real loose. I have been feeding oats and barley mixed in the morning and corn at night and have a mash before them all the time.—Mrs. L. D. B.

When the comb of a hen turns dark it is often a sign of liver trouble and any disease which impairs the circulation might cause a darkening of the comb. The bowel trouble may indicate disease but may be present in a large number of diseases. A postmortem examination of the internal organs may help to locate the cause of the trouble.

When fine, heavy hens which have been in the best of condition suddenly become sick, it may be due to the feed and care should be taken that the hens receive no mouldy green feed or spoiled meat scrap. Plenty of alfalfa or sprouted oats is a help in keeping hens healthy and free from digestive disorders and liver trouble.

PULLET DIES SUDDENLY

Last night a six months old pullet died. I opened it and examined it.

Succeed with Chicks

by learning chick raising essentials from

Michigan Farmer Chick Bulletin

Describes short practical method of raising chicks which assures success.

Has been approved by poultry experts and practical poultrymen. Contains unique labor-saving feeding method, suggestions on disease prevention, and many practical hints in care and management which make a big difference in results.

Send Self-addressed Stamped Envelope to

Poultry Dept., Michigan Farmer, Detroit, Mich.

For Your Copy



"Why don't my Hens Eat more Pearl Grit?"

We have had this question asked time after time. The answer is simple. "Hens don't need any more than they eat."

The Proof is Here

Maryland Experiment Station in comparing Lime Stone with Oyster Shell found: "The Limestone pen consumed 43% less material but laid 20% more eggs."

"Limestone can be safely used as the sole source of Calcium for growing chicks and laying hens."

Kentucky Experiment Station found that Limestone Grit produced by far the most eggs and the hens ate much less of the grit thus making a gain both ways.

PEARL GRIT

Is Carefully Selected Limestone

It is clean and healthful. It is pure limestone, high in Calcium. It furnishes the necessary grinding action in the gizzard, also insures ample supply of Calcium for bone and egg shell structure. A small amount of Pearl Grit will do more good than larger amounts of other grits and shells. "Less grit to buy and more eggs to sell" is borne out in actual practice when you use PEARL GRIT. Made in three sizes: For Chicks, Growing Birds and Laying Hens.

The Ohio Marble Company
PIQUA, OHIO

We Have Dealers Everywhere
Ask Your Dealer



Stop Using a Truss Free-Trial Plapao-Free

STUART'S ADHESIF PLAPAO-PADS are surprisingly different from the truss—being mechanico-chemico applicators—made self-adhesive purposely to keep the muscle-tonsic "PLAPAO" applied continuously to the affected parts, and to minimize painful friction and dangerous slipping. No straps, buckles or springs attached. Soft as velvet—easy to apply—Inexpensive. For almost a quarter of a century satisfied thousands report success without delay from work. Process of recovery natural, so no subsequent use for a truss. Awarded Gold Medal and Grand Prix. Trial of "PLAPAO" will be sent to you upon request absolutely FREE. Write name on coupon and send TODAY.

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Fine Fountain Pen, Platinum effect fm. Wrist Watch, Ribbon Bracelet, Lavalier with Neck Chain, Birthstone Ring and Signet Ring—A L. L. GIVEN for selling 12 bottles of Perfume at 50c each.
Dept. 1236 East Boston, Mass.

BABY CHICKS from pure-bred and utility stock. Good laying strain and free range flocks. 12 Varieties, 8 cents up. 100 Live arrival. Write for free circular and prices. Bank reference. ST. STEPHEN HATCHERY, St. Stephen, Ohio.

WOLF SELECTED CHICKS
CHICKS C. O. D. SEND ONLY \$1.00
Our chicks are from leg-banded stock selected by expert poultryman. You can feel safe for you know every chick is up to highest standard for egg production and breed type. Get our special wholesale price on brooder stoves when bought with chicks. SEND FOR OUR BIG CATALOG. It tells all about our pedigree males and special pen-matings. Also gives details about our high producing utility birds. Valuable book free with each order. Prices reasonable. Write today.
WOLF HATCHING & BREEDING CO. BOX 42 GIBSONBURG, OHIO

BUY RECORD OF PERFORMANCE
7 Varieties of Male Matings Up to 316 Egg Record.
Also 15 varieties of purebred chicks from selected flocks, including direct Morgan-Tancred 313-egg-record, blood-tested, trapezoid White Leghorns. Chicks 9c up. FREE catalog gives big discounts on chicks, hatching eggs, brooders. Don't fail to try our high production quality chicks! We guarantee them to satisfy! ORDER NOW!
LAWRENCE HATCHERY Grand Rapids, Mich.

Its liver was a trifle swollen, but had no spots. It was as fat as could be, and there were many eggs in the ovary. The largest one was about the size of a walnut and it was black. Some of the smaller eggs were a little black too. I feed the chickens morning and night. I give them warm drinking water every day. I also give them oyster shell and grit. There is also an older chicken which never comes from the roosts to eat.—Mrs.

The pullet that was heavy with fat and died suddenly may have had apoplexy or an internal rupture due to the strain of laying. The condition of the oviduct might indicate that the bird was a carrier of white diarrhea. The hen would not have amounted to much as a layer.

Then hen that will not come from the perch to eat may be coming down with some disease or may be crop bound or have some kind of digestive disorder which destroys the appetite. Examine the bird for weight, condition of crop, and general appearance. It should be isolated from the flock to prevent the infection of other birds.

RURAL HEALTH

By Dr. C. H. Lerrigo

MANY A GOOD EYE HAS GONE THROUGH A CATARACT

I REMEMBER very well the woe-gone looks of Uncle Abner when he was threatened with cataract. He was not entirely unprepared, for his father had spent the last ten years of his life in darkness because of double cataract. Abner supposed he was in for the same thing. I cheered him as well as I could and took him to the best eye surgeon in the state. Now, fitted with special spectacles, Abner can see as well as most men of his age, and regretfully declares that his old father might have been spared some very dreary years had this eye surgeon been available.

Cataract comes when the crystalline lens no longer receives its proper nourishment and becomes dead to light. It may come from an apparently trifling matter such as diseased teeth or it may come from such serious diseases as diabetes, Bright's disease or syphilis. It is asserted that it may come from overstraining the eyes and certainly it may come from accidental injury to the eyes. In some families the tendency seems hereditary. There is no reliable non-surgical treatment of cataract. Many cases are helped every year by skillful surgery; so many that no cataract sufferer should despair until that help has been tried.

The outcome will depend greatly upon the cause of the cataract. If a serious disease of the whole body is back of it, a disease that is incurable, the removal of the cataract does not promise such good results. Even then you must be guided by your surgeon's judgment in each case. This is also true in reference to the decision as to time of operation.

Save losses in chick raising by reading the Michigan Farmer Chick Bulletin. You can obtain it by sending self-addressed stamped envelope to Poultry Department, Michigan Farmer, Detroit, Mich.



WONDERFUL NEW REMEDY FOR POULTRY AND HOGS

For more than 30 years, Geo. H. Lee has been an outstanding leader in the fight against poultry and hog diseases. Thousands of farmers know from long experience, they can safely depend on Lee preparations. Just as expected, the Lee laboratories have met the present serious Flu situation with a sensible and really effective remedy.

Flu in hogs is indicated by wheezing and coughing. Flu infected chickens sneeze and gasp and, in the later stages, spring in the air, fall on their backs and die from strangulation. Simple cold troubles, if neglected, often lead to such a serious bronchial ailment or to pneumonia.

NOW EASILY CORRECTED

Flu-Koff Emulsion is an internal medicine which acts on the mucous membrane, to ally the cough, reduce temperature and overcome irritation, like a medicine for human beings. It is given in the feed—no individual dosing, no bother. Both chickens and hogs take it readily; like it. Vapo-Spray is a combination of healing oils, which is sprayed in the henhouse or the hoghouse at night, to be breathed into the bronchial tubes and lungs. This common sense treatment is wonderfully effective. Before offering to hog and poultry raisers, we proved its great merit on nearly 50,000 sick chickens and many droves of sick hogs. Farmer users throughout most of the states have since reported just as satisfactory results.

There is no excuse now for serious losses from these diseases, either in your poultry or your hogs. Have Flu-Koff Emulsion and Vapo-Spray on hand—use at the first signs of colds or indications of flu. Prompt treatment is important but, even if the cold has "gone down" on the lungs, don't consider the hog or chicken as good as dead; use Flu-Koff Emulsion and Vapo-Spray.

More than ten thousand drug stores, feed dealers and chick hatcheries handle these remedies, and will give you a copy of "The Lee Way" free book, which tells all about these diseases and their treatment. If no dealer at your town, write for book and agency terms.

GEO. H. LEE CO., 50 Lee Bld., Omaha, Neb.

Mfrs. of the famous preventive and remedy, Germozone, favorite for more than three generations

Like for human beings

Flu-Koff Emulsion and Vapo-Spray are a result of our investigations and experiments for several years during which we conducted over 6,000 free clinics on farms throughout the country.

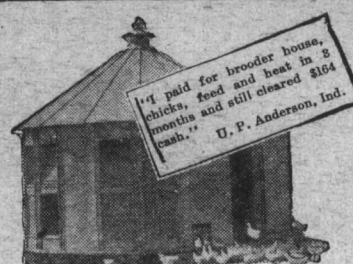
Colds, croup, canker, flu (infectious bronchitis) and pneumonia, all are diseases of the breathing passages. So similar are they to colds and bronchial troubles affecting people, we had four leading physicians assist the twelve veterinarians of our Research Staff in determining the ingredients and their percentages used in these medicines. The same scientific care as if for human beings, helped perfect this remedy for your poultry and hogs.



Lee's VAPO-SPRAY

Lee's FLU-KOFF EMULSION

Vapo-Spray, gal. cans, \$2; 1-2 gal., \$1.25. Flu-Koff Emulsion, gal., \$6.50; 1-2 gal., \$3.50; qt., \$2; 12 oz., \$1. One gal. Flu-Koff Emulsion and one gal. Vapo-Spray is sufficient for a 4-day treatment for 30 hogs or 1,000 chickens. Smaller amounts in proportion. If ordered direct from our factory, express is prepaid. If in great need, wire and we will ship C. O. D.



Amazing New-Type Brooder House Pays for Itself Quick, or No Cost

No more gambling with poultry profits! No more heartbreaking chick losses! For now an old, well-known manufacturer makes the most startling offer in poultry history—a surprising new development in brooder houses, backed up by a complete poultry raising plan so remarkable that hundreds have already received their entire investment back in 2 to 3 months. There are no "strings" or "red tape." Absolute money-back guarantee protects you. Makes \$500 to \$2,000 a year extra income from poultry easy as A-B-C. Liberal time payment plan. Write today and get all the amazing details without obligation.

MARTIN STEEL PROD. CO. (Est. 1901) DEPT. 8, MANSFIELD, OHIO.

FARM PROSPERITY is Built on Quality Seeds and Feeds



Crops - Dairy Cows - and Poultry

are the fundamentals of farm prosperity. Your ability to obtain greatest production from them determines your net profit.

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Offers You A Three Way Service

Michigan Farm Bureau pure, adapted, high-quality Seeds, free from troublesome weeds, have solved the problem for thousands of farmers of What Seeds to use for bigger crops.

MICHIGAN MILKMAKER—the famous 24% balanced feed for dairy cows has likewise helped hundreds of dairymen to a milk and butter fat production from their herds, far beyond their fondest hopes, with a minimum of feed expense.

Similarly, experienced poultrymen chose **MICHIGAN EGG MASH** because, in combination with scratch feed, it maintains the proper balance for greater egg production and produces increased profits from their flocks. For detailed information on Michigan Farm Bureau Seeds, Dairy and Poultry Feeds, write us direct or consult your local Co-operative Dealer.

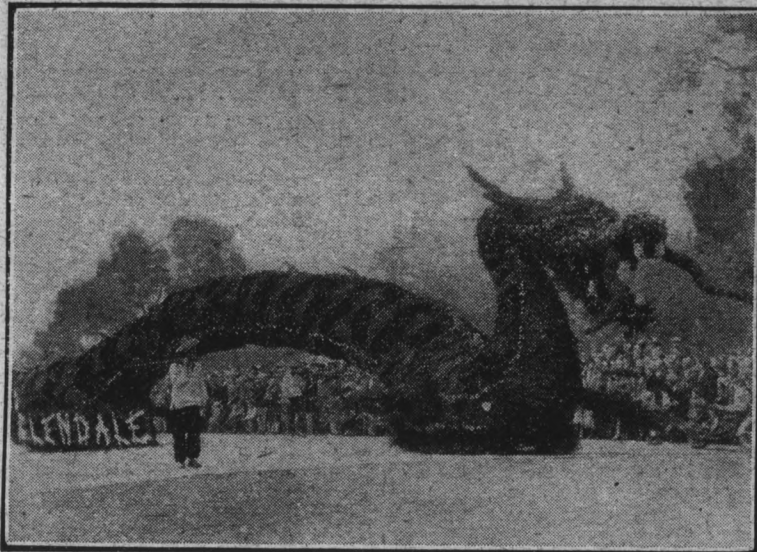
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Lansing, Michigan



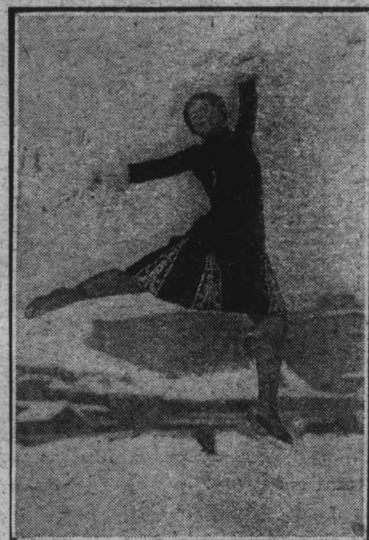
WORLD EVENTS IN PICTURES



Pres. Von Hindenburg of Germany attends last rites of his comrade Gen. Von Loewenthal.



Just draggin' along—this huge dragon made of flowers was the prize-winning float from Glendale at the Tournament of Roses in Pasadena, California.



Beatrix Loughran, ice bird, thrills throngs by her grace and skill at Lake Placid.



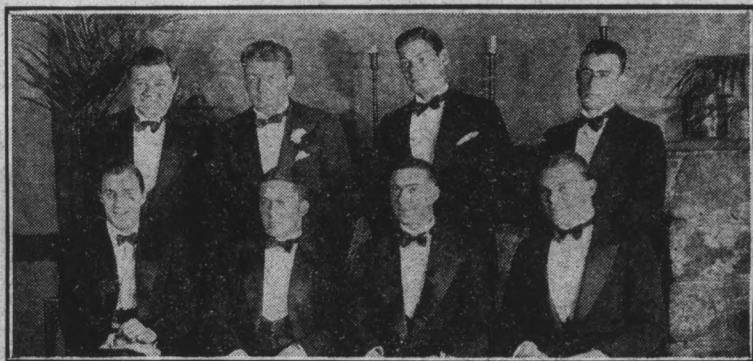
Mrs. Harry Payne Whitney, famous society sculptress, and Pres. of Panama confers on Roosevelt monument to be built in Panama.



Jenab-Aala Ilmeri-Aala, Mohammed Wali Khan is acting king of Afghanistan.



There was money to burn when Mussolini ordered 300,000,000 paper lire destroyed in effort to stabilize Italy's currency.



Champions all—these sport kings gave up their individual fields for a night to attend the world's champions' dinner sponsored by the Madison Square Club. Can you pick out your favorite?



Texas' great stone face is a curious rock formation known as the Sleeping Irish Beauty and is located in the hills near Abilene. Can you find the face?



These small outboard hydroplanes, the fastest on the Pacific coast, will enter a forty mile race through the treacherous ocean waters around Catalina Island, California.



"It's a long way to Nicaragua" sings this detachment of marines as they start on their way to help quell the revolt led by General Sandino, Nicaraguan guerilla leader.

The Secret of Jesus' Fame

Our Weekly Sermon—By N. A. McCune

JESUS was so popular that he could not enter a town without running risk of being mobbed. That is loving a man pretty hard. That he did not particularly enjoy this kind of thing is very evident. Over and over, after he had healed some one, he would enjoin the former sufferer not to say anything about it, but to keep still. He was not anxious, apparently, to develop a reputation as a healer. But his fame also grew from his teaching. "Here is a thinker," said people. "Is he not one of the famous prophets of old come to life?" It did look that way.

As a matter of fact, Jesus' fame was often an embarrassment to him. He could not go anywhere without a procession of clamoring humanity following him. These well-intentioned folk



wanted to get out of him all they could. Their motives were very largely selfish. They wanted to be healed, a very natural desire. They were intent on getting rid of their aches and pains. Often the case was pathetic. Twisted limbs or helpless feet or loathsome skin spoke of the fearful inroads of disease. With such he was always sympathetic. But many of his would-be patients had no ideals higher than to get cured. Of surrendering their lives to God, and being of service to Him were thoughts that did not trouble them much. For that reason Jesus sometimes cautioned a healed person to sin no more. At other times he entered into deep religious conversation with some one whose body had been touched by his healing hand.

Then, too, his teaching challenged his hearers. It was so unconventional, so clear and simple, yet so deep, that they were held as if spiked to the ground where they sat. His teaching was revolutionary. Carried out, it would do away with all war, with trade rivalries, with ill-feeling between Jew and Samaritan, between Roman and barbarian, between French and German, between white and black. Probably if Jesus were to come back and talk as he did, on the street corners of some American cities, he would be arrested and taken to the city jail. In fact, that is almost certain. After his message began to make people uncomfortable, he was arrested, especially when the leaders in politics and the church saw that his teachings were directly contrary to what they were practicing. "He taught them as one having authority." "His word was with power." That is why they did not like it.

You can never analyze the secret of any strong personality. When you have named all the points you can think of, there remains a residue of the unexplainable. For twenty years Sir Charles Parsons, noted English inventor, has been experimenting with diamonds, to learn their mystery, and if possible to ascertain how artificial diamonds can be made. He is not the only one who has made similar experiments. A French chemist heated carbon to 3,600 degrees, and subjected it to fifteen tons pressure to the square inch. Then the mass was plunged in cold water. The result was a sort of diamond, but so small as to be valueless. He gave up the attempt, as has Sir Charles Parsons. The diamond keeps its secret. That is the way with the power of Jesus. You can go a long way in understanding it. But you cannot seem to get beyond a certain point.

He goes across to Gennesaret. This was (probably still is) a most fertile

spot. It is only one mile by two and a half. It was looked upon as almost a little paradise. Fruits grew there which did not grow near Jerusalem, and were prized for their sweetness. Those who owned land there were regarded with envy.

But fertility and prosperity do not prevent disease, do they? Apparently people were as badly afflicted there as they were in the less productive parts of the country. The people had an eye to business. Here was a Prophet and Healer who very likely would never be there again. Moreover, the treatments were free! So, they brought out all their sick relatives, and the cripples whom they had had to support for years, and got them all healed.

I wonder just what the reason was, that healing of this nature gradually passed out. It was done in apostolic times, in the period just after Christ's ascension, and after that. But the gift finally passed away, as a general practice. Of course, people can be found now who have been healed in answer to prayer. But healing disease by the laying on of hands has not been a general practice for many centuries. I can think of two reasons for this, and no doubt you can think of more. (1) If healing the body was the chief end of religion, the emphasis would be on the physical, rather than the spiritual. Some of the greatest saints have not been blessed with health. Paul was never healed of his "thorn in the flesh," and, whatever it was, perhaps semi-blindness, perhaps a crooked spine, it was a very serious handicap. Nor could Paul heal all other people who needed healing. "Trophimus have I left at Miletum sick." (II Tim. 4:20). And (2) it was God's way to let men work out their healing by long study and experiment and suffering. Smallpox and many other diseases have lost their terrors, from the successful efforts of hard-working, keen-thinking men. More on this at some subsequent time.

SUNDAY SCHOOL LESSON FOR JANUARY 29

SUBJECT:—The Secret of Jesus' Fame: Mark 3:7-12 and 6:53-56.
GOLDEN TEXT:—Mark 12:37.

TROUBLES

Gladys H. Kelsey

I'll not deny I've had my share of troubles—
I've seen my cherished dreams fade out like bubbles,
Known nights when one room couldn't hold my worries;
And yet, I've always noticed when the furies
Of old misfortune's sad misgivings round me fall
The worst are those that never happen after all!

The tears I've wept I'm sure would fill an ocean,
The moans I've made would raise a great commotion—
But now of tears and groans I'm quite a miser—
I'm older—and I'm grayer—and I'm wiser—
I know when worries cloud my life with blackest pall
The worst of them will never happen after all!

Mother of college freshee: "Here's a letter from our boy at last."
Dad: "Has he a job yet?"
Mother: "Yes, he's washing dishes in a cafe."
Dad: "Fine. He said he was going to clean up a million."

Read Michigan Farmer Chick Bulletin and better your chick raising results. Get your copy by sending self-addressed stamped envelope to Poultry Department, Michigan Farmer, Detroit, Mich.



Mr. de Jong's cauliflowers win first prize at Syracuse—

FROM way out in Red River Valley, six miles north of Winnipeg, came cauliflowers from Mr. Klaas de Jong, to win a first prize at the Convention of the Vegetable Growers' Assn. of America, held at Syracuse, N. Y.

The picture above shows the quality of the cauliflowers. Here's the story of how they were raised:

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less than \$20 and his crops sold for \$1,056.

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Note: Photo above shows cauliflowers which won first prize in the Cauliflower Contest, Annual Convention of the Vegetable Growers' Assn. of America. Mr. Klaas de Jong, E. Kildonan, Manitoba, grower.

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Traveling Alamode in West Africa

World Hikers Take Third Class Passage Because There Isn't Any Fourth Class

By Francis Flood

DOES any white man ever ride second class on the railroad here in Nigeria?" I inquired of a neat government official in the Secretariat in Lagos. We had ten days between ships before proceeding down the west coast of Africa to the Belgian Congo and were planning a side trip to Abeokuta, about six miles inland, to see an American missionary there and get a peep into the African "bush."

"Absolutely not!" The horrified British colonial set down his cup of tea with a bang. And that should have been that.

But this is our usual procedure: If we want to do something that is questionable we ask the opinion of everybody until someone eventually gives us the advice we want. Then we ignore all the other information and act upon our original intent. So we asked a commercial man, a quinine-colored Englishman in khaki shorts. "We want to see this country and these people and we don't like to sit properly in a private compartment all to our own dignity and see nothing of the life we're passing through," I explained. "How about traveling second class on the train? Will they sell a white man a ticket for second class?"

"You cawn't ride second," decreed the Englishman. Then he got our idea and compromised. "But, look here, old thing, why don't you hire a car or even ride in a lorry, if you can get the bally driver to keep the natives off?"

A "lorry" in west Africa is a medium-sized auto truck, one or two tons capacity, which scorchs up and down the crooked bush roads carrying freight, passengers, and death in almost equal proportions. They are driven—or rather turned loose—by native drivers who crash along the roads absolutely unmindful of the brake or steering wheel, their attention centered only on those more interesting devices, the accelerator and the horn. I had always thought the Paris taxicab drivers had the world beat for fast and furious driving—but I had never been to west Africa before. The Paris taxi driver, for all his recklessness and speed, rarely has an accident, while his black brother in Africa is out of one and into another all the time. Overturned lorries, wrecked machines, broken cars, and twisted chassis are common sights along the roads in the Nigerian interior and these do not inspire much confidence in the black men who sit behind the wheel.

THE lorries are usually owned by a wealthy native or a company of natives and then turned over to hired drivers and the rest of the "crew" for carrying freight and passengers. The crew consists of the black devil who calls himself the driver and who would therefore scorn to handle a piece of baggage or box of freight; the supercargo or clerk who collects the money and looks after the manhandling of the freight; his helper who ultimately does all the work, and the driver's apprentice whose main duty it is to "wind" the car and sit on the soft cushion beside the driver. Sometimes there is another assistant whose duty it is to sound the raucous honker, but usually that is too great a privilege and a pleasure to be turned over to any mere underling.

There is always room for freight on top as well as on the sides of these lorries and there is always room in the pockets of the supercargo and the driver for a few more shillings. The

result is that the lorries usually contain, in addition to a maximum load of freight, a dozen or twenty blacks of all sizes and ages, and the whole comes careening around the corners and skidding through the little mud villages at the terrifying rate.

Whole families travel en masse and they maintain regular meal service en route. Evil smelling concoctions are dragged out from more evil smelling bags and consumed on the fly—and with them. When the lorries are stopped, as they seem to be most of the time, for the repairing of a tire or straightening of an axle or the bushing up of a broken spring, out piles the entire human cargo to cook up some soups or yams or fry some bananas or bats or anything else that

screwed up their eyes and studied sceptically the sign on the outside of the car proclaiming "Third Class" or else babbled at blacker and more naked citizens who were studying us equally sceptically. Plainly they thought that either we or they were in the wrong car—and they were right. Some stared and some grinned, and we stared and grinned back. They couldn't help it and neither could we.

We perched on little, wooden benches that were packed together as they are in a heavy duty street car, and it was clear full. We had so completely broken caste that two or three of the boldest natives who knew a few words of English even dared greet us and speak to us, a thing one would



One of the Outdoor Sports Is Dressing Hair. The Kinky Wool Is Braided Into the Tightest Braids, All in Rows, Like Tin Soldier on Parade.

is about. And all the while the little "pickins" are drawing away, like huge ticks, at the leathern black breasts of their mothers, like grown pigs that are never weaned.

Our next step was to ask our American missionary friend in Lagos. We must find someone to advise us to ride second class.

"Well, I have known an occasional white man, returning from a bush trip, to ride second class," admitted the missionary. "But you are liable to pick up spinal meningitis, ticks, smallpox, and other diseases and things. Besides that, you're jammed into stuffy little compartments crowded with steaming, sweating negroes, and you sit on uncomfortable, hard, wooden benches that grow harder and more uncomfortable all the time."

Then I got Jim's usual bright idea and one that is typical of the workings of what he calls his mind. "I've got it. Since we can't very well ride second class—let's ride third class!"

AND ride third class we did. (There isn't any fourth.)

I made the one reservation: Jim must buy the tickets. He had quite a palaver with the native ticket seller who tried his best to dissuade us from stooping to such heresy. But, utter renegade that he was, Jim bought two third class tickets for two shillings and sixpence each. First class fare is exactly eight times as much and well worth the difference to the average traveler. That day we were one-eighth of the average.

The minute we edged into the dingy, steaming little railway "carriage" a black exodus sneaked out the other end as though we carried the plague. Half-naked blackamoors

never do under other circumstances.

At every station the black crowds rushed toward the third class car, saw us and faltered to a stop. Then they whispered among themselves, studied the sign and, just as the little brass engine blew its final warning whistle and the clamorous station bell tolled a threatening "All Aboard," which meant that the train might start any time within the next thirty minutes, they edged into our carriage and stared, like a roomful of school children when the inspector makes a call.

FINALLY a crackling black baritone behind us spanked out the words and some of the melody of "Show Me the Way to Go Home" and "Old Black Joe" and when Jim chimed in with his Broadway bass, the color line was erased entirely and we were definitely accepted. We were just as good as the native blacks—and a whole lot better. A fat Mohammedan trader with glittering gold ornaments draped over every bulge in his tunic beamed at us and stammered, "You be good fellah!"

A native ticket collector came through and suggested that we go forward and ride second class, without paying any additional fare.

"But we want to ride third class," we told him.

"Why?" he asked. Jim gave it up and then I came to the rescue.

"Because there isn't any Fourth Class," I explained. The native shrugged and passed on. A white guard passed down the aisle apparently without even seeing us, so far beneath him had we sunk. We were to see him later—but that's another story.

Eventually, after four or five hours

of this jostling about in a black lined sweat box we had traveled our sixty miles and reached Abeokuta. There, on the station platform, stood our missionary friend, a real American from Alabama. We explained our motive to him and were accepted. That's the American of it. Incidentally, it's not British.

Up and up we climbed in a chugging old motorcycle to the very top of one of the highest hills in the city. And there, from the porch of his mission home, our friend, Mr. Patterson showed us the roofs of this famous old city of Abeokuta with a black population of about 70,000 and a white population of some three dozen. High up above it all stood the Alumo Rock, the sacrificial altar of the old, old city. The next day we climbed to the top of this rock and saw the remains of goats, chickens, and what not, that had been sacrificed to some mysterious god within the past few days.

Human sacrifices have been customary there until recent years and we were told of one zealous farmer, who, just a few days before our visit, in order to insure a bountiful harvest, had slain and sacrificed a child under the old rock. Although he had many wives and children of his own he had gone to a neighboring village and stolen the only child of an aged couple for his sacrifice. And although human sacrifices are considered passe in that country and, if made at all, are always made secretly, his chiefest crime seemed to be that he had stolen a neighbor's child instead of using one of his own.

But one of the most important things that happened to us during our stay in Abeokuta with the Patterson's was a suggestion that Mr. Patterson casually made in regard to our future plans and route. It was a most ambitious suggestion and got us into months of difficulty. Mr. Patterson's revolutionary idea will be described in the next installment, but I can't tell you the results yet because we are still struggling and fighting our way through it. See you next week.

"By the Way"

GUILTY

"His cook once spoiled the dinner of an Emperor of men; the dinner spoiled the temper of his Majesty, and then the Emperor made history and no one blamed the cook."

FORGOT TO REMEMBER

"I can never remember whether to say 'It is I' or 'It is me,'" observed Simpson to his friend.

"This is the rule I follow," advised his friend. "Just say over to yourself this rhyme: 'It is I, said the spider to the fly' and there you are."

A few days later the friend met Simpson and inquired as to whether his advice had been of any use.

"It would have been, but, you know, I forgot whether your rhyme was: 'It is I, said the spider to the fly,' or 'It is me, said the spider to the flea';"

Father: "My son writes he is in a tight place."

Friend: "How come?"

Father: "He is a waiter in Edinburgh."

When you feel touchy, go fishing, and go alone.

Under the 4-H Flag

By John Francis Case

HAD the Barton's known it, there could have been few times more propitious. Chilled through, the old man was not unappreciative of the warm drink Mrs. Barton pressed upon him, and his word of thanks, while surly, was sincere. The old fireplace sent out its ruddy glow and Jones, spreading cold fingers before the blaze, then rising to toast his aged shins, went back in memory to years gone by. A gentleman of the old school, their visitor was quick to note that here were folks different from those who had cringed at the lash of his scornful words, who had seized every opportunity to pay back enmity with enmity in despoliation of the land. But the moment Father Barton brought up the matter of needed expenditures that the house might be more habitable and the farm itself more profitable, Jones was on his guard. He was not to be caught with promises of unrepaid labor in return for cash expended. Others had done the same thing and failed.

In an adjoining room Bob sat with the driver who chuckled at the querulous old voice rose high. "Not a cent, sah, not a cent," cried the old Squire in answer to Barton's interrogation. "You-all signed a contract. Now the first thing you ask, sah, is money. Earn it, sah, and fix up the place youself."

"He's a hard old bird," informed the driver, a lad not much older than Bob. "Cussed me all the way here, although my boss, not I, set the price. Tight as they make 'em. Got scads of coin, too. I pity you, young feller, if you have to depend on Old Jonesy to help you make a living from this farm." "We don't depend on him," Bob answered coldly. "We'll make our own way. But he might be decent enough to fix up the house so it would be comfortable and let us cut a few posts for fence."

Bradley Barton was no mean diplomat. He soothed the old man with tactful words and suggested that they talk business after the dinner hour. But Jones was wary. "Not a cent, sah, not a cent," he mumbled when the call came. Yet there was visible relaxation when "filled to the neck," as his driver expressed it, Squire Jones again sat before the fire, a good cigar proffered by his host tucked at a rakish angle in his mouth. Marking his guest's Southern speech and a shrewd observer of personality, Barton lead the conversation along political lines. They were of the same faith and Barton deplored an election which had swept the state into the enemy's camp after long years of fealty to their own party chiefs.

"By gad, sah," cried the old Squire, "this country is goin' to the devil. I'm proud, sah, to have a man in my house who is one of my own breed. Where I live, sah, they are most all fools. I shall visit you often, sah—but not at the price that young scamp charged me," he concluded, recalled to the necessity of professed economy.

"Perhaps you would like a little music, Squire," remarked the wily Barton, taking out his violin. "We find so few now who love and appreciate the old tunes."

"As you please, sah, as you please," granted the now mellow visitor, and Bob grinned at the driver's low-voiced, "I take off my hat to your old man. He's some little old fixer. I'll bet he gets just what he wants out of the old bird."

Clear and sweet sang the violin, and as he sat with closed eyes before the fire, Thomas Jefferson Jones was transported to another time. The

years slipped away and when, after the playing of many familiar tunes, Bradley Barton broke into his newest creation, Jones was a boy again. In fancy he could see the slave children dancing in wild abandon before the great fire, while his father and mother looked on indulgently and he and his brothers and sisters swayed to the rhythm of stringed instruments. It was as one awakened from a dream that the old man spoke: "You are a master, sah, and there must be magic in your bow. It seemed that I was a boy again, watchin' the pickaninies dance before this fire. Who wrote that piece, sah? It is wonderful."

"A little thing of my own," smiled Bradley Barton, "inspired by your fine old home and the glow in your fireplace here. Now here's something I know you will like," and Barton broke into the stirring strains of Dixie.

With an agility which Bob would have thought impossible, Thomas Jefferson Jones leaped to his feet and the fighting yell of the Southland broke from his lips. Again the scene had changed and the old man was one of a mass of gray-clad forms which hurled themselves upon ramparts bristling with steel. But the reaction was too great and Jones dropped into his cushioned chair, wheezing asthmatically. "By gad, sah," he cried when he could speak again, "you took me out of myself. I'm an American citizen, sah, as good as the best. I'd fight for my country, sah, as I fought for the 'lost cause.' But, by gad, sah, there never were such men as Jackson and Lee. God rest their souls."

"Yes, thank God, we are all American citizens," said Bradley Barton, "and none can censure you for loyalty to your heroes of the past. If my music has pleased you, I am glad, and you will be welcomed to this house whenever you can come. As you say, we are of the same breed, for men of my blood fought shoulder to shoulder with those of yours while those of my good wife here wore the blue crowned victorious. But that all is past and we live in a new day full of opportunity for young Americans. That is why, Squire," concluded Barton earnestly, "that we must make fair returns from this farm above the rent paid you. We have the children to care for and educate, and if we do well this year Bob can continue in high school. For every dollar you spend on this farm we will give you a dollar in labor without a cent of return. But we must have fences, and the roof on this house must be fixed. Will you do this for us?"

"Go ahead with the fencing, sah," said Jones, "and get everything for the house you need. I mean," he amended quickly, "everything that I say you need. I know this place will be in good hands. And as for the labor, sah, we'll see. It would seem hardly fair, sah, to work for me without pay. But we'll see, sah, when the year ends. And now I must be going, sah. I thank you for the dinner, madam," and the old Squire bowed over the extended hand of his hostess. "It was wonderful."

Bob Barton had played the part of a dutiful son, listening to the conversation, asking no questions. Well Bob knew that in the arts of diplomacy his father was skilled beyond anything that he likely ever would attain. Somehow, sympathy tugged at Bob's heart as he saw the wistful glance of the old man as once more he spread hands before the fire. So old and

(Continued on page 117)

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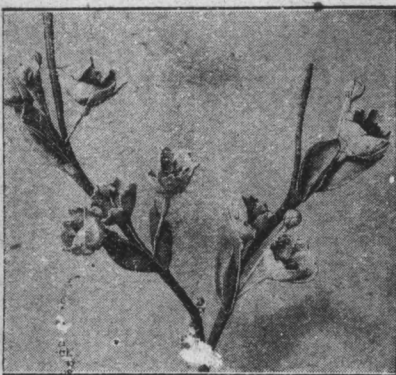


Enjoy Apple Blossoms the Year 'Round

By a Bit of Practice You Can Make Sprays That Add the Color Note of Spring to Your Living Room

By Dorothy Wright

WHAT is lovelier than the apple blossom in early spring? And isn't it almost impossible to resist the temptation of breaking off the blooming branches and carrying them home so we may have them near? We shouldn't do this, of course, but there is something that we may do and that is, to make some apple blossoms out of pink and white crepe paper. And they can be made so beautifully that your friends will exclaim at their exquisite naturalness just as you do over the beauty of the real ones. Let



It's Fascinating Work to Make Apple Blossoms Like These

me tell you how to make them. They are not at all difficult.

The necessary materials for making apple blossoms are white and light pink crepe paper for petals, grey and moss green crepe paper for leaves, apple green for calyx and for wrapping stem, and dark brown for wrapping branches. Spool wire, and No. 9 and No. 7 stem wire will be required, and also some rose stamens.

Each blossom has 5 petals with white inside and pink outside. For each flower, cut strips of white and pink crepe paper across the grain, making each two inches wide by three inches long. Stretch slightly to make smooth. (To save time longer strips may be used and several petals cut

site side, and pushing forward with one thumb and forefinger and backward with the other at the same time stretching the paper slightly. Then cup each petal slightly. You now have a strip of five double petals cupped and fluted.

For the center double 5 rose stamens and place them inside of an end petal. Pull the petals around evenly about three-quarters inch down from the tips, the stamens extending up from the center about one-half inch. Fasten at the side with a seven-inch strip of spool wire. Cut away the surplus paper below the fastening wire; bring the two wire ends half way around on opposite sides and down, and twist them together underneath.

For the stem place a seven-inch strip of No. 9 wire along side the two wire ends and, with a one-half inch wide strip of apple green crepe paper, cut across the grain and wrap the stem smoothly. Press the petals out gently from the center into natural position.

To make the little buds that add so much to the beauty of the spray of apple blossoms, make a round ball of pink or rose crepe paper, not more than three-eighths inch in diameter. Stretch over it a one and one-half inch square of the same color crepe paper and pinch together underneath. Cut off some of the surplus paper at the sides only underneath the bud. Cut a little five-pointed calyx out of a five-eighths-inch piece of apple green crepe paper (see pattern given below) and place it around the bud, the points meeting at the top of the bud. Paste the lower part of the calyx around the stem part and wrap the stem with a one-half-inch strip of apple green crepe paper. Join the buds and blossoms together in clusters of from two to five; wrap all stems together with a one-half-inch wide strip of apple green crepe paper, reinforcing the stem with No. 9 wire. Several such clusters will be needed for the branch.

The leaves are made in much the same way as the petals—by pasting

strips of the grey and moss green crepe paper together at one edge, and then cutting out the leaves using the pattern given here.

Make the branch by starting to wrap a No. 9 wire or a No. 7, if an extra long branch is being made, with an inch-wide strip of dark brown crepe paper. Three inches down insert a cluster of buds and blossoms, with two leaves—the grey side next to the stem. Continue wrapping the stem and inserting clusters of buds, blossoms and leaves until you have the size branch desired. Two small branches joined together, as shown in the illustration, is an especially attractive arrangement.

If you are interested in making other designs in crepe paper flowers, send for the bulletin "How to Make Crepe Paper Flowers," price ten cents. It contains complete instructions for making twenty-two different crepe paper flowers. Address your orders to The Michigan Farmer, Desk L, Detroit, Michigan.

SUGARCOATS CHILD'S DAILY DOZEN

WHEN a rainy day comes or the weather is too cold for the children to play outside, they become restless from inactivity. It is then that we usually play circus, for children like to imitate animals. In this way they really get their daily exercise sugarcoated.

First there is the parade around the ring. The elephant leads walking on all fours, hands and feet, not hands and knees, and swaying his trunk. The horse follows, trotting spiritedly with high head and knees lifted. Then comes the giant, walking on tiptoe and stretching his hands above his head to make himself very tall. Next comes the donkey on all fours but with a different gait than the horse and stopping every few steps to kick up his heels.

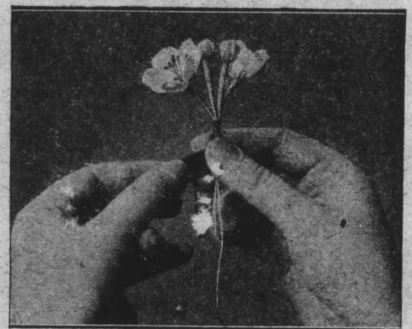
The monkey starts the real show with a few small corks which he picks

up with his toes, first one foot and then the other, finally walking around the ring with them held in his toes. The juggler lies on his back on the floor and tries to juggle a rubber ball with his feet.

Last of all is the lion whose chief accomplishment is a great roar. This is done by taking a long breath, filling the lungs and opening the mouth wide letting out a real roar. This takes the place of deep breathing exercises and the kiddies like to repeat it several times.—Mrs. B. L.

CAN MEAT FOR SUMMER USE

FIFTEEN years ago, home canned meat was an unheard of thing. I often wonder now how we ever got



Twist Two or Three Together for Best Effect

along without it. Now one of my biggest helps in preparing a tasty meal in the hot summer is my extensive supply of canned meats. I can open a can of roast pork or beef, finding the stock or gravy in the can right with the meat, or a can of meat balls, browned and perfectly fresh, or a can of vegetable soup or meat loaf to use on sandwiches if I wish. Any of these varieties can be made ready to serve in a few minutes. Last summer I got a new recipe from a neighbor lady. We enjoyed the chili con carne so much all winter that I consider it a pleasure to pass it on so that others may enjoy it with me next year.

Canned Chili Con Carne

Ten pounds of ground beef, ten good sized onions, three quarts of cooked red kidney beans and five quarts of tomatoes. Chop the onions and let brown in frying pan, add meat and let brown, stirring constantly, then stir in tomatoes and beans and season to taste. Mix well, fill jars and process for one hour.—Mrs. C. F.

KINKS THAT SAVE ME EMBARRASSING MOMENTS

WHEN using valuable vases for table decorations, I fill one-fourth full of sand to prevent being knocked over.

To keep the hands from getting rough and hard, rub with a little vinegar after scrubbing, washing, dish-washing, etc. It will keep the skin very soft and smooth.

Put a wire hook on the clothespin basket, and hook it on the clothesline and push it along in front of you as you hang up the wash.

If snaps on garments are fastened before laundering, there is less danger of their being bent or flattened in the process.—Mrs. A. S.

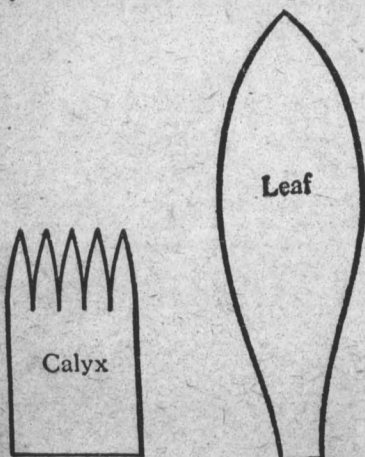
Make Motherhood Safe

WHEN approximately eighteen thousand young mothers and one hundred thousand infants die annually in our country as an immediate result of child birth, there is urgent need for serious attention to be given to this problem of maternal mortality. Our death rate from child birth is nearly twice that of England, and the great majority of these deaths could be prevented.

Much has been done in an endeavor to save young mothers in Michigan, yet the task has only begun. In every year since the Maternity and Infancy Act went into effect in 1922, Michigan has been one of the fourteen states that has appropriated sufficient funds to entitle it to its full quota of federal funds. Five years affords only a good start in any public health movement. But since the beginning of our state's co-operation in this great work, every one of the eighty-three counties have been reached. Last year, sixty-eight counties carried the work, three having assumed financial responsibility for the future of the work begun.

Nearly complete returns from this work indicate that in the birth registration area in 1926, seventy-three babies died from every one thousand born—a rate three points lower than that for the area in 1921.

The original five year period during which appropriations were authorized, expired in June of last year. The Act has been extended to June of next year and will then lapse unless new appropriations are granted. But it must not be permitted to lapse. Women, individually and through their clubs, should, by letter or otherwise, urge their congressmen to see the importance of carrying on this great work of serving motherhood and childhood.



These Patterns Are in Actual Size for Cutting

at one time.) Brush along the three-inch edge of one strip with a good white paste, and lay the other strip over it evenly, pressing with the finger along the pasted edge. Now divide the double strip into five equal parts and cut down each division one inch from the pasted edge, rounding the corners of the petals just made. Flute each double petal edge once in the center, by placing the thumbs on one side and the fore-fingers on the oppo-

Spring Favors Sport Clothes



No. 882—Practical. Designed in sizes 16, 18, 20 years, 36, 38, 40, and 42 inches bust measure. Size 36 requires 3 yards of 40-inch material.

No. 892—For Travel or Office. Designed in sizes 16, 18, 20 years, 36, 38, 40, 42, and 44 inches bust measure. Size 36 requires 3½ yards of 40-inch material.

No. 886—Comfy Night Drawers. Designed in sizes 1, 2, 4, 6, and 8 years. Size 4 requires 2 yards of 36-inch material.

No. 278—Youthful Plaits. Designed in sizes 36, 38, 40, 42, 44, and 46 inches bust measure. Size 36 requires 4 yards

of 36-inch material with ½ yard of 36-inch contrasting.

No. 758—Youthful Lines. Designed in sizes 16, 18, 20 years, 36, 38, 40, 42, and 44 inches bust measure. Size 36 requires 3½ yards of 40-inch material.

No. 526—Grown-Up Style. Designed in sizes 6, 8, 10, and 12 years. Size 8 requires 2 yards of 40-inch material.

The price of each pattern is 13c. Send an extra 13c with your order and a copy of our Spring and Summer Fashion Catalog will be sent to you. Address your orders to the Pattern Department, Michigan Farmer, Detroit, Michigan.

When Guests Want to Help

THE recent article "When Guests Insist on Helping" has brought out many opinions and some very workable plans relating to the problems of the farm woman who entertains. Only two of the letters can be printed this week but more will appear later.

Give Guests Full Sway in Kitchen

My girlhood days were passed on a farm with but few conveniences in the house which caused me to become thoroughly dissatisfied with farm life. The result was, that while attending college, I became engaged and, in the course of time, married a city-bred man. After two years in the city, I again found myself living on the farm, due to my husband's failure of health.

Each season brings several groups of "in-laws" and friends to be entertained. Do I become nervous and embarrassed while they are guests in my home that boasts but one modern convenience, a kitchen sink with running water? Because of my humble home and makeshift ways, I can truthfully say that I do not, for after all most,

if not all, of us have our pet economies.

My guests always come into the kitchen and work. Anyone can wash dishes if they are shown the dishpan and other necessities. In fact, my guests are often given full sway in the kitchen in the morning while I go about my outside chores. Of course, they do not attend to things as I would but, if they use their own methods, surely they cannot criticize mine. I do not put myself to any extra trouble for my guests as many hostesses do, yet my guests seem to enjoy themselves and come back again and again.

The guests who annoy me are the ones who try to make me feel that I am living the one and only life. If they could just trade their modern house and lot for a farm, they would be in their seventh heaven, so to speak. These women have no idea of how many times the farm woman's patience is tried to the limit. I might also say that they are usually the ones who manage to be busily occupied, giving the stock, crops, and farm

the once-over about the time there is any work to be done in the house.

Another type of guest who annoys me is the one who allows her children to bring all their petty grievances inside and does not appear to care or try to keep them from upsetting the household in general.

It has been my experience to entertain these different classes of visitors each season and friend husband cannot understand the vastly dissimilar attitude I have for each group. Perhaps he can be excused by the aged worn aphorism, "that is the man of it."

To be a pleasant hostess and guest, I believe one must make preparations long before they find themselves in either position. First, they must cultivate a pleasing personality. Second, they must learn to adapt themselves readily to any situation which may arise. Third, and not least, they must train their children in a natural companionship with their guest.—Mrs. E. T., Van Buren County.

Takes Guest On Farm Tour

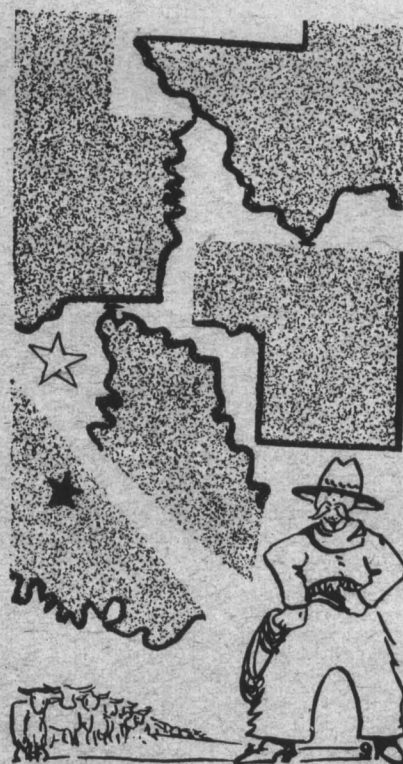
I was fortunate to be the oldest of a large family. My father was a breeder of pedigreed stock and unexpected guests were nothing unusual. I have always tried to keep my emergency shelf well supplied but sometimes the larder is sure to be about bare when most needed. In such cases, my husband has always come to my rescue by taking the guests on a tour of the farm, maybe for only half an hour, but long enough to make a cake or a pan of biscuits, set the table and have everything ready when they came in.

When I am the guest, I either help with preparing the meals or take care of the children, just which ever seems to be the most help to my hostess.—Mrs. C. P., Montcalm County.

For Our Little Folks

STATE SECRETS

This state had a governor lately
That no one could call a real man;
It has a "pan-handle" that's famous,
And yet it's too large for a pan!



The pieces of this puzzle when correctly put together, make a map of the state which this verse describes. The star indicates the capitol. When you have solved the secret of which state this is, write me all you can about the state and its capitol.—Aunt Martha.

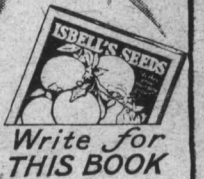
(The answer to last week's secret was Minnesota and its capitol is St. Paul.)

RADISHES

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OUR PAGE

Some Sound Subjects

Are Commented on by Merry Circlers

Life

LIFE is a perfect dream or a beautiful story book. There are new things each day that we find of interest to us. If we are happy and contented each bird and bee and flower will hold something new to interest us. All of God's noble creations are put here for us to make the best use of. He put us here to find all the joys of life that we can, not to fight and quarrel with our neighbors and make everything as ugly as we can.



Eleanor Marie Hawkins Looks Like a Sunshine Girl.

We cannot expect to go through life never suffering a pain or anything. It does us good to suffer a little bit, then we can sympathize better with our fellowmen that suffer. A ship has good sailing when there are no storms, but when it storms the waves break and dash against it, sometimes causing it to sink. So we come to the page of life where there are storms also. We come to the sorrows and heart-breaking and soul-rendering things that sometimes cause us to sink into despair only to be lifted again by some of God's earthly creations that have something to interest us. So again I say life is like an interesting story book. As we turn from page to page we find something different of interest to us. To me life is very beautiful.—Agnes Arthur.

Religion and Education

IN this day and age of the world, what is more beneficial than religion and education? There aren't any factors that should have the amount of consideration as these.

First, I will take up religion as its place is first in our history. Aren't there numerous college students that forget to "Honor Thy Father and Mother?" When a boy or girl gets into college, about the first problem they try to solve is to make God's truths into something else. Their good old fathers and mothers, who saw fit to so nobly advance them, are left behind as mere items of nature. Also, some parents are actually ashamed of their boy, through some "didos" he gets from college.

Colleges and universities have students that commit suicide because their minds become heavy-laden with scientific elements to such a great extent, they get unbearable.

Some parents think their child should, on completing high school, immediately go to college or a university. What's the hurry? Why not try out the education they have received in high school and see if it is

really helpful to them? If they can't make use of that in some way, really earning their living, what is the use of giving them more of the same? Schooling is not all there is to education. Parents and children alike need to learn, and if they are real students, they will learn as they work, this being America's need of today.

When our parents went to school, they earned their education. Now, the majority of students glide through school on a flowery bed of ease. Work made our parents, so why should we be deprived of that opportunity now? No motto of today means more than ours, "Work to Win."

A diligent student of both Michigan and Yale Universities was unable to name a single professor he really knew. Large institutions mean educational paralysis. He can go from college holding a diploma and yet not have the elements of education. The same with other educational bodies. The fact is, the parents have the better education as far as a "life" education or beneficial education is concerned.

The fundamental aim of education should be manhood rather than mechanism. The ideal is not a working man, but a man working; not a business man, but a man doing business; not a school man, but a man teaching school; not a medicine man, but a man practicing medicine; not a clergyman, but a man devoted to the soul; not a statesman, but a man holding the affairs of the state.

Now I have done my best in giving my opinion on religion and education. People are trying to change religion, but it will always be the same. As far as education is concerned, "work" is the keynote of its sanity, and if work isn't available at the completion of a high school course, a college education would be of no advantage as all education institutions aim at the "field of work."

"It isn't the job you intend to do, Or the labor you've just begun

That puts you 'right' on ledger sheet—
It's the work you have really done.
Good intentions do not pay bills,
It's easy enough to plan,
To dream, is the play of an office boy,
To do—the job of a man."

Chester Lattin.

Character

Character has many definitions. It may be defined as a distinctive quality; or as the peculiar qualities impressed by nature or habit on a person which distinguishes him from others. These constitute real character and the qualities he is supposed to possess constitute his estimated character, or reputation. We may truthfully say a character is not formed when a person has not acquired stable and distinctive qualities. There are many traits of character that we need possess to succeed. Some are self-control, self-respect, self-reliance, honesty, loyalty, initiative, ambition, perseverance, punctuality, and industry. Any man's emotions must be bridled and brought under control of his will if the greatest success is to be obtained. He will not achieve self-respect unless he has a proper sense of his own value and thoroughly believes in himself, or in other words, is self-reliant.

Honesty is more than refraining from taking money not his own; it is applying to the task in hand all the skill at the workman's command for every minute of the business day. Loyalty is faithfulness to one's country, friends, promises, and duties. It is the quality which causes the student to support his school athletic teams even when they are losing. Initiative is the starting power energy required to begin a new undertaking. Ambition is the eager desire to get ahead. Perseverance is the ability to stick to a job until it is finished. Punctuality is to be "Johnny-on-the-spot," when the "whistle blows." Franklin said, "Keep thy shop and thy shop will keep thee." We must be industrious and up and doing.

After we have attained these traits of character we will not regret the energy used to build up a good character even if we have not gained intellectual fame, for character is higher than intellect.—Patty.

out a year book and I am art editor on the staff.

Why is it that so few fellows have letters on Our Page? It's just girls that are writing letters or maybe W. B. gets most of ours. It seems that in all the arguments on cats, pheasants, etc., no one seems to agree with "Horst Beyer; "he" sure started something when "he" wrote against cats, but I heartily agree with all "he" wrote; what about it, uncle? Cats are no good; pheasants are "rot"—may they forever be bereft of their grandfathers, and happy homes. "Thus far and no farther."—Horst Beyer.

I am pleased to learn that Horst Beyer agrees with Horst Beyer. It is unwise not to agree with oneself. The boys are not as prolific writers as the girls are. I would like more letters from boys.

Dear Unc:

The other day as I looked through some of my good friends, the Michigan Farmers, I came where the boys had their chance telling what they thought of the girls. I laughed then about as much as I did when they were in print. Uncle Frank, don't you think you ought to let them give us another laugh? I do. Am very interested in the M. C. letters, but it seems funny they can quarrel with each other through the Michigan Farmer. Sir Gullford Rothfuss is a jolly fellow, isn't he, Uncle Frank? Say, Unc., why don't you print your picture? Your nieces and nephews probably want to know what kind of an uncle they have, "especially me." I will ring off hoping W. B. is full before my letter reaches his large mouth so it can be in sprint.—Susie Ann.

Perhaps we will give the boys and girls another chance to give opinions of each other. Why spoil a good imagination with a poor picture?

Dear Uncle Frank:

My opinion is that "Mayflower" made a good suggestion when she prescribed political events for a subject instead of beauty. I think that people should be punished for doing such things as killing animals, etc., and they are. If the court doesn't punish them, God will. You will find that God punishes them, for does it not say in the Bible that God made animals and that he wanted them to multiply? Well, how could they if man killed them?—Catherine.

Your statement is rather broad. In order to eat we must kill. We kill a plant when we eat it. It is wrong to eat meat if it is wrong to kill animal life. Where are we going to stop in this killing matter?

Dear Uncle Frank and M. C.'s:

Just a line or two, to let you know the Indians are not drying my scalp yet. I'm still in western Washington.

OUR LETTER BOX

Dear Unc.:

Say, M. C.'s, what good does a correspondent scramble do when we don't tell uncle how we like our correspondents? Well, at present I have six. I think they are the nicest friends you can get through writing. Most of these are carries I got through the Scramble. A month ago I received a pack of letters from the correspondent club Christine Zeck started.

Well, I had better give one suggestion. Does a radio profit a farmer? I say for dairy farms it does. Let's hear some comments on this. I get a lot of enjoyment out of our radio.—Happy-Go-Lucky.

I am glad to know that you have such nice correspondents. I think a radio is beneficial to anybody.

Dear Uncle Frank:

According to the number of times I write, you must think I'm on a hunting trip somewhere in the jungles of Africa—but I'm not.

I agree with H. S. about hawks and crows. They are very destructive but don't you think that the reason for there being pests like these are so that we will appreciate more the birds that are not destructive?

Uncle Frank, please won't you ask H. S. to write another letter and tell

us more about his collections of moths and butterflies, where he hunts for them, and how he takes care of them?

I also agree with Matilda H. about people not seeing the beauty in life. Some folks go about grumbling about things, but never stop to think how they could improve them so they would be of benefit to others.

I like the picture of White Amaranth. I am going to keep it. Her appearance resembles those wonderful words she uses in expressing her thoughts.—Elizabeth Walt.

No, I was beginning to think that I would have to go on a hunting trip to find a letter from you. Harold might tell us more about his collections sometimes. There is plenty of beauty in life—all we have to do is to see it.

Dear Uncle Frank:

I was not very active in the Merry Circle for quite a while now, so here's a few lines. I see they're still arguing cats and evolution. The evolution question seems to be quite common, so I'm going to read Darwin's "Origin of Species" to find out something. That's all I can say on that.

I'm a senior in high school now so I'll soon be through. We are putting



Harold Strange, See Article on the Opposite Page

It's a great life if you don't weaken. I've been on a berry ranch all summer and I spent an ideal summer vacation. I picked loganberries and strawberries and made the honorable

sum of thirty-four bucks and had one thousand bucks worth of fun. The ranch was almost on Discovery Bay. The water was absolutely elegant, the rowing better, and as for beach fires, they were absolutely the "cat's eye-brows." The Cape George fish trap was right near there also. There are octopus, salmon, flounder, sole, spate's, and fish of every kind and description in it. The trap is owned by the Booth Fisheries of Seattle.

This is one of those made to order western mornings, the mountains I can see through the windows, the peaks of them are all snow-covered. They are too pretty for words. Port Townsend Bay is blue and "verra" beautiful. Seeing it's Saturday morning and no high school, I'm going to try and go for a rowboat ride.—Ex-Michigander.

I'm sorry I could not get your September letter printed sooner, but it is just as interesting now as ever. It must be an enjoyable country you are in.

SEVEN YEARS A DAIRY CLUB MEMBER

HAROLD STRANGE of Grand Ledge, Michigan, has been a members of boys' and girls' dairy club for the past seven years. He also belonged to a pig and bean club but found dairy club to be the most profitable.

Seven years ago he started with a registered Holstein female calf. She had trouble in calving and gave only 8,000 pounds of milk the first time, although she and her three year old daughter now average 11,000 pounds of milk each. He feeds them a commercial feed, and silage and alfalfa and clover hay.

The seven year old cow gave birth to four bull calves and one female calf. Three of the bull calves were sold as veal for \$22 each and the fourth sold for breeding purposes for \$15 when three days old. The younger cow has given birth to a bull and a female calf. The bull was sold as veal for \$23.

At the present time his method of

feeding has enabled him to secure a profit of \$300 a year from the two cows.—Y. P. Bhosale.

MORE ADULT LETTERS NEEDED

TO give our Annual Parents' Parley a good start we should have some more letters from adults. We have several good ones but need more to make a good showing. Criticisms and comments are sought. Girls and boys, ask your parents to take part in this parley.

CORRESPONDENCE SCRAMBLE

FURTHER requests for correspondence scrambles make me believe this one is wanted. Hundreds of Merry Circleers have made fine friends through these scrambles; you can add to your list of wholesome friends by taking part in it. Just write an interesting letter to "Dear Friend" or "Dear M. C." address an envelope to yourself and put a stamp on it, then put your letter and the envelope into another envelope which should be addressed to Uncle Frank, Michigan Farmer, Detroit, Mich. If you are above thirteen years of age put the letter A in the lower left hand corner of the envelope. If younger than thirteen use the letter B. The scramble closes Feb. 4th. Your letter will be put in another person's envelope and some one's letter in yours and mailed again.

THE PRIZE WINNERS

The papers of the following on "My Favorite Winter Sport" have been picked as the best in the last contest. Some of the papers will be printed next week.

Fountain Pens

Zona L. Amos, R. 7, Owosso, Mich.
Wilma Enyart, Barrytown, Mich.

Note Books

Menno Martin, Brutus, Mich.
Clinton Van Duine, R. 1, Dorr, Mich.
Lilly Tervo, Chassell, Mich.

Knives

Marguerite Turner, Brown City, Mich.
Hilda Waltz, Dryden, Mich.
Margaret Thiem, Herron, Mich.
Hazel Browning, R. 2, Kingston, Mich.
Anne Koski, Box 117, Rock, Mich.

Under the 4-H Flag

(Continued on page 113)

alone, with not even a close relative to care for him if the story of his young driver was to be believed. Squire Jones needed the friendship that they might give. But one question must be asked, and Bob's father had not even given hint of it.

"Mr. Jones," said Bob hesitantly as the old man turned to leave, "dad hasn't mentioned it, but I wanted to ask you about some of the strange things that happened on this farm three years ago. Do you believe there is any danger of our losing live stock as your other tenants did?"

"Who has been talking nonsense to you, boy?" demanded the old man. "Of course, you may lose stock. There are wolves around here, sah," he added, turning to Father Barton. "Keep your stock well penned at night."

"But the things that happened to the Perkins family," insisted Bob. "Wolves didn't do that."

Thomas Jefferson Jones scowled at the recollection. "A passel of poor white trash," he replied contemptuously. "Scrappin' the Harkins family just as Harkins's fought them. Beat me out of every dollar they could, sah, but I paid 'em back. Folks don't get far when they try to beat Squire Jones," and there was grimness in the crackling laugh. "You mind your business, young man, and nothing will happen to you here."

Bradley Barton was too elated over the favorable outcome of the interview to give more than a passing thought to the question raised by Bob. "Of course, it was just a family row," he remarked, "as I've told you all before. Nothing ever happened before, nothing has happened since. Old girl," and Barton patted his violin lovingly,

"You've done a good day's work. For that I'm going to give you a new string." While Bob tolled at the work outside, his father celebrated with a musical debauch which lasted well into the night. But the family was not disposed toward fault-finding. The violin had played a strong part in performing an allotted and important task.

CHAPTER V Under Club Banners

ROSS BURTON was not one to let opportunity slip. He had sensed the unspoken admiration in Bob Barton's eyes and had taken note that here was a lad of character and intelligence. A shrewd observer, young Burton needed no family history to assure him that if the farming venture proved profitable, most of the burden must be carried on young shoulders. "If there's any chance," Burton had confided to Miss Edwards, his co-worker, "I'm going to get that new boy into the pig club. He deserves a chance to have something of his own. Then," the agent concluded quite irrelevantly, "he looks like a ball player to me. If our Brown County team don't beat that Harmon County bunch this year Bill Tucker's goin' to 'rag' the life out of me."

"Always thinking of the welfare of the dear farmer," teased Clara Edwards. "Training their sons up in the way of the baseball player."

"And I know a certain young lady who never thinks of coaching her girls in basketball," mocked Ross. "You come along with me on this call and bring that curly-haired O'Neal kid. I'm going to need help if I land this fish." Real teamworkers were the Brown County agents, and when Burton's car stopped at the Barton home

and Bob and his father went out for the promised farm inspection, Agent Edwards parked her runabout at the O'Neal gate. It was after school hours and Kate ran out to meet and embrace her friend. Soon she was nodding emphatically as Miss Edwards unfolded Ross Burton's plan. When the trio returned from their walk over the fields they found Mrs. O'Neal, Kate, and Miss Edwards in the great living-room. The talk turned to crops and soils and Bob found himself marveling at the knowledge displayed by the young woman visitor.

"I've been telling Mrs. Barton," announced Miss Edwards, "that Bess and Ruth here deserve a fine melon patch. You've good soil for vine crops, for I've been over the farm. And Bob's going to have other opportunities to make money." She smiled at Ross Burton.

"Yes, Bob doesn't know it yet," spoke up Burton, "but he's going to be in my pig club. I've even gone far enough to pick out a dandy bred gilt for him."

They certainly did things in this county, thought Bob. Didn't even wait for a fellow to make up his mind. How did he know that he wanted to join a pig club or any other kind? Aloud, he observed: "That's mighty good of you, Mr. Burton, but I haven't talked it over with mother and dad. Ted Baldwin told me something about the work, and it must be worth while. But we haven't much money. Afraid I'll have to wait."

"How much will it cost?" asked the practical Mrs. Barton.

"Not a cent for the club work," replied the county agent, "not a dime for all the help we can give. But, of course, it will take money for the gilt and for feed. The gilt I have picked out for Bob is a fine individual, daughter of a sow that brought ten pigs her first litter last year. She's the granddaughter of a grand champion, bred in the purple and registered. It will take a hundred dollars to buy her, but the litter sold last year for \$400, and if the best one had been sent to the state fair he'd have brought \$100 or more. We can get cheaper gilts, but this one, in my opinion, is a real buy. Wait till you see her, Bob, and you'll say the same thing."

"A hundred dollars," Father Barton cut in. "Man, what are you talking about? I never paid more than \$25 for a brood sow in my life. Why, that's as much as I paid for one of the grays. Bob can't tackle any foolish ventures like that."

"The price does seem high," Burton admitted, "but there's sure to be good demand for breeding stock this fall and we'll hold an auction sale of club pigs this fall. A boy always takes pride in something good, and I'm banking on Bob showing the right spirit to win out. I wouldn't recommend such a venture for every boy I know." Bob felt the warmth of Burton's smile and glowed in response.

"I'd sure like to try it once, dad," said Bob. "What do you think?"

"Too much money, son," answered Barton. "We can't afford it this year. Perhaps another time."

"Don't let the purchase of the sow worry you," announced Ross Burton. "I have that all arranged, too. Vern Lawson, a banker friend of mine, has agreed to lend all the money we need to finance our club and take the boy's personal notes. All you need is a recommendation, Bob, and I'll be glad to do that for you. Now what do you say?"

(Continued next week)

THE STORY OF A CLUB MEMBER

(Continued from page 95)

state fair, and first senior yearling, second junior yearling, third sow pig, and grand championship at Hillsdale fair, also state championship in the

herd project with a scholarship to Michigan State College. At the annual meeting of the Michigan Duroc Breeders' Association held Farmers' Week, I was elected Secretary-Treasurer.

As I look back over the five years I was in club work I find that, like everything else in life, it wasn't all roses nor all thorns, and that in club work it is possible to have success without being a champion. Championships are always so little better than those next in line as to mean but little as long as one is a success.

It is the failures that ought to be made harder to accomplish. The failures I have found in club work are due to several reasons, one of which is jealousy on the part of parents. Many times in the show ring there is so little difference in the merits of animals that even the best of judges find it hard to make the placings. Someone must take second or third place as well as first. When this happens, some parents with their untrained eyes, fail to see the finer points of the winning animals and think that some one else's boy or girl is being favored, so oftentimes they take their children out of club work. They fail to realize that there can be success without blue ribbons.

In my own case, for example, I never won a blue ribbon on any of my stock in my first three years of club work. Had I quit then I am sure that I should have missed a lot of the really better things of life in the way of friends, travel, and education.

To the parents with boys who want to enter club work, I urge you to let them enter, but don't go blindly in. Remember this, you must expect that he is going to require some time off to care for his project that may inconvenience you, but you can also expect that with his ownership he is going to take a lot more interest in your affairs.

Too much emphasis is often placed on financial returns from club work. There are good returns to be made from club work, but it takes care and attention to details. The amount of education to be gotten from club work is almost unlimited. When a boy goes to the fairs he must spend his time in or around the barns and judging rings, if he is to learn the most, and not be out on the midway or watching the free acts at the grandstand. The men who are successful at the larger shows are the real master breeders and fitters, and they will give a lot of helpful pointers to the boy who shows an interest. Studying bulletins and pictures helps a great deal, but to be in the show ring and compare one animal with another is a surer way to learn to judge correctly.

One of the things club work teaches is to be a good loser, not an easy loser, but a person who can take an honest defeat and not crab about it. In the meetings the ability to talk before a crowd is developed, and training in parliamentary rules is given. In fact results depend on the boy or girl's ability to dig.

In closing, I know that no boy is going to know how much his club work is meaning until he has lost the opportunities it affords. The things that I count as real gains from my five successful years as a club member are not the financial gains, not the honors won, but the friendships made. These money couldn't buy. When I see the amount of time, money, and interest that some of the very biggest men in the business and agricultural world are contributing to this work, I am sure that American farming will continue to be just what it has always been, the greatest place to live on earth.

To the thousands of farm and small town boys in Michigan who are not in club work, let me tell you that you are missing a big opportunity even though you never intend to farm.

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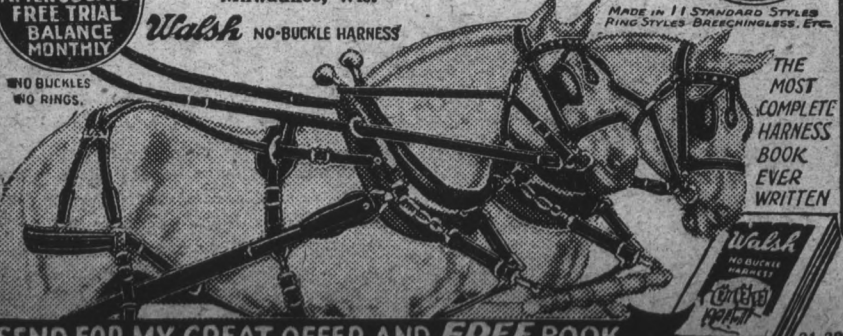
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21-28

LIVE STOCK AND DAIRYING

PLAN NEXT WINTER'S FEEDING

TO provide a balanced, nutritious ration requires the stock keeper to plan ahead. He must figure out his next winter's ration at this time in order to plant the proper crops and provide the proper feeds.

With all things considered, the cheapest source of digestible carbohydrates is found in corn silage. It is not difficult to produce from ten to fifteen tons per acre of this valuable

composite of the night and morning milkings. Since the value of much of the information gathered for this work depends upon the integrity of the owner, one found guilty of dishonest practice may be expelled from the Holstein Friesian Association of America.

The credit for the introduction of this new line of performance work should come largely to Michigan, since Horace W. Norton, Jr., and Professor O. E. Reed, of Michigan State College,



Increased Profits Have Gradually Led Sheepmen to Systematically Treat Their Flocks for Stomach and Intestinal Worms

food stuff which can be fed either winter or summer, and which can be carried over from one year to another. With this in view, we can safely say that every stock farmer should have an ample supply of silage. The best balance for corn silage is found in legume hay or pasture. Alfalfa, clover, and sweet clover are the leaders.

The greatest profit comes when the animal is supplied with its requirements. This means liberal feeding. No one ever made a profit by starving his stock. Our cattle should be considered as machines and we wish the machine running at full capacity. So far as possible, make animals, especially cattle, consume large quantities of roughage; this will make for greater profit.

To get large production we must feed concentrates. These can be purchased with regard to their price and nutrients. It is well to balance the concentrates, so whatever grain you feed, whether it be two pounds or twenty, you will feed a balanced ration. For largest profits, high-producing animals will as a rule give the greatest reward.

We are making rapid progress in improvements, in breeding and feeding. With 700,000 less dairy cows this country has produced in the past year considerable more dairy products. We can still further reduce the number of cows and increase the product and profits providing we feed economical, balanced rations.—A. H.

REGISTRY WORK IN MUCH FAVOR

THE Herd Improvement Registry work being put on in Michigan by the Holstein people is meeting with much favorable comment. This work gives an excellent line of information on the performance of animals and is inexpensive compared with the old method of carrying on Registry testing.

This new work is a part of the regular testing, or dairy herd improvement association, work. Only pure-bred Holsteins are entered. The owner must weigh each milking throughout the period of test, and the regular supervisor must test each milking separate instead of making a

were chairman and secretary respectively of the committee which worked out the plan.

GIVE COWS PLENTY OF WATER

ALTHOUGH water is cheap, the fact remains that many dairy cows do not get the water they should have for best results. Careful experimentation shows that a cow giving twenty-five pounds of milk daily, needs three pounds of water for each pound of milk produced. Cows should have access to water at least twice each day. Individual drinking cups furnish the best means of keeping a supply of water constantly before the animals.

The water ought not to be colder than fifty degrees. The common practice now is to locate the water tank in the barn where the heat from the animals maintains the water at about the right temperature. If to this tank is pumped clear, clean water from a deep well or spring the cows will respond surprisingly.—R. D.

RECORD OF PERFORMANCE WORK

SOME of the cattle recently entered for recognition in the Michigan Record of Performance indicate that good feeding methods go a long way in producing profits in dairy herds.

Approximately 20% of the cows tested fulfill the butter-fat requirements of the R. O. P. Cows under three years of age need to produce 280 pounds of butter-fat, cows under four years 310 pounds, cows under five years 350 pounds, and mature cows 400 or more pounds of butter-fat. Some dairymen have succeeded in entering as many as 50% and in a few instances even more than 75% of their herd in the R. O. P.

While animals of good conformation usually have a large capacity for the consumption of food, as a class they are more efficient in changing what they eat into animal products.

The adding of a little linseed meal to the dairy ration often improves the quality of the butter, particularly if the ration produces tallowy butter.

Dairy Improvement Work

Review of 1927
By A. C. Baltzer

A REVIEW of dairy herd improvement associations in Michigan during 1927 brings forth a number of interesting facts.

A slight decrease in average production of milk and butter-fat per cow under test is noted in this year's results. The average D. H. I. A. cow under test in 1927 produced 7,536 pounds of milk and 294.3 pounds butter-fat. The highest average of milk and butter-fat production reached occurred in 1926 when the average D. H. I. A. cow produced 7,634 pounds milk and 301.9 pounds butter-fat.

Dairymen need not feel alarmed over this shrinkage of 98 pounds milk and 7.6 pounds butter-fat per cow because many factors influenced and probably caused this slight decrease. No doubt the sale of many desirable cows for milk production usage to other states, feed shortages, and pasture droughts resulted in decreasing the production per cow in this small way.

The lessons to be learned are: 1. That more attention needs to be given to the dairy herd in feeding and care throughout the year. 2. That plans be made to provide better pasturage, particularly sweet clover. 3. That grain be fed during the pasture season. 4. That greater care in the future should be exercised in the sale of any surplus live stock. Michigan dairymen cannot afford to continuously sell off the cream of their dairy herds.

Tester activities assisted in the placing of 220 pure-bred sires during 1927. This number of sires is ap-

proximately equal to the number of sires placed by testers during the last few years. Through the efforts of all extension agencies in Michigan 468 pure-bred sires were placed.

Number of D. H. I. A.'s that	1926	1927
Organized during the year	14	18
Disbanded during the year	18	17
Average number of cows per association	270.2	263.5
Average number of herds per association	25.0	23.0
Number cows culled as unprofitable	2596.0	2130.0
Average number of cows culled per association	25.9	20.3
Per cent of cows culled	9.42	9.6
Per cent of members using PB sires	90.0	92.3
Per cent of members using PB Holstein sires	52.9	47.5
Per cent of members using PB Jersey sires	19.9	21.8
Per cent of members using PB Guernsey sires	20.4	25.7
Per cent of barns whitewashed		42.8
Per cent of barns equipped with drinking cups		29.9
Per cent of barns equipped with tank heaters (no drinking cups)		35.3
Per cent of members using silos		87.3
Per cent of members feeding grain on pasture		76.6

Testing associations have not witnessed any decided growth nor has any decided loss in numbers occurred in recent years. The following groups of figures will show the standing in this respect giving the number of associations, number of herds and total cows under test on December 10 of each year since 1921:

No. Ass'ns	1921	1922	1923	1924	1925	1926	1927
No. Herds	11	25	70	105	108	104	105
Total Cows	242	496	1483	2641	2716	2603	2415
	1967	4936	16162	30506	29223	28633	28277

More than 7,500 herds have been under test during this period of seven years. These dairy herds under test at one time or another are demonstration dairy farms scattered throughout Michigan as continuous reminders to the dairymen and often many neighbors of profitable results accomplished through more efficient dairy practices. Only ten counties remain which have not had D. H. I. A.'s operating within the county during these seven years. These counties are: Keeweenaw, Baraga, Luce, Mackinac, Montmorency, Crawford, Roscommon, Clare, Benzie, and Lake.

Again, as in previous years, between 9% and 10% of the cows tested were found to be unprofitable. During 1927,

2,130 or 9.6% of the cows tested were found to be non-profit making cows. These cows are presumed to have been sent to the local butcher.

The census figures of 81 D. H. I. A.'s reported 1,861 farms through Michigan testers show that the acreage of alfalfa seeded on dairymen's farms increased 22% during 1927. The average acreage of alfalfa per dairy farm is 10.8 acres.

Similar figures from the same source show the increase in the seeding of sweet clover acreage, particularly for pasture purposes. Here the increase is 26.5% and the average sweet clover acreage per farm is 14.7 acres.

Reports received from 92 D. H. I. A.'s list 1,072 Michigan dairy herds which averaged above 300 pounds butter-fat productions. Diplomas have been received by this office for these herds, enrolling them in the national herd honor roll lists of the National Dairy Association. These diplomas are now in the Dairy Extension Office and word is being awaited from each testing association regarding their further distribution.

The second volume of the Record of Performance has been published. This volume contains the records of 1,050 Michigan cows and many dairy herds which have distinguished themselves through quality production.

In addition, the following figures and percentages will give further indications about the progress and activities of Michigan dairy herd improvement associations during the past year:

ON GROOMING HORSES

It is only human to like to be patted on the back. One of the pleasantest features of grinding out copy each week is the kind letters which we are continually receiving from readers of The Michigan Farmer. One such, written recently by Mr. R. S. Hudson, Farm Superintendent at the Michigan State College reads thus:

"I read the items in the Michigan Farmer contributed from Ingleside Farm each week with a great deal of interest. So far as I am concerned you made a home run this week when you put yourself on record as having

time to groom 'Old Dobbin.' 'Dobbin' is pretty apt to be neglected these days right along with the dairy cattle. I agree with you that both should be given some attention with grooming utensils.

"To tell the truth, I like your attitude toward horse affairs and you can know that here is one reader who likes to have you write regarding them. I am sure that this is a very opportune time to be injecting some horse news into our agricultural papers."

This letter is especially cherished because Mr. Hudson probably knows as much or more about the care of farm horses as any man in Michigan.

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No. 1 — with clover or alfalfa hay and corn silage.

Ground Corn, or Hominy, or Barley	300 lbs.
Ground Oats	300 lbs.
Wheat Bran	300 lbs.
Linseed Meal	200 lbs.

No. 2 — with timothy, bluegrass, or prairie hay and corn silage.

Ground Corn, Hominy or Barley	200 lbs.
Ground Oats	200 lbs.
Wheat Bran	200 lbs.
Linseed Meal	400 lbs.

Feed 1 lb. per day to each 3 or 4 lbs. of milk.

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Solve this Puzzle

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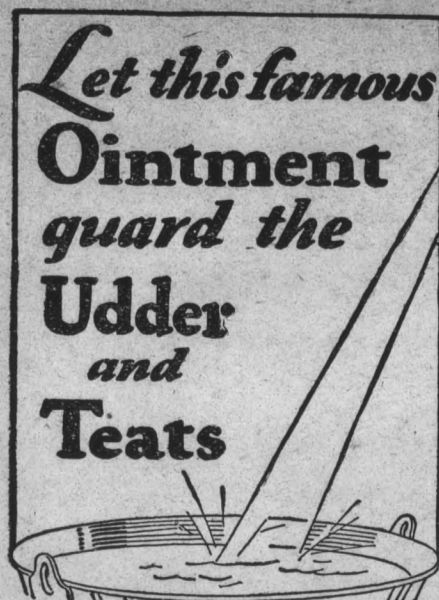
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Bred cows and heifers served by these sires are available for foundation stock.

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Reference: Northville State Savings Bank

HOLSTEINS Registered cows and heifers due to freshen in March, priced reasonable. Come and see them. B. B. REAVEY, Sls., Mgr., Tuscola Co., Holstein Association, Akron, Mich.

FOR SALE Ten high grade Holstein cows, tuberculin tested for several years. Never any reactors. GEORGE HEIDENFELDT, St. Clair, Mich., R. 3.

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Herd Sire, Tipperary Clyde 1331772. Grand Champion bull Tennessee State Fair 1927. Sire of 1st prize bull calf, 1st prize pair calves. 3rd prize get-of-sire, and reserve Junior Champion bull at Mich. State Fair 1927. Bull calves up to 8 mo's, old for sale, reds and roans out of cows with record up to 14,000 lbs. milk in one year.

FOR SALE Dual purpose Red Polled Bulls from 10 to 12 mos. old. BAT-FENFIELD BROS., Fife Lake, Mich.

KEEPING SILAGE FROM FREEZING

MANY farmers who have trouble with silage freezing, blame the type of silo, but careful observers believe that there is no noticeable difference among silos as to freezing. The trouble is due largely to the way the silo and silage is managed. How can freezing be prevented?

First of all, the silo must be kept tight, so that the air above the silage will act as a sort of insulation. The silo roof must be tight, the windows kept closed, the silo doors put back in place as the silage is fed down, only one or two doors being left open at the top of silage, and this opening must be closed with a heavy blanket or rug or a sack of straw which can be pulled into place when leaving the silo. A cover over the bottom of the chute will also help.

Then the silage must be handled properly. It should be kept higher in the center, and should be broken down two or three inches from the wall at the close of each feeding period. Two or three heavy rugs or blankets spread over the silage, especially around the walls, will help a great deal in preventing freezing from one feeding to the next. Any small amount of frozen silage pulled loose from the wall should be put at the center of the silo and covered with a rug or carpet or tarpaulin, and the natural heat from the silage will usually thaw it out before the next feeding period. The large body of silage has quite a lot of heat, which prevents deep freezing from the walls.

Considerable protection can be given silos at small expense and trouble, if, before cold weather, poles are set up three or four feet away, galvanized fencing tacked to these, and then the space between packed with hay, straw, or corn fodder. If these are 12 or 15 feet high they will cover the part which is usually fed out in bitter cold weather.—I. D.

ONTARIO ALFALFA SEED SHORT

(Continued from page 97)

State College has been testing the adaptability of a number of sources of alfalfa seed. Since a very high per cent of the alfalfa seed sown in Michigan comes from sources outside of the state, it is very important that the performance of the strain be considered before seed is purchased. A glance at the following data from work at our Experiment Station will show the great difference in the relative yielding ability of a few of the strains tested:

Yield Records of Alfalfa Seeded in 1921								
Given in Tons Hay Per Acre—12% Moisture								
Strain	Source	1922	1923	1924	1925	1926	1927	Avg.
Group I								
Hardigan	Michigan	5.58	7.21	7.85	3.12	3.93	3.83	5.25
Grimm	Idaho	5.63	7.09	7.68	2.60	3.28	3.10	4.89
Grimm	S. Dakota	5.56	6.63	7.41	2.53	3.26	3.05	4.74
Group II								
Common	Montana	5.11	6.39	7.36	2.52	3.00	2.78	4.52
Common	Utah	5.15	6.06	6.92	2.07	1.94	1.78	3.98
Common	Idaho	4.91	5.48	6.51	1.87	1.71	1.83	3.70
Group III								
Peruvian	Arizona	3.83	1.11	1.74	0.32	0	0	1.16
Common	Arizona	3.90	0.92	1.55	0.38	0	0	1.12

From the yields listed above and from other tests made by the Farm Crops Department, it is relatively easy to divide the strains of alfalfa seed into three main groups, according to their adaptation to Michigan conditions. Most of the seed available in Group I will be Grimm, however, some Hardigan will be available. In Group II, high altitude Utah Common will supply, by far, the greater proportion of seed available. None of the strains of Group III are adapted to Michigan conditions, however, there will be considerable seed of this group available.

A gorilla grows to be about five feet eight inches tall.

FEEDING NOTES

Animals fed exclusively on fats and carbohydrates cannot long survive, since there is a constant drain upon the supply of protein in the body; and when that is depleted life is impossible.

The milk secreted in the udder of the dairy cow differs entirely from the blood from which it originates. The casein and milk albumen in the milk cannot be duplicated elsewhere in the body of the dairy cow.

In the list of hays for cattle and sheep, alfalfa should be put at the top on account of its palatability and the high content of protein. With such a hay it is not difficult nor expensive to balance the ration.

Some sows yield about twice as much milk as do others. It is well to look carefully to this factor in brood sows, and to feed them for the maximum of milk production when nursing pigs.

For pigs weighing over 100 pounds the best results are obtained by feeding three pounds of skim milk to one pound of corn. For pigs under the above weight the quantity of skim milk can be advantageously increased.

TEN PER CENT MORE LAMBS ON FEED

ABOUT 4,740,000 head of lambs and sheep were reported on feed in the principal feeding states on January 1, 1928, by the United States Department of Agriculture. This was an increase of nearly 10 per cent over the 4,294,000 reported a year ago and slightly more than the 4,630,000 head fed two years ago. The corn belt has 193,000 fewer on feed than last year, while the western states have 640,000 more, mostly in Colorado. The average price at Chicago was \$14.30 in the first five months of 1927 and \$14.05 in the corresponding period of 1926. Since current prices are around \$12.75, it would appear that they have discounted quite fully the prospective gain in the supply.

WOOL TRADE OUTLOOK CONTINUES STRONG

BOTH domestic and foreign wool prices continue firm at recent advances. Boston quotes 48½ to 49 cents, grease basis, for fine to quarter-blood fleeces which compares with 44½ to 45½ at the start of 1927. Mill consumption of wool declined slightly in November but in the first 11 months of 1927, consumption of combing and clothing wools reached 323,000,000 pounds compared with 290,000,000 pounds in the same period in 1926. Imports of these two types in the same 11 months were 61,500,000 less than in 1926. This means that

stocks have been considerably depleted. Advances in goods prices in the last few weeks bespeak a healthy cloth trade and mill agents appear confident of active business in January. Contracting in the west still continues and close to 50,000,000 pounds probably have been tied up by this time. In Montana and Texas, sales up to 40 cents have been reported. It is estimated that American purchases in southern hemisphere markets since the opening of the season in early fall total only 16,000,000 pounds, or half as much as a year ago and one-fourth of the quantity bought two years ago. Over half of the Australian clip has been sold, 70 per cent of the South African clip, 70 per cent of the Uruguay clip and 50 per cent of the first clip in the Argentine. Stocks still available in world markets are quite moderate.

this hole costs millions



Swine killed on highways; dairy cattle dead from bloat; pure bred mixed with scrub sires; bad blood between neighbors—these are only a few of the many penalties a poorly fenced farm must bear.

RED BRAND FENCE

"Galvannealed"—Copper Bearing

Can't be rooted up from the bottom, or broken down from the top, when properly erected. Full length, picket-like stays, wavy strands and can't-slip knots keep it hog-tight and bull-proof.

No other fence can match "RED BRAND." We put copper in the steel, like old-time fence. This adds years of extra wear. Our patented "Galvannealing" process welds on an extra heavy coating of zinc. This keeps rust out and long life in.



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Calves, Yearling & Two's; Hereford Steers & Heifers. Beef Type, dark reds, good grass flesh, most all bunches dehorned, each bunch even in size and show good breeding. Choice Herefords are usually market toppers when finished. Few bunches T. B. tested. Will sell your choice from any bunch. State number and weight you prefer 450 to 1000 lbs.

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Young bulls and bred heifers, priced for quick sale. Duchess breeding, high milk and test records. Herd under state and Federal supervision. Sixty days retest allowed. Your success is our success. F. W. JOHNSON & SONS, Box 26, Custer, Mich.

Milking Shorthorns Central Mich. Shorthorn Breeders' Assoc. offers young bulls, heifers, and cows, fresh and coming fresh, priced right. Oscar Skinner, Sec., Gowen, Mich.

FOR SALE Graded Dual Purpose Shorthorn bulls, 6 and 12 mos., sired by Laddie Boy by Roan Archer. FAIRFIELD FARMS, Zeeland, Mich., R. 3.

TWELVE YOUNG JERSEY COWS for sale. Tried sire, some young bulls and heifers of Tiddleywink blood. They combine production and type. Send for catalog. C. C. Creek, Montpelier, Ohio.

For Sale—Polled Shorthorn Calves

Either sex, milk and beef, Federal tested. PAUL QUACK, Sault Ste. Marie, R. 2, Mich.

Red Polled A few choice calves of both sex for sale. ROYSTAN STOCK FARM, Will Cottle, West Branch, Mich.

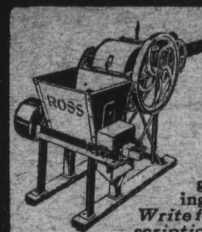
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This saves time and labor.



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Use the famous Cone-Shape
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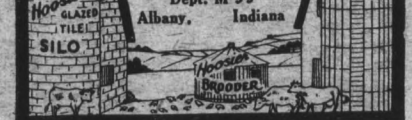
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HOGS

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FOR SALE—Duroc Gilts of type and quality, bred
to High Orion No. 265227. Also a few spring
boars at right prices. Shipped C. O. D. on ap-
proval. W. E. BARTLEY, Alma, Mich.

DUROC JERSEY BRED SOW SALE, Feb. 1st.
Our herd won 15 firsts at Michigan State Fair
1927. Wonderful offering. Write for catalog.
MILLER and DICKINSON, Montpelier, Ohio.

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For Sale—Reg. O. I. C. April & May Pigs
best of breeding. Shipped on approval. FRED W.
KENNEDY & SONS, R. 1, Chelsea, Mich.

O. I. C's. Good last spring pigs, not akin
also fall pigs, recorded free.
OTTO SCHULZE & SONS, Nashville, Mich.

Chester White Gilts with quality. Have a
few March gilts bred for
March farrow. Also fall pigs. Will sell cheap.
NEWMAN'S STOCK FARM, Marietta, Mich.

CATTLE ON FEED JANUARY 1

THE number of cattle on feed for
market in the eleven Corn Belt
States was 6 per cent smaller on
January 1, 1928, than on January 1,
1927, according to the feeding estimate
of the United States Department of
Agriculture. All states east of the
Missouri River had a smaller number
on feed than last year, but there was
a considerable increase in numbers on
feed in Kansas and Nebraska, where
the corn crop was unusually large.

In the Western States the number
on feed January 1 was about 70,000
head, or 16 per cent, smaller than
last year. All states in this area had
a smaller number on feed than last
year, but the largest reductions were
in the states west of the Continental
Divide where the decrease was nearly
25 per cent for the area as a whole.
In Colorado, the principal western
feeding state, the number this year
was only about 5 per cent smaller
than last year's large total.

The movement of stocker and feed-
er cattle through markets into the
Corn Belt States for the six months,
July to December, was about 11 per
cent smaller in 1927 than for this pe-
riod in 1926, and the smallest for the
period since 1921. During November
and December the movement was
larger than for the same months in
any of the previous three years. This
heavy late movement reflected the in-
creased production of corn from what
seemed probable earlier in the season
and the steady advance in fat cattle
prices.

All available information indicates
that the cattle on feed January 1 this
year averaged lighter in weight than
last year and the lightest for many
years. Feeders reporting on the
weights of cattle on feed show a
larger proportion of cattle under 750
pounds and of calves than last year.
Records of shipments from four prin-
cipal feeder markets show that the
number of feeders weighing over 1,000
pounds was only a little over one-half
as large from July to December, in-
clusive, this year as last and only
about one-third as large as in 1924,
while shipments of steers under 700
pounds and of calves were almost as
large as last year.

INTRODUCING PURE-BRED DAIRY Sires

THE pure-bred dairy sire is the
greatest single factor in increas-
ing the average production of dairy
cows. This fact is generally recog-
nized; yet 75 per cent of the dairy
bulls in service in the United States
are either grades or scrubs. Further-
more, those states or sections having
the highest percentage of pure-bred
dairy sires are also leading in aver-
age milk production.

Various plans to introduce pure-bred
sires have been tried, such as county-
wide and state-wide scrub-bull-eradic-
ation campaigns, co-operative bull as-
sociations, bull clubs, better sire trains,
and others.

A county-wide scrub-bull-eradication
campaign is an organized effort within
a county to inform every dairyman of
the importance of breeding only to a
good pure-bred bull and to make defi-
nite arrangements to replace inferior
bulls with pure-breds that are well
grown, of good conformation, and
from dams with high yearly milk and
butter-fat records.

DAIRYMEN INTERESTED IN SUR-PLUS LEGISLATION

A CONFERENCE of the Corn Belt
farm relief committee and the
executive committee of the National
Co-operative Milk Producers' Federa-
tion has been held for the purpose of
considering surplus disposal legisla-
tion. Several dairy organizations have
indorsed the McNary-Haugen plan.

The Surge Milker

The Only Milker

that 1 gives the cow's teat the Real TUG
of the calf—
2 and like the calf—TUGS harder and
harder as the cow milks out—
3 and like the calf—gives EACH cow
just the TUG she needs!

Milks Like a Calf!



The Surge Milker does MORE than other milkers.
The Surge finishes the job; other milkers only
start it. Other milkers secure the milk by suc-
tion; some add a release or massaging ac-
tion. The Surge does both! And then ADDS
The Real Tug of the Calf! Yes, and like the
calf—The Surge TUGS harder and harder
as the cow milks out. AND—a quick, easy
Surge Adjustment enables YOU to give each cow
just the suck and TUG she needs to get ALL the
milk. No other milker does or can do ALL THIS—which
accounts for The Surge's well known ability to milk cows
like no other machine has ever milked cows before.

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your barn. You'll be
surprised how little
it'll amount to. Mail
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CHESTER WHITES fall pigs, service boars
and bred sows of first
quality. F. W. ALEXANDER, Vassar, Mich.

Registered O. I. C. Gilts bred for April and
May farrow. H. W.
MANN, Dansville, Mich.

FOR SALE Poland China boars of March
and April farrow. Also some
choice bred gilts, due to farrow in March and April.
Every one immuned for cholera. WESLEY HILE,
Ionia, Mich.

L. T. P. C. GILTS bred for March and
April. Weighing up
to 265 pounds, 35 and 40 dollars each, price up to
to Feb. 15. Satisfaction guaranteed. JAMES G.
TAYLOR, Belding, Mich.

BIG Type Poland China Gilts bred to son of Allert-
on's New Hope, 14th yr. Prices reasonable. F.
L. Miers, Berrien Center, Mich., R. 1.

FOR SALE Poland China Bred Gilts and
Milking Shorthorn bull calves.
CLAIR I. BROWN, Kalamazoo, Mich., R. 10.

LARGE TYPE POLAND CHINAS Spring Pigs,
either sex for sale. Also Brown-Swiss Bulls.
A. A. Feldkamp, R. No. 2, Manchester, Mich.

A FEW good Hampshire spring boars at a
bargain. Place your order for bred
gilts. JOHN W. SNYDER, St. Johns, Mich., R. 4.

SHEEP

BRED EWES

263 Choice extra large Delaine ewes, 91 yearlings,
balance 2 and 3 yr. olds. Bred to registered Shrop-
shires. Must sell as we are overstocked. D. L.
CHAPMAN & SON, S. Rockwood, Mich.

SHROPSHIRE Flock of 14 choice young
Reg. ewes bred to an im-
ported Buttar Ram. Priced right. D. L. CHAP-
MAN & SON, S. Rockwood, Mich.

A FEW bred Karabul ewes for sale, the
right fur bearing kind. ANGUS
HOME STOCK FARM, Davison, Mich.

DELAINE EWES Registered. Bred.
F. H. RUSSELL, R. 3, Wakeman, Ohio.

WILL SELL a few bred Registered Hampshire
ewes of all ages. JOHN B.
WELCH, Ionia, Mich., R. 1.

HORSES

FOR SALE A coming three-year-old
Belgian stallion, a splendid
individual. HILLCREST FARMS, Kalamazoo, Mich.

FOR SALE Belgians, Stallion Roan Bay
and Sorrels, coming four, five
and six. ERIAS SNIDER, Goshen, Ind.

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THE LATEST MARKET REPORT



GRAIN QUOTATIONS.

Tuesday, January 24

Wheat.

Detroit—No. 2 red at \$1.43; No. 2 white \$1.40½; No. 2 mixed at \$1.40½.
Chicago—March \$1.30½; May \$1.31; July \$1.27½.
Toledo—Wheat, No. 2 red at \$1.43½ @ \$1.44½.

Corn.

Detroit—No. 2 yellow 97c; No. 3 yellow 95c; No. 4 yellow 93c.
Chicago—March 88c; May 91½c; July 92½c.

Oats.

Detroit—No. 2 Michigan 62c; No. 3 white 60c.
Chicago—March 54½c; May 56c; July 52½c.

Rye.

Detroit—No. 2, \$1.18.
Chicago—March \$1.10½; May 1.09½; July \$1.04½.
Toledo—\$1.18.

Beans.

Detroit—Immediate and prompt shipment \$6.45 f. o. b. shipping points.
New York—Pea domestic at \$6.50 @ \$6.95; red kidneys \$7.50 @ \$8.25 to the wholesalers.
Chicago—Spot navy beans, Michigan choice, hand-picked, in sacks at \$6.45 @ \$6.50; dark red kidneys \$7.75.

Barley.

Detroit—Malting 97c; feeding 94c.

Seeds.

Detroit domestic seeds:—Cash clover \$18.55; February \$18.70; March \$18.65; cash alsike \$16.25; February \$16.40; March \$16.55; timothy at \$2.05; March \$2.15.

Hay.

Detroit—No. 1 timothy, \$13.00 @ \$14.00; standard \$12.50 @ 13. No. 2 timothy \$10.00 @ 11.00; No. 3 light clover, mixed \$13 @ 14; No. 4 clover \$11.50 @ 12.50; wheat and oat straw \$10.00 @ 11.00; rye straw \$11 @ 12.00 alfalfa hay, No. 1 to choice at Chicago, \$24.00 @ 26.00.

Feeds.

Detroit—Winter wheat bran at \$40; spring wheat bran at \$39; standard middling at \$39; fancy middling at \$43; cracked corn at \$43; coarse corn meal \$41; chop \$40 per ton in carlots.

WHEAT.

For over a month, fluctuations in wheat prices have kept within an unusually narrow range. Nothing has occurred in this period to cause any alarm on the part of either buyers or sellers and prices have been on the approximate level justified by supply and demand. Foreign markets have been moving sideways for a still longer time as the May delivery at Liverpool has kept within a seven cent range since early in September.

Dry weather still prevails in the southwest and there is a possibility of fairly large winter abandonment as a result. Texas has had some rain but the area to the north still needs a good drenching. Also, the crop elsewhere has been subjected to low temperatures without adequate snow cover. A crop scare may prove to be

the market factor which will offset the big acreage and the rather large stocks in North America.

RYE.

Foreign demand for rye has been rather slow recently. The visible supply has increased to 3,407,000 bushels, but this compares with 12,856,000 bushels a year ago and an average of 15,700,000 bushels at this time in the last five years.

OATS.

Oats prices have been swinging over an extremely narrow range for several weeks. Owing to the small stocks on farms and at terminals, oats prices seem likely to reach a higher level before the next crop is harvested, but no one can say just when the advances will take place.

CORN

Corn prices have shown strength in the last week as a result of some improvement in export demand. This has helped to reduce the pressure from the winter movement. Apparently, Argentine supplies are running low as prices in Buenos Aires have advanced sharply in the last two months and United States markets are now on a competitive basis.

The movement of corn from first hands has not become excessive but it is running heavier than a year ago and producers appear willing to sell rather freely on small advances in price. At the same time, domestic demand is much broader than a year ago and the export situation promises to help keep the slack out of the mar-

ket. Stocks at terminals are already large, but it may be that demand will be broad enough to prevent much further accumulation during the winter.

BARLEY.

Barley prices have been strong with further export sales. Foreign trade observers estimate that 15 million bushels more will be needed from the United States up to midsummer. Stocks at terminals are moderate.

EGGS.

The fresh egg market has advanced during the past week even in the face of increasing production. The market at present prices, which are the highest at the corresponding time since 1921 with the exception of 1925, is in a sensitive position, and adjustments to larger supplies from this time on may be sudden and drastic. The shortage in storage stocks is believed to offset some of the usual upsetting effects of the first evidence of the approaching spring flush of fresh egg production. However, prices are expected to work from 30 to 40 per cent lower during the next three months before they reach the spring low point.

Chicago—Eggs: fresh firsts 42½c; extras, 50 @ 51c; ordinary firsts, 35 @ 40c; dirties, 28 @ 32c; checks, 28 @ 31c. Live poultry: Hens 22½c; capons, 28 @ 30c; springers, 26c; roosters, 19c; ducks, 22c; geese 19c; turkeys, 28c. Detroit—Eggs: Fresh receipts, best quality, 42½ @ 44½c; dirties and checks, 23 @ 26c. Live poultry: Heavy springers, 27c; medium springers, 26 @

27c; heavy hens, 27c; light hens, 22c; roosters, 16c; geese, 7 lbs. up, 20 @ 21c; ducks, large white, 30c; turkeys, 35 @ 38c.

BUTTER.

Increasing supplies of fresh butter at a time when dealers are taking on only enough stock to meet actual needs, resulted in the butter market working lower again last week. Prices are more than 10 per cent lower than at the high point late in December. The break in the cold weather has stimulated production and the butter output is increasing faster than at this time a year ago. Imports of foreign butter have been negligible recently, but the possibility of heavy shipments from abroad is a check on any improvement in the domestic market. Consumption probably will be stimulated by the lower prices which dealers are beginning to carry on to consumers, so that the increased make can be absorbed without forcing prices much lower.

Prices on 92 score creamery were: Chicago, 46c; New York, 47½c; Detroit, 42 @ 45c in tubs.

FEEDS.

The feed market remained firm last week although demand became less urgent. Stocks in consumers' hands are light, according to dealers, so that another spell of cold weather would precipitate fresh buying orders. Production, particularly of wheatfeeds, is increasing, but so far, offerings have been readily absorbed.

Chicago—Bran, \$33.25; standard middlings, \$32.50; hominy feed, \$37; gluten feed, \$38.70; old process oil meal, \$50; tankage, \$75; cottonseed meal, 43%, \$52.50.

BEANS.

The bean market remains strong with C. H. P. whites quoted at \$6.60 per 100 pounds, f. o. b. Michigan shipping points. Farmers continue to follow a holding policy so that current receipts are not burdensome and country markets are firm with prices tending upward.

WOOL

Wool prices advanced further in the last ten days. Choice Ohio delaine wool sold at \$1.20, scoured basis, and asking prices are up to \$1.25 to \$1.30, or practically equal to Australian wool of similar grade, duty paid. The small domestic supplies and firmness in world markets are the dominating factors. Unsold stocks of wool in Boston early in January were 55,000,000 pounds, or about 10,000,000 pounds more than generally expected, but they compare with 81,000,000 pounds a year ago, when holdings in the interior were much smaller. Demand for goods has not been quite as active recently and the rise in raw wool has narrowed the manufacturing margin to a point where some tendency to curtail mill consumption may take place. Even with this curtailment, it seems doubtful if the rise in wool prices will be checked until they have advanced still further.

GRAND RAPIDS

Potatoes, 90c @ \$1 bu; onions, \$1 bu; parsnips, \$1 bu; radishes, 75 @ 90c doz. bchs.; carrots, 75c bu; cabbage, 60 @ 75c bu; leaf lettuce, 14 @ 15c lb; apples, \$1.50 @ 3.25 bu; wheat, \$1.23 bu; rye, 90c bu; buckwheat, \$1.50 cwt; beans, \$5.80 cwt; pork, 10 @ 12c lb; veal, 11 @ 16c lb; lamb, 17 @ 22c lb; beef, 6 @ 16c lb; chickens, 15 @ 24c lb; hens 14 @ 24c; eggs, 40 @ 43c doz; butter-fat, 49c lb.

DETROIT CITY MARKET

Apples 80c @ \$5.00 bu; bagas, 75c @ \$1.00 bu; beets 50 @ 90c bu; cabbage 50 @ 75c bu; curly cabbage 50c @ \$1.00 bu; red cabbage 70c @ \$1.00 bu; carrots 50 @ 75c bu; 50 @ 75c doz; celery 50c @ \$1.00 doz. bchs; eggs, wholesale, white, 50 @ 55c doz; brown 45 @ 50c doz; retail 50 @ 55c doz; leaf lettuce 50 @ 75c; dry onions 75c @ \$1.25 bu; root parsley 75c @ \$1.00 bu; curly 35 @ 40c doz. bchs; parsnips 90c @ \$1.50 bu; pears 75c @ \$1.25 bu; potatoes 60c @ \$1.15 bu; hens, wholesale, 25 @ 30c lb; retail 30 @ 32c lb; broilers, wholesale, leghorns, 22 @ 24c lb; rocks 26 @ 30c lb; retail 30 @ 32c lb; ducks 26 @ 30c lb; geese 25 @ 28c lb; dressed poultry, retail, 30 @ 35c lb; ducks 35 @ 40c lb; black radishes 75c @ \$1.00 bu; horse radish \$2.00 @ 5.00 bu; Hubbard squash \$1.50 @ \$2.00 bu; spinach \$1.75 @ 2.00 bu; turnips \$1.25 @ 2.00 bu; vegetable oysters 75 @ 90c doz. bchs; butter 60c lb; dressed hogs 14 @ 16c lb; pumpkins 75c @ \$1.00 bu; veal 19 @ 20c lb.

Live Stock Market Service.

Tuesday, January 24

DETROIT

Cattle.

Receipts 235. Market steady.
Good to choice yearlings
dry-fed \$11.00 @ 13.75
Best heavy steers, dry-fed 10.25 @ 13.00
Handy weight butchers.. 9.00 @ 11.00
Mixed steers and heifers. 9.00 @ 10.00
Handy light butchers.... 7.50 @ 9.50
Light butchers..... 6.00 @ 8.50
Best cows..... 7.00 @ 9.00
Butchers cows..... 6.00 @ 7.00
Cutters..... 5.50 @ 5.75
Canners..... 4.75 @ 5.25
Choice light bulls..... 6.00 @ 9.00
Bologna bulls..... 7.00 @ 8.50
Stock bulls..... 6.00 @ 7.75
Feeders..... 7.00 @ 9.50
Stockers..... 7.00 @ 8.50
Milkers and springers... \$75.00 @ 115.00

Calves.

Receipts 511. Market opening steady.
Best..... \$16.50 @ 17.00
Others..... 7.50 @ 16.00

Sheep and Lambs.

Receipts 1,214. Market steady.
Bulk good lambs..... \$ 13.00
Best lambs..... 13.50 @ 13.75

Fair lambs..... 11.00 @ 12.50
Light lambs..... 8.00 @ 10.00
Fair to good sheep..... 6.00 @ 7.25
Buck lambs..... 7.50 @ 12.25
Culls and common..... 2.50 @ 4.00

Hogs.

Receipts 2,503. Market mixed hogs 10c lower, others steady.
Pigs..... \$ 5.50 @ 5.75
Mixed hogs..... 8.60
Lights..... 8.00
Roughs..... 6.50 @ 6.75
Good Yorkers..... 8.60
Stags..... 5.50 @ 6.00
Extreme heavies..... 7.00 @ 8.00

CHICAGO.

Hogs

Receipts 52,000. Early market mostly 10c lower than Monday's average; stots off more; big packers bidding 10 @ 20c lower; early tops \$8.30; strictly choice hogs, 160-210-lbs., at the top of the market; bulk good and choice 170-210-lb. average \$8.15 @ 8.30; 220-300-lb. \$8.05 @ 8.25; most 130-150-lbs. \$7.50 @ 8.10; pigs \$7.00 @ 7.50; packing sows \$7.25 @ 7.40.

Cattle

Receipts 9,000. Market fed steers slow, steady, lower grades predominating; she stock steady to weak; light yearling fully steady; bulls strong; vealers strong to 50c higher; good to choice kind, scaling 140-lbs. up, showing maximum advance; most steers \$14.50 down to \$12.50; best yearlings \$16.50; stockers and feeders firm at \$10.50 @ 12.00; best light feeders \$12.50; light vealers to packers largely \$13.00 @ 14.00; shippers \$15.00 @ \$16.00.

Sheep and Lambs

Receipts 15,000. Market fat lambs active, strong, 15c higher than Monday; early bulk good to choice \$2-88-lb. kind \$13.75 @ 14.00, asking \$14.00 @ \$15.00 on choice; nothing doing on heavies; sheep firm; bulk fat ewes \$7.00 @ 7.25; choice light weights absent; feeding lambs strong; bulk good 65-72-lb. feeders \$13.50 @ 13.75.

BUFFALO.

Hogs

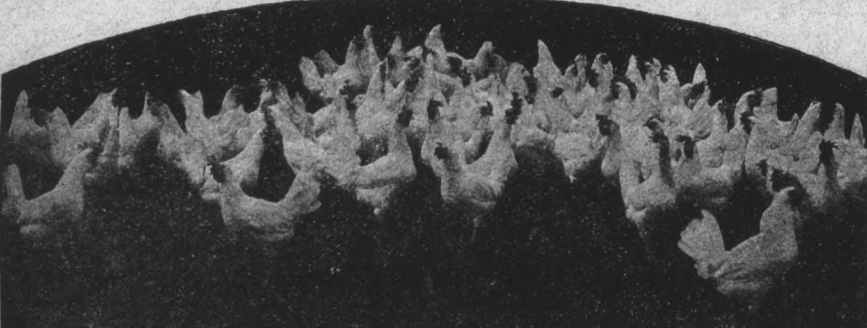
Receipts 800. Hold over 1,475; market steady, 10c higher; bulk 160-250-lbs. \$9.00; few 175-lbs. \$9.10; 220-300-lbs. \$8.50 @ 8.55; pigs \$8.00 @ 8.50, few 140-lbs. \$8.75; packing sows \$7.00 @ 7.50.

Cattle

Receipts 250. Market around 25c higher; tops \$16.75; culls and common \$9.00 @ 12.50.

Sheep and Lambs

Receipts 200. Market strong; few good lambs \$14.00; culls and common around \$12.00; fat ewes \$6.00 @ 7.50.



PURE HOLLYWOOD WHITE LEGHORNS

Baby Chicks, Eggs, Pullets, Hens

The stock in this mating is direct from the Hollywood Poultry Farm, and is of the same foundation that has made such wonderful records in recent years in many Egg Laying Contests.

HIGH EGG BRED BLOOD LINES

The Hollywood Cockerels we produced last year were direct from 200 to 208 Egg Hollywood Stock. These Hollywood males were mated to our Contest Quality Breeders of exactly the same strain that produced 2,393 eggs in 51 weeks at the 1926 Michigan International Egg Laying Contest. Hens weigh from four to five pounds. Contest Pullets produce pure white eggs averaging 2½ ounces to the dozen.

This mating produced pullets that averaged over \$3.00 net profit each for their owner, when fed without lights.

FREE 1928 CATALOG

Send for copy of our Big, New 1928 Catalog. Tells the story of our breeding methods and how we have built up a profit making, high egg laying, strain. Gives facts about how to raise chicks for best results.

Anconas, S. C. White Leghorns, Barred Plymouth Rocks
WYNGARDEN FARMS & HATCHERY, Box M ZEELAND, MICHIGAN



LAMB RECEIPTS DECREASE

LIGHTER receipts in the last week caused a slight upturn in lamb prices. Since January 1, arrivals at 7 leading markets totalled only 626,000 head compared with 625,000 head a year ago in spite of the fact that numbers on feed are about 10 per cent greater than last year. The movement from Colorado is increasing and is expected to reach peak volume about the middle of February. The fact that many lambs are either overweight or underfinished is an adverse phase of the trade. Prices seem likely to fluctuate around the present level for the next two or three months.

EUROPEAN HOG SUPPLIES LARGE

WHILE consumptive demand for pork is active, receipts of hogs are so liberal that prices of product are comparatively soft. With prospects of ample receipts of hogs right along, speculative demand is not giving the market much help. Exports of both meats and lard since January 1 have been about the same as a year previous, but the sharp decline in foreign takings at that time played a large part in the decline in hog prices in 1927. Reports from Europe indicate that native supplies of hog products will continue rather large for several months yet.

Save losses in chick raising by reading the Michigan Farmer Chick Bulletin. You can obtain it by sending self-addressed stamped envelope to Poultry Department, Michigan Farmer, Detroit, Mich.

FOR INFLAMED JOINTS

Absorbine will reduce inflammation, swollen joints, sprains, bruises, soft bunches. Quickly heals boils, poll evil, quitters, fistula and infected sores. Will not blister or remove hair. You can work horse while using. \$2.50 at druggists, or postpaid. Send for book 7-S free.



From our files: "Fistula ready to burst. Never saw anything yield to treatment so quickly. Will not be without Absorbine."

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.
W. F. YOUNG, Inc. 468 Lyman St., Springfield, Mass.

100 PEACH TREES \$12.50

A RARE OPPORTUNITY to buy unusually thrifty 3 ft. peach trees at this bargain price. Guaranteed stock. Wide selection of varieties. Our free 1928 catalog lists many unusual bargains on Fruit Trees, Shrubs, Vines and seeds.

ALLENS NURSERY & SEED HOUSE
BOX 7, GENEVA, OHIO

AUCTION SALE

Wednesday, February 1st

commencing 9:30 o'clock. General sale, 5 horses, 20 head registered and high grade Holsteins and farm tools. MILTONE E. ARMSTRONG, 3 miles west and 1 1/4 miles south of Cedar Springs, Mich.

\$10 Auction Course Free

Postal will bring it. 200 Auction Sayings \$1.00. AMERICAN AUCTION COLLEGE, Kansas City, Mo.

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.

Rate 9 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 7 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order. Live stock advertising has a separate department and is not accepted as classified. Minimum charge 10 words.

Words	One time	Four times	Words	One time	Four times
10.....	\$0.90	\$3.60	26.....	\$2.34	\$7.28
11.....	.99	3.96	27.....	2.43	7.56
12.....	1.08	4.32	28.....	2.52	7.84
13.....	1.17	4.68	29.....	2.61	8.12
14.....	1.26	5.04	30.....	2.70	8.40
15.....	1.35	5.40	31.....	2.79	8.68
16.....	1.44	5.76	32.....	2.88	8.96
17.....	1.53	6.12	33.....	2.97	9.24
18.....	1.62	6.48	34.....	3.06	9.52
19.....	1.71	6.84	35.....	3.15	9.80
20.....	1.80	7.20	36.....	3.24	10.08
21.....	1.89	7.56	37.....	3.33	10.36
22.....	1.98	7.92	38.....	3.42	10.64
23.....	2.07	8.28	39.....	3.51	10.92
24.....	2.16	8.64	40.....	3.60	11.20
25.....	2.25	9.00	41.....	3.69	11.48

Special Notice

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

REAL ESTATE

IN THE SAN JOAQUIN VALLEY of California, general farming is a paying business, feeding millions of people in towns and cities. Alfalfa combined with dairying, hogs and poultry, yields a good income. A small one-family farm, with little hired labor, insures success. You can work outdoors all the year. Newcomers welcome. The Santa Fe Railway has no land to sell, but offers a free service in helping you get right location. Write for illustrated San Joaquin Valley folder and get our farm paper, "The Earth," free for six months. C. L. Seagraves, General Colonization Agent, Santa Fe Railway, 912 Railway Exchange, Chicago.

GRAND MONEY-MAKING FARM—620 Acres Fully Equipped. Good custom saw mill trade; near village. Valuable camp sites on mile-long lake; excellent 12-room house, large barn, 6-room tenant house, etc. Only \$8,900 with 3 horses, 15 cattle, 26 sheep, hogs, poultry, machinery, crops; part cash. Pictures and details pg. 42 big catalog. Copy Free. Strout Agency, 1105-BC Kresge Bldg., Detroit, Mich.

GRAB THIS BARGAIN—45 acre farm with good 4-room house, flowing well, out buildings, 90 rods high bank river front, 1 1/2 miles to beautiful Ross Lake, good fishing, and City of Beaverton, Mich. Price \$1,000. U. G. Reynolds, sells farms, Gladwin, Mich.

AN OPPORTUNITY RARELY OFFERED—to secure improved farm homes, 80 acres up, direct from owner, no profits, no commission; in famed dairy section Wisconsin; broad and fertile State Minnesota; Rich prairie soil, North Dakota; fertile lands near best markets in Michigan. \$200 to \$1,000 cash. Balance 36 years at 5%. Write today. Federal Land Bank, St. Paul, Minn., Dept. 33.

BARGAIN OF BARGAINS 100 acres clay loam farm near Gladwin, Mich., small stream, watered pasture, ideal stock farm. \$4,000, basement, barn and silo, two dwellings, all go to make bank settlement for \$6,000. U. G. Reynolds, sells farms, Gladwin, Mich.

STANISLAUS COUNTY, California—where farmers are prosperous. Crops growing all year round. Land priced low. Write free booklet. Dept. 6, Stanislaus County Development Board (County Chamber of Commerce), Modesto, California.

110-ACRE dairy and potato farm for sale on M-44, good buildings. Silo. Glenn Gould, Admstr., Ionia, Mich.

IDEAL DAIRY FARM—360 acres near Gladwin, Mich. \$9,000 takes it. \$3,000 cash required. U. G. Reynolds, sells farms, Gladwin, Mich.

WANTED FARMS

WANTED—To hear from owner of farm or unimproved land for sale. O. Hawley, Baldwin, Wis.

FARMS FOR RENT

FOR RENT—Ideally watered 1,350 acre stock farm. Big barns, two houses. Terms to suit. 80 miles North Grand Rapids. L. J. Hlavacek, 5451 North Spaulding, Chicago, Illinois.

MSCELLA NEOUS

ATTENTION LODGES, CHURCHES—I have 150 double folding chairs, a full line of dishes and 7 10-foot tables. Also lighting fixtures for sale at an attractive price. Call at my expense. Harry C. Robinson, Phone 7, Plymouth, Mich.

125 GOOD WHITE ENVELOPES and 125 full size unruled Letter Heads all neatly printed and pre-paid, one dollar. Money back if wanted. Other good printing at low prices. Address, The Braytons, Freeport, Michigan.

WINDOW CURTAINS—Genuine linen net. Very new, durable, artistic. Will harmonize with any color scheme. \$2.95 per pair. Postage prepaid. L. M. Adix, 2879 Buckingham, Berkeley, Mich.

OUR 1928 CATALOG just from press. 84 pages showing Largest Line of Poultry Supplies in the World. (Over 300 items). Write today for your copy Free. Brower Mfg. Co., C-27, Quincy, Ill.

BIG BARGAIN—Send \$2, receive postpaid 100 double sheets and 100 envelopes. Hammernill Bond, each printed with name, route, post office address. J. W. Barr Printing Co., Charlotte, Mich.

VIRGIN WOOL YARN for sale by manufacturer at bargain. Samples free. H. A. Bartlett, Harmony, Maine.

FOR SALE—Triple Unit Nickel Bean Picker, new. Wasta Huber, Gladwin, Mich.

PURE HONEY—Five lb. pail \$1 postpaid. Homer Buzzard, Fenton, Mich.

WANTED

WANTED—Comb Honey in large quantities. Joseph Milnarich, 34 East Charlotte, Ecorse, Mich.

EXCHANGE

TO TRADE for a small, well improved farm, a fine forty bbl. flour mill, 20 ton feed mill, well located, forty-five miles from Detroit. Cheap electric power. Write Box 133, Michigan Farmer, Detroit.

EDUCATIONAL

BIG PAY JOBS open in auto and tractor work. I'll train you in a few weeks so you can earn \$35.00 to \$75.00 a week to start. Qualify as an expert and make \$100 to \$200 a week or operate your own garage or service station. No books—no printed lessons. Work with real tools and real equipment. Age no barrier. Little schooling needed. Write today for big free auto book and remarkable tuition offer, which includes board and railroad fare to Cincinnati or Cleveland. Investigate; this is the opportunity of a lifetime. Write today—a postal will do. McSweeney Auto Schools, 81-AS, McSweeney Building, Cincinnati, Ohio or Cleveland, Ohio.

FARM MACHINERY

HUMMER—SATTLEY IMPLEMENTS: Plows, Disc, lever, tandem and tractor harrows. Spreaders, cream separator, cultivator, rotary hoe, etc. Ask for catalogue. Seth S. Bean, Jackson, Mich.

FOR SALE—at all times, repairs for Moline Tractors, all models. Mann Transfer & Storage Co., 223 W. South, Indianapolis, Ind.

FORDSON CLUTCH THROW-OUT LEVER. \$1.50 prepaid. J. A. Weaver, Sec., Kutter Mfg. Co., Bryan, Ohio.

PET AND LIVE STOCK

REGISTERED FOXES—Write for ranching offer, 100% increase guaranteed. Booklet; terms. Breeder Agents wanted. Cleary Bros., Empire Bldg., Seattle Washington.

FERRETS—Over thirty years experience, white or brown, females \$5.50 each, males \$4.75 each. Will ship C. O. D. Instruction book free. Levi Farasworth, New London, Ohio.

BOYS, start your own business. Chinchilla Rabbits are very profitable, unequalled for fur and table. Pedigreed Chinchillas either sex, twenty dollars delivered, trios, two does one buck, fifty dollars delivered cash with order. Money refunded, less express charges, immediately if rabbits not satisfactory when received. Wm. Reed, Lapeer, Mich.

COLLIE PUPPIES. Exceptionally well-bred, carrying the blood lines of America's finest collies. Specially priced. C. M. Bedinger, Berrien Springs, Mich.

RABBITS—Make Big Profits with Chinchilla Rabbits. Real money makers. Write for facts. 892 Conrad's Ranch, Denver, Colorado.

PURE-BRED FLEMISH GIANT RABBITS, unrelated pair, 3 months old, \$4.50. Leonard Norton, Three Rivers, Mich., R. 3.

CHINCHILLA RABBITS. Excellent foundation stock. D. Hale Brake, Stanton, Michigan.

MATTRESSES

MATTRESSES made any size, low factory prices. Catalog free. Peoria Bedding Company, Peoria, Ill.

FRUIT TREES AND NURSERY STOCK

MASTODON LARGEST EVERBEARING STRAWBERRY, 100 plants, \$2.00; 300, \$5.00; 1,000, \$12.50; 1,000 Champion \$8.50; 200, \$2.50; 1,000 strawberry plants \$3.00, Gibson \$3.75; Big Joe, Cooper, Premier, \$5.00; 1,000 2-year Grape plants \$20.00; 100, \$4.00; 100 Raspberry or Blackberry \$2.25. Shrubs, asparagus, bulbs, thrifty well rooted plants guaranteed. Catalog. Westhanser's Nurseries, Sawyer, Mich.

LYMAN'S GRIMM ALFALFA SEED. Buy direct from the introducer. All seed Scarcified, necessitating less per acre. Lyman's Best 42c per lb. No. 2 Grimm, a lighter and finer seed, but which gives excellent results, 23c per lb. while it lasts. A. B. Lyman, Introducer, Excelsior, Minnesota.

PEACH TREES, \$5 per 100 and up. Apple Trees, \$7.50 per 100 and up. In large or small lots direct to planters, by freight, parcel post, express. Plums, pears, cherries, grapes, nuts, berries, pecans, vines; ornamental trees, shrubs and shrubs. Free catalog in colors. Tennessee Nursery Co., Box 125, Cleveland, Tenn.

100 GENUINE MASTODON EVERBEARING strawberry plants \$1.95, 250 for \$3.50, 500 for \$6.75. Bears July to December. 18 1/2 quart, 2 year Concord grape plants less than 2c each. Beautiful catalog free. George Stromer, Box 14, New Buffalo, Michigan.

MASTODON EVERBEARING—Less than 1 1/2c each. Why pay more. Champion Originator. Catalog free. Edwin Lubko, New Buffalo, Mich.

SEEDS

WOLVERINE OATS absolutely pure, color and germination perfect. Very heavy. One dollar bushel, bags free. Freight prepaid, Michigan, on over twenty bushel orders received before March. Checks cashed early March when seed shipped. Satisfaction guaranteed. A. B. Cook, Owosso, Mich.

REGISTERED AND CERTIFIED SEED CORN—Clement's white cap yellow dent, Picketts yellow dent and Michigan yellow dent (a very early dent). Certified worthy oats, 2-row barley and sweet clover seed. Dept. A. Paul C. Clement, Britton, Michigan.

SCIENCE AND PRACTICE demonstrate Improved American Banner wheat, Wolverine oats, Improved Robust beans best for Michigan. A. B. Cook, Owosso, Mich.

SWEET CLOVER SEED, white blossom, grown northern Michigan. Recleaned, scarified. Sealed bags. Delivered your station \$6.00 bushel. Thos. Buell, Elmira, Mich.

SWEET CLOVER, bushel \$5.40, alfalfa \$15.00, seed corn \$3.50. Write for price list. Felton Seed Co., Sioux City, Iowa.

TOBACCO

SPECIAL OFFER—Chewing or smoking 5 lbs. \$1; 10, \$1.75; Cigars 50 for \$1.95; pay when received, money refunded if not satisfactory. Farmers Association, West Paducah, Kentucky.

GUARANTEED HOMESPUN TOBACCO—Chewing, 5 pounds, \$1.25; 10, \$2. Smoking, 10, \$1.50. Pipe Free! Pay postman. United Farmers, Bardwell, Kentucky.

HOMESPUN TOBACCO: Chewing 5 lbs. \$1. Smoking 5 lbs. 75c. Pay when received. Pipe free. Farmers Union, A5, Paducah, Ky.

LEAF TOBACCO, good sweet chewing, 5 lbs., \$1.25; 10, \$2.00; smoking, 5 lbs. 90c; 10, \$1.50. United Farmers, Mayfield, Ky.

POULTRY

WHITTAKER'S MICHIGAN CERTIFIED REDS Both Combs. R. O. P. Trained. Michigan's greatest color and egg strain. Cockerels, chicks, eggs. Catalog free. Interlakes Farm, Box 9, Lawrence, Mich.

BARRED ROCK COCKERELS. Start the new season right with one of our well-developed exhibition quality cockerels with dark, even, narrow barring. \$5 each, 2 for \$9, 3 for \$12. Ingleside Farm, H. E. Powell & Son, Ionia, Mich.

5 VARIETIES Record of Performance Male Matings. Breeding cockerels, pullets, and chicks. Free catalog giving big early order discounts. Beckman Hatchery, Box 57, Grand Rapids, Mich.

BUFF LEGHORN PULLETS, hatching eggs and baby chicks that live and grow. Circular. Hillcrest Poultry Farm, Bath, Mich.

CHOICE WHITE ROCK COCKERELS, satisfaction guaranteed or money refunded. R. C. Smith, Oxford, Mich.

S. C. BROWN AND WHITE LEGHORNS, 332 egg catalog. Harlen Fulton, Gallipolis, Ohio.

STOCK, EGGS, CHIX. All varieties chickens, ducks, geese, turkeys, guineas, bantams. Arthur Jarvis, Waveland, Indiana.

COCKERELS, Holterman strain of Barred Plymouth Rocks, strong healthy birds, \$4. two for \$7. Mrs. Glenn Arnold, Saranac, Mich.

BARRED ROCK COCKERELS, Holterman strain. Mrs. J. Carmichael, Wayne, Mich.

BABY CHICKS

WHITE LEGHORN CHICKS from big white eggs. Shipped anywhere c. o. d. Guaranteed to live. Low prepaid prices. Trapped, pedigreed foundation stock. Egg contest records to 314 eggs. Hundreds of cockerels, pullets, hens. Bargain prices. Big 28th annual catalog free. George B. Ferris, 934 Union, Grand Rapids, Michigan.

BABY CHICKS—Rocks, Reds, and Leghorns. Each week beginning Feb. 13. All stock bloodtested and Michigan Accredited. Pierce Hatchery, Jerome, Mich.

DOWN'S LEGHORNS LEAD STATE CONTEST—Last report (Dec. 14) shows our leghorns leading Michigan International Egg Laying Contest. 1,000 pullets now being trained in R. O. P. To insure delivery when wanted—order your Michigan Accredited chicks now! Free circular and prices on request. Down's Poultry Farm, Romeo, Mich.

TOWNLINE CHICKS, eggs, breeding stock in four leading varieties have made a record of profit performance for thousands of poultrymen that points the way successward for you. Don't fail to get our New 1928 Catalog. Tells how to raise chicks and why our egg blood lines make profits easy. Copy free. Townline Poultry Farm, Route 1, Box 107, Zeeland, Michigan.

BABY CHICKS—You can buy your early hatched Michigan Accredited chicks right here at home. First hatch January 15. Also booking orders now for spring delivery at special discount. Send for catalog and prices. Brimmer-Fredrickson Poultry Farm, Box 28, Holland, Michigan.

BABY CHICKS. The Village View large type, vigorous, healthy chicks. Direct from our poultry farm and hatchery to you. Ask for our large free catalogue which tells all about our hatching and breeding establishment. Price reasonable if orders are booked now. Village View Poultry Farm, Zeeland, Mich., R. 3.

FAIRVIEW CHICKS, Pullets, Hens and Pedigreed Cockerels have paved the way to bigger poultry profits for hundreds. Our 1928 Catalog tells you how to raise poultry for profit. Get our Live and Let Live Prices. Fairview Hatchery & Farms, Box CM, Zeeland, Michigan.

ACCREDITED WHITE LEGHORN CHICKS, Hollywood strain. Contest pullets now average 25 ounces eggs per dozen. 1926 contest pen averaged 239 eggs each. Customer's profit \$3.00 per bird. Also Anconas, Rocks. Catalogue. Wyngarden Hatchery, Box 14, Zeeland, Mich.

MICH. CERTIFIED S. C. W. Leghorn Chicks. Why not make an additional income this year with Gibbs' Winter-Lay Strain Leghorns. All Approved R. O. P. males. Our new catalog will tell you all about them. Gibbs Winter-Lay Hatchery, Bronson, Mich., Box B.

BARRED ROCK CHICKS—Incubators now running. Order chicks early. Card's chicks are better chicks. Chicks, eggs, and breeding stock. Flock under State and Federal supervision. Leo. V. Card, Hillsdale, Mich., Phone Cambria 4109.

BABY CHICKS—From our extra large type Eng. W. Leg. Heavy producers. Get our circular before ordering elsewhere. Prices low, only \$107.50 per 1,000. A-1 chicks. Model Poultry Farm, Zeeland, R. 4, Michigan.

BROILER CHICKS—Why have empty brooder houses? Make a profit on Pinnerott broilers. Accredited and blood-tested. Incubator now running. Pinnerott Poultry Farm, R. 6, Owosso, Mich. Write for circular.

BETTER BABY CHICKS from State Fair winners, production class. Eighty per cent of our chicks go to old customers. Eleven breeds. Booking orders. Living now. Write. Litchfield Hatchery, Litchfield, Mich.

MIC. AN ACCREDITED CHICKS. Barred Rocks, R. J. Reds. Strong, husky chicks. Brood-to-raise strain. Special February-March prices \$14.00 per 100. Order now. Howe's Accredited Hatchery, Essex, Mich.

MYERS PURE-BRED CHICKS, 100% live delivery, postage prepaid. Four leading breeds, White Leghorns, White Wyandottes, Barred Rocks, R. I. Reds. Flocks bred for egg production. Send for descriptive circular. Myers Hatchery, Mt. Pleasant, Mich.

LOOK! 100,000 chicks 9c up, 20 varieties. Using many 200 to 312 egg record bred ROP cockerels. Send for free catalog giving big early order discounts. Lawrence Hatchery, Grand Rapids, Mich.

SECRETS OF CHICK CULTURE told in Chapman's chick booklet. Mailed free to chick buyers. Drop postal to Chapman Poultry Farm, Box 265, Plainwell, Michigan.

TURKEYS

WHITE HOLLAND TURKEYS and White Pekin Ducks, pure-bred healthy stock. Addressed stamped envelope for reply. Alden Whitcomb, Byron Center, Mich.

TURKEYS, all breeds. Strictly pure-bred. Unrelated pairs and trios, reasonable prices. Eastern Ohio Poultry Farm, Beallsville, Ohio.

PURE-BRED BRONZE BREEDING STOCK, unrelated pairs, vigorous, good quality. Mrs. Chas. Boone, Traverse City, Mich., R. 5.

QUALITY TURKEY FARM, Giant Bronze Turkeys, choice cockerels, eggs in season. G. W. Ely, Dowagiac, Mich.

PURE-BRED BOURBON TOMS, twelve; hens ten. F. J. Chapman, Northville, Mich.

MAMMOTH Bronze Turkeys. May hatched. Very good ones. Mrs. Eugene Ramsdell, Hanover, Mich.

PURE-BRED BOURBON RED TURKEYS. Maurice A. Rector, Rockford, Mich.

PURE-BRED NARRAGANSETT TURKEYS, not many left. Ernest Clement, Ionia, Mich.

PURE-BRED BOURBON RED TURKEYS, large and vigorous. Archie Ives, Rockford, Mich.

AGENTS WANTED

MAN TO WORK his local territory, booking orders for shrubs, roses, perennials, ornamental and fruit trees, etc. Also hire agents. Full or spare time. Five year replacement. No investment or experience necessary. Outfit free. Real opportunity. Knight & Bostwick, Newark, New York State.

NEW HOUSEHOLD DEVICE washes-dries windows, sweeps, cleans walls, scrubs, mops. Costs less than brooms. Over half profit. Harpers, 173 Third St., Fairfield, Iowa.

WANTED—Farmer or farmer's son or man to travel in country. Steady work. Good profits. McConnon & Company, Dept. F-26, Winona, Minn.

HELP WANTED

MILK ROUTE SALESMAN WANTED—\$200.00 cash bond required. Steady employment, good wages and chance for advancement. Write for further particulars. Freeman Dairy Company, Flint, Mich.

WANTED—Married man by year, dairy and general farming. P. H. Stebbins, Saranac, Mich., R. 2.

SELL your poultry, baby chicks, hatching eggs and real estate through a Michigan Farmer classified advertisement.

Join the Money-Makers NOW!

F. E. Beatty, Pres.,
R. M. Kellogg Co., Box 3657
Three Rivers, Mich.

Send me, FREE, that new 40 page Berry Book as advertised. I want to know more about making \$500 to \$1,200, or more, per acre.

Name.....

Address.....

Write for this FREE Book

Read here the story of a man who learned how to make a big profit from a small fragment of land. Right now you probably have some piece of land that should be making bigger profits. Make it pay its way. Make it bring in



that extra money that you need. Make it pay you \$594 per quarter acre just as Mr. Reed did, or make it pay even \$627 per quarter acre like H. J. Von Hagen did.

Last year I told you Michigan Farmer folks about myself—how years ago I tried to raise strawberries, how I had always had only ordinary luck, etc., until finally I became acquainted with R. M. Kellogg and his Thorobred Pedigree plants. Then I found that the whole secret of his great success was the plants that he used.

Now, this year, I am going to tell you about a man who had almost exactly the same experience that I had. Three years ago, A. H. Reed, of Kennedy, N. Y., was a chicken raiser who was trying to raise strawberries as a side-line with his chickens. He was having good enough luck with the chicks, but no luck with the strawberries—he was beginning to get discouraged, and was about ready to quit. Then, one day, an uncle of his came to visit him. This uncle had been a successful fruit-grower, so Mr. Reed showed him his patch and asked him what was the trouble. The first question that his uncle asked him was "Where do you get your plants?" Reed replied that he got them anywhere he could, and that was all the uncle needed to know. He advised his nephew to try Thorobred Pedigree plants, and told him where to get them, and now Mr. Reed finds that his uncle gave him good advice.

**\$594 From Only
1/4 Acre**



Mr. Reed got his first Thorobred Pedigree Strawberry plants in the spring of 1925, and in the summer of 1926 he wrote me that he had made \$594 from only 1/4 acre of these plants. He had only 2,000 of them and they produced 2,700 quarts of fancy berries most of which sold at 30c to 35c per quart. Mr. Reed says:

"We had a wonderful crop of berries. We picked 2,700 quarts of the most beautiful berries I ever saw grow. Our berries sold in advance of the market all season, while other growers here were begging for buyers at any price.

"Speaking of the quality of your plants reminds me of how I happened to send for Kellogg plants. I had tried to get started with

strawberries for several years but with very poor success. About when I was ready to give up an uncle of mine visited me. He had been a successful fruit grower and I called his attention to my strawberries. The first question he asked was 'Where do you buy your plants?' I told him, 'Anywhere I could find them.' He replied, 'There is only one place to buy strawberry plants and that is Kelloggs.' That is how you got my first order.

"We took up strawberries as a side-line with our large poultry farm, but after growing a crop of Kellogg Thorobreds, we have changed our plans. Strawberries first and eggs as a side-line. This year, when we were selling fancy table eggs at 33c per dozen, we were selling Kellogg's Thorobred Strawberries at 35c per quart."

Profit From Mr. Reed

Profit from Mr. Reed. He knew the value of high-bred productive chickens, and he always had made a success of chicken raising, but it had never occurred to him that high-bred, productive plants were necessary for raising strawberries. He went on year after year trying to make a success with ordinary plants, until his uncle—who knew—told him of the Thorobred Pedigree kind. Mr. Reed tried the Thorobred Pedigree kind and immediately he made a big profit.

Send for my new free book and it will tell you more about Thorobred Pedigree Strawberry Plants, than Mr. Reed's uncle told him. You already know the value of high-bred chickens, milch cows, horses, pigs, etc. Now learn the value of high-bred productive strawberry plants, and you will make big money.

Make Bigger Profits

**Mr. Von Hagen
Made
\$627 From
Only
1/4 Acre**



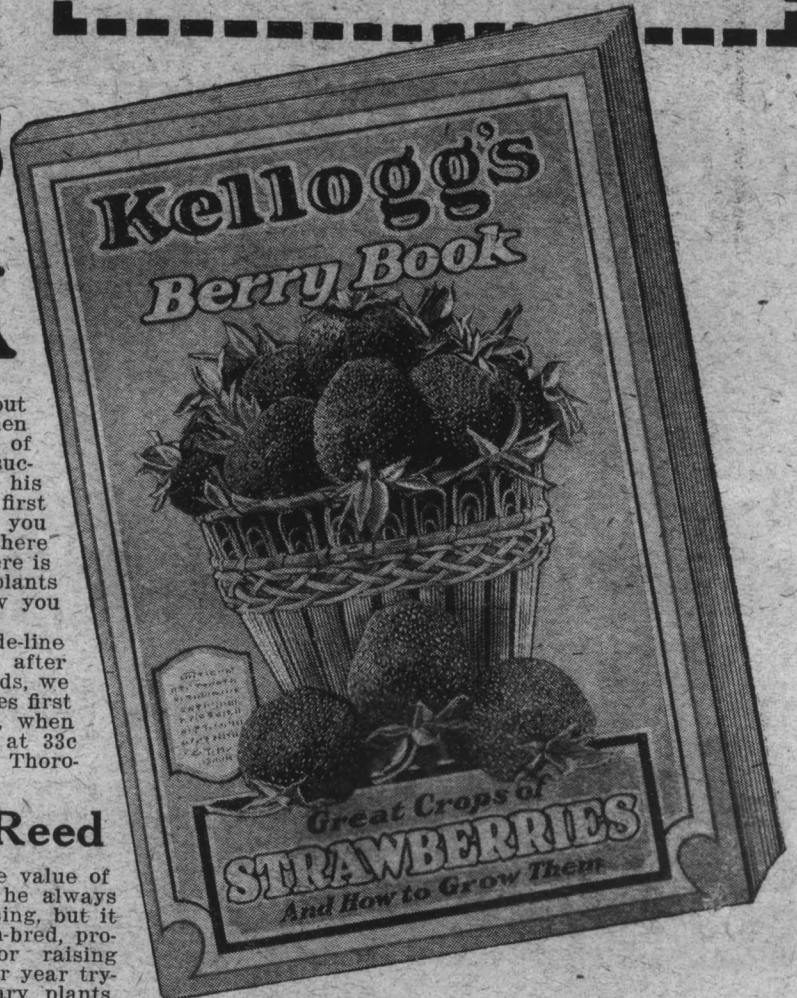
Mr. Reed is not the only one who made a big success with Thorobred Pedigree plants. H. J. Von Hagen made \$627 from only one-quarter acre and won back lost health in the bargain. People by the hundreds are making money at the rate of \$500 to \$1,200 per acre right along. Send for my book and read about these others. Everything is easy and simple. These big profits are just as much within your reach as they were within the reach of Mr. Reed and others. You can make big profits and I want to show you how.

Get Your Pencil

Get your pencil now and fill in the coupon at the top of this page, address it to my Company and mail it. I will send you my new free book at once.

You will profit by reading this book. It will give you confidence in your own ability to make money with Thorobred Pedigree plants. You will find there how to grow berries for your own use or for market. Tells everything from start to finish. Get the book and then use your own judgment.

F. E. Beatty, Pres.



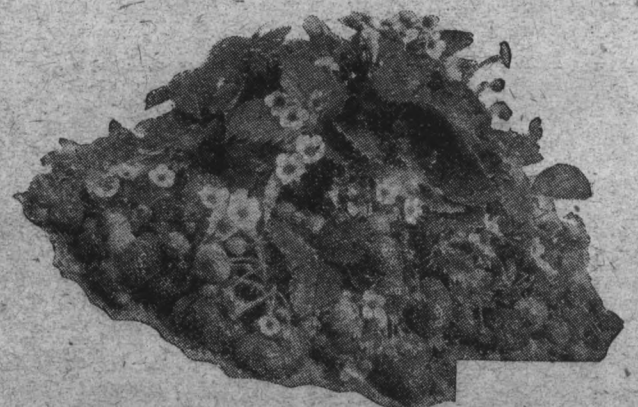
Prolong Your Profits

Write for our new Berry Book and learn about our new line of raspberries, blackberries, asparagus, trees, and other nursery stock.

Our name, reputation, and guarantee are back of this stock. This is your definite assurance of success. It is the symbol of money-making quality. Send for our new free book, and learn about this stock. Whenever Kellogg offers anything for sale, you can bet your last dollar it's good. You can bank on it to make you money. You can be sure that it will produce. You can make big profits. That's what has made us our reputation. Get our new free book and learn about the complete satisfaction our plants have given to others.

Now you can make money all season long and use the profitable Kellogg Thorobred plants throughout. You can start your income with asparagus early in the spring, continue with strawberries, raspberries, blackberries, and cherries, and finish in the fall with grapes and everbearing strawberries. With this complete line there'll be no gaps in your income. Mail the coupon.

Yes, this book is free. It's a valuable book. It costs us money to produce it for you. Still it will cost you nothing. All you need do is ask for it. Write your name and address on the coupon—or a post-card—and mail it to us now.



A Kellogg Thorobred

This is a picture of a Kellogg Thorobred Pedigree strawberry plant fruiting in characteristic thorobred fashion. Note the piles of big berries with still more to come. Send for our new free book.

R. M. Kellogg Co., Box 3657 Three Rivers, Mich.