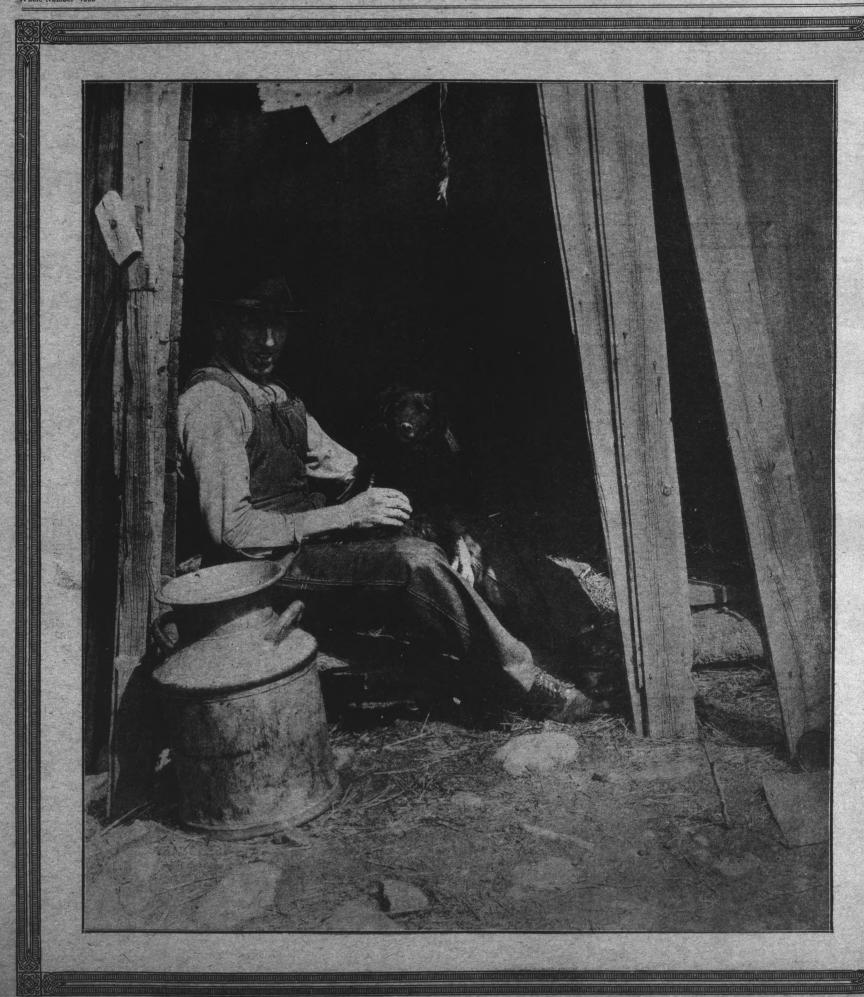


VOL. CLVIII, No. 25 Whole Number 4206 DETROIT, MICH., SATURDAY, JUNE 24, 1922

ONE YEAR \$1.00 FIVE YEARS \$3.00





Published Weekly Established 1843 Copyright 1921

The Lawrence Publishing Co. Editors and Proprietors Boulevard Detroit, Michigan TELEPHONE CHERRY 8384 aFayette Boulevard

YORK OFFICE-95 Madison Ave. AGO OFFICE-1019 Transportation Bldg. ELAND OFFICE-101 1-1013 Oregon Ave. N. E

ARTHUR CAPPER VI PAUL LAWRENCIE VI MARCO MORROW VI J. P. CUNNINGHAM VI F. H. NANCE	ce-President Treasurer
I. R. WATERBURY BURT WERMUTH ALTA LAWSON LITTELL FRANK A. WILKEN	Associate Editors
I. R. WATERBURY Busine	.ss Manager
TERMS OF SUBSCRIPTION	* *1.00

All Sent postpaid
Canadian subscription 50c a year extra for postage RATES OF ADVERTISING

Member Standard Farm Papers Association and Audit Bureau of Circulation.

Entered as Second Class Matter at the Post Office at Detroit, Michigan Under the Act of March 3, 1879 NUMBER TWENTY-FIVE VOLUME CLVIII

DETROIT, JUNE 24, 1922

CURRENT COMMENT

THE MICHIGAN FARMER SAYS: A little nonsense is singularly re-

freshing to the man who works hard. Many persons miss doing great things because they set themselves at

too many tasks. The easiest way to get away from yourself is to have a good laugh with your friends.

Tugs, not breechings, are built to do the big task.

Short sermons catch the most sin-

Good schools are the greatest defense of the nation.

Party Versus People

SECRETARY of War Weeks stirby his recent speech red up a hornet's nest at Cleveland, in which he deplored what he

termed the decadence of our government as a result of the operation of the direct primary, the formation of "Blocs" in congress, and any influence which tends to disturb the tenure of strictly party government in this country. We do not know whether Mr. Weeks was merely voicing his personal views on this subject or the views of the administration. Nor does it matter greatly so far as the issue or the result is concerned.

Representative, rather than party government was the aim of the early American statesmen who laid the foundation for and established our great republic. Party government was a later development not contemplated or provided for in the original plan. It was the practical method developed for the settlement of paramount issues during the great and rapid development of the country. It is a valuable means to this end and is doubtless a permanent institution.

than the end to be sought. Unfortunately party leaders have not always recognized this fundamental principle, and the direct primary and the "Agricultural Bloc" are modern methods which have been developed to secure better representation of the body politic by public officials and to settle issues which are vital to the well-being of the country.

fused the issue and that it is party of any doings that may come to their

And in the end, the voters of the coun- over the country and the publicity ser- in by practically every mail. The intry will see that it is corrected.

M.A.C.'s New President

D URING the present week Dr. David Friday is being inaugurated as president of the Michigan Agricultural College.

Last April we gave the story of Dr. Friday's rapid rise from a farm boy to his election by the State Board of Agriculture to this leading position in in which they are concerned. This deagricultural educational work in the great state of Michigan.

He comes to this high position at a crucial, yet opportune, time. The field of agricultural education is broadening. To successfully carry on the farming business we have come to know that there must be unity of action. One class cannot exclusively devote itself to production while another class is working alone at distributing government, the equitable protection without having misunderstanding, conflict and a great loss of energy. A knowledge of marketing is very essential to the successful planning and execution of a practical schedule of production.

From his training and public expressions we gather that Dr. Friday contemplates working out a broad program which will give special emphasis to the economic side of the business of farming. Farm management and marketing will come in for a much larger share of attention in the curriculum of the school and in the activities of the experiment station and extension workers than it has enjoyed heretofore.

Because of the unusual training which President Friday brings to this important office, and the generally favorable public attitude, particularly of the farmer, toward the development of agricultural schools in the direction of economics, we bespeak for him and his coworkers an era of great usefulness in training young men and women for broader fields of service and in directing the general thought of those who depend upon agriculture for a livelihood, in the way of greater coordination and of a more unified effort.

Our Index Number

N this issue will be found our semi-annual index where are classified under apheadings propriate the subjects of arti-

cles published in the Michigan Farmer since January first. Those who file their papers will find this index a ready reference to a fund of current information relating to every phase of agriculture.

To others we suggest that they take a moment to scan the columns of this index carefully to note the vast amount of editorial matter run during the course of six months. This material has been gathered from a thousand different sources through a system which we have been years in building up.

may be briefly stated. There are bush-But it is a means to an end, rather els of letters from farmers coming inof over two hundred special correcounties of the state keeps this office Perhaps Secretary Weeks has contive territory and to wire us a story ing school known as the auto tour.

which is at a low ebb because of these ated splendidly in giving us needed in- by Mr. J. H. Brown, of Battle Creek, developments. This is a state of mind formation. Special correspondents at have proven especially popular bewhich will be corrected when the ma- Lansing and the Agricultural College cause of the fine educational features jority of party leaders consistently and at Washington keep us informed provided. Two trips are being planplace the end of good government on what is being done at these points above the means of partisan advantage of interest. A regular news service and the other to Mackinaw. We unas the desirable goal to be attained. from the various experiment stations vice of the numerous farmers' local, teresting thing is that parties who state and national associations enable the editors to select for the hundreds year before are making application week Dr. of thousands of readers the material from which the weekly issues of the Michigan Farmer are made up. Not satisfied with this contact, however, ye editors feel constrained to get out evder to know what the farmers are doing and to get their attitude on issues farm life and the business of farming.

Tariff and the Farmer

TARIFF legislation is a difficult governmental problem at best. It involves the consideration of revenue needed by the

of needed American industries and American labor and the well-being of American consumers. It would be difficult to write an equitable tariff law if the question were approached in a capable economists. It is quite impossible under the present method of tariff legislation by congress.

But it ought not to be impossible to secure fair and equitable tariff schedules where the public interest is all on one side with only a minor industrial interest to be considered in opposition. Yet the pending tariff bill contains a provision which awaits action by the senate which is detrimental to the interests of both farmers and consumers, in the provision for a graduated duty on potash imported into this country for a period of five years, although potash is ostensibly left on the free list.

The excuse for this is the protection of an "infant industry." Potash production is one of our "war babies." But the process is expensive and the product costly. It is neither reasonable nor expedient that the farmers of the country should be taxed millions of dollars per year in the increased cost of potash fertilizers and the consumers of the country millions more for the increased cost of foodstuffs for the benefit of this industrial war baby. If this baby must be fed let's do it honestly and above board out of the public treasury rather than out of the farmers' pockets.

The senate should kill the joker at the end of paragraph 1635 of the tariff bill and leave potash for fertilizers on the free list where it always has been. Michigam farmers would do well to write their United States senators urging this course.

New School

THE auto has made is of peculiar value to

farm folks.

to the office constantly and in these bringing information of a thoroughly are found many practical suggestions practical type to the farmer. In these for the farmer and his family. A list tours knowledge is gathered largely first-hand. The producer of crops and spondents distributed among all the the breeder and feeder of animals have to do largely with natural laws informed on local agricultural condi- and things, and the training of the so the dross won't show so much. tions. Then we have five district news eyes to see, and of the mind to com- When we find the gold what's there gatherers whose business is to watch pare is very fundamental. This trainevery avenue of news in their respecting is provided liberally in the travelit's in.

The much-talked-of Michigan farmer but I had a lot o' fun thinkin'. government rather than congress attention. County agents have cooper-tours conducted for the past two years

ned this year—one to Niagara Falls derstand that applications are coming were in the tours last year and the again for this season's trips.

Besides these tours any number of local excursions are being arranged by groups of farmers to gain information by visiting farms where lessons of peery week and call upon farmers in or- culiar value are impressively taught by the demonstration method. The county agents are finding the new school an unusually fine method for scribes briefly how we keep connect- bringing home to the farmers importing up with the practical phases of ant lessons of the season's work. These tours are valuable. Don't miss a single one if you can possibly go.

As I Like Them

THE other day, the ground was too wet for cultivatin', so I snuck out before Sophie could find any more harnesses and etc. to fix, and went fishin'. Then, too, Sophie was still in newtral which made fishin' more pleasant than sittin' in and lookin' out.

But as the fish wasn't bitin' I got purely scientific manner by the most thinkin' about people and why I do and don't like them. While my physical activities was engaged in baitin' hooks and holdin' the pole in the water, my mental activities come to these conclushuns.

> I don't like folks for themselves but for the good qualities they exhibit. For



inst. it is the good qualities I like and when some of t h e m qualities what you call predominate in a person, I kinda like that person in spite of their bad ones. Now, there is

Susie Reynolds, she's sweet as a peach and powerfully good for the eyes, but I think I would rather be her admirer than her husband, 'cause he would have to get his own breakfast and wash the dishes besides.

And Sam Smith, I like him a whole lot for what you call his sociability and generosity. But he's always invitin' folks to his house for dinner which makes him over-generous in the work he gets for his wife to do.

When I got money I like to put it in Penny Pulford's bank, 'cause I know it won't be used with extravagance, but the financhul educashun he is givin' his children ain't to their likin' 'cause it only lets them go to the picture shows once a week, and then only when it costs ten cents.

Lizzie Robinson is a awful hard worker, works too hard, but still she has got time for her hobby of keepin' posted about other folks' business and helpin' them run it, whether they like possible an edu- it or not. Seems like she is just let cational training that tin' her good qualities slop over.

Jim Ackerman's proud of what he the farmer. We speak thinks is accomplishments, but this of auto tours which country would still be the Thirteen How this information reaches us are rapidly becoming popular among Colonies if we was all like him. He never wants to do nothin' until every-Auto tours are especially adapted to body's done it and found it all right. He wears out ten pair o' holdbacks to one o' tugs.

But, you know, there is always gold nuggets in all folks, but there is also dross with the gold. So it seems we ought to help to polish up the gold we just can't help likin' the folks

I didn't get any fish, not even a bite,

HY SYCKLE.

A Day with the Chicks and Chickens

Michigan's First Poultry Tour Was a Short Course in Poultry Culture

HE poultry tour which was held in Ottawa county June 8, was another great indication that the poultry business was evolving rapidly from a side line which women only would give attention to, to one of the big interests of the farm, and one of the greatest sources of farm profits. It truly showed that poultry was coming into its own.

This trip, in the center of Michigan's hatching industry, was run strictly on a time schedule. The arrangement of this schedule and its successful fulfillment is a great credit to County Agent Milham and the poultrymen who cooperated with him. The starting place was Coopersville and the time 7:00 a.m. From Coopersville the caravan of nearly one hundred autos went through the famous Hudsonville muck region and then to Jamestown where many very fine looking clover and alfalfa fields were noted.

The first stop was at the farm of Clyde Hollis, who raises Wyandottes, mear Jamestown. Here Mr. C. M. Fer- the house was cool and comfortable. guson, of M. A. C., gave some pointers on the selection of breeders, the chief of which were early maturity, precociousness and the refinement of the head so necessary in good laying

At Walter Van Dam's place we saw over 1,500 chicks and 400 high-producing hens. Here Mr. E. C. Foreman, of M. A. C., emphasized further the points to be considered in selecting the laying type. The clean, refined head with a large capacity body, are most essential. In cockerels, the birds should be flat-ribbed, close-feathered, and early-

Young stock should be hatched so that it will start laying in September as the high price months for eggs are from September to December. To get incision of muscles. pullets laying at this time they should be hatched in February or March and fed and cared for to bring about inch in length is made between the the value of the infertile egg for the

By Frank A. Wilken

early maturity and egg production. first and second ribs. The wound is An opportunity of going through a opened with a special spreader and Foreman type poultry house was of with another instrument the yellow fered by the stop at the farm of Mar- testicle, about the size of a wheat grain ed, and County Agent C. P. Milham garet Strick. Miss Strick was keeping is removed. The spreader is removed, about 400 hens in this house, which the bird turned over on the other side cost her about \$1,200. From the stand- and the operation repeated to get the point of light, ventilation and general other testicle. When the bird is alutility, this house is all that can be lowed to resume its natural position desired. Although the day was hot the muscles naturally close the



Professor Foreman Explaining the Qualities of a Good Cockerel.

In his brief explanation of the house, Mr. Foreman said that it might cost a little more than the ordinary type, but it would be the most economical in the end, beause of the better condition of the hens. He showed a hen belonging to Miss Strick which laid 103 eggs in 110 days. She laid fifty-one eggs before she skipped a day.

At the farm of Marinnus Brandt a stop was made for lunch, and also for onstrations. Mr. Ferguson demonstrated the simplicity of the caponizing operation. The first essential is to tie the birds legs and wings to weighted cords so that it can be stretched out when operating. This is necessary because stretching frees the place of

The feathers just above the hip are

wounds. Before operating the bird should be kept from food for thirty-six hours. It is also necessary to frequently disinfect the tools while using.

Mr. Smith, of the Lakewood Farms, gave the killing and dressing demonstration. The killing was done by sticking in the mouth to sever the jugular vein and to deaden the brain. Then imediately following, the bird was dry-picked.

At the farm of Thomas Beyer a moncaponizing, killing and dressing dem- itor type house was inspected and cubator trays pulled out. One can some culling work demonstrated. Mr. Bever had some very fine Anconas, Rocks and Leghorns, also 2,000 young chicks of these breeds. At George Caball's place some blue ribbon showroom Rocks were looked over. And at Mr. Wyngarden's place some very fine Anconas were seen. Here, also, the production of infertile eggs was plucked and the incision of about one discussed. There is no doubt as to

commercial market and of the uselessness of a male bird after the hatching season is over.

A seventy-two-thousand egg hatchery was seen at the Wolverine Hatchery -at Zeeland. Here, too, coffee was servgave a talk on the relation of the hatcheries to the poultry industry. In commercial incubation it is a common practice to take the hatch off promptly on the morning of the twenty-first day. Thus all the weak and slow-hatching chicks are discarded.

Many of the hatcheries are very careful about the stock from which they get their eggs. They use nothing but pure-bred stock and matings which have a record for good egg production. So in this way quality stock is being rapidly distributed throughout the country through the day-old chick bus-

Mr. Milham said that Ottawa county had more poultry associations than any other. The size of the industry in this county is indicated by the fact that its commercial incubators have a capacity of one million and one-half eggs at one filling. The hatching season lasts about twenty weeks, so during the season this territory will ship over eight million chicks.

After leaving the Wolverine hatchery, the Grandview hatchery was visited. This is the largest hatchery in the state, having a capacity of 96,000 eggs at one time. At the time of the visit the eggs were airing with the inimagine what a fine sight dozens of rows of trays of pure white eggs nearly a block long would make.

At the farm of C. DeJonge the poultry enthusiasts had an opportunity of seeing the large shed type house and thousands of Leghorn and Amcona hens. Mr. DeJonge was also raising a large number of chicks of these two breeds

(Continued on page 743).

A Little "Irish Stew" for Potato Growers

TATOES.

To further guarantee high quality in the certified seed they are planning on producing this year, growers in Emmet county have organized "spraying rings" through which they are buying power-driven spraying rigs to better protect the potato plants against insects and disease. These men are using the most advanced methods of cultivation, fertilization, seed preparation and treatment.

GRAND RAPIDS TO HOLD POTATO SHOW.

MICHIGAN is to have a potato show this year. It has been definitely decided to hold such a show in conjunction with the annual meeting of the Michigan State Horticultural Society at Grand Rapids during the week of December 4-9. The West Michigan State Fair people took active part in promoting the event, cooperating with the college, the potato growers association, the exchange at Cadillac, county agents, etc. A wide variety of classes and prizes are being planned.

HILL SELECTION OF POTATOES.

LARGE number of pairs of plants from similar halves of the same seed tubers were grown under as nearly the same conditions as possible and

Experiment Station. Wide differences were found in the yields, ranging from nothing to 141.8 per cent of the averwith an average difference of 23.4 per is said to indicate that there are probably important factors affecting the yield of potatoes which are unknown or which are not now fully appreciated. An unequal number of stalks per plant is known to have been an important cause of the differences in yield noted in the station experiments.

It is believed that these wide differences in yield of plants from halves of the same seed tuber which would ordinarily be expected to be quite uniform, toes by the hill selection method can- plows in the fall or early in the spring

proved strains of potatoes. Selecting a satisfactory method for maintaining high yields."

CULTIVATE THE POTATOES BE-FORE THEY COME UP.

THE practice followed by George Spencer in the cultivation of his potatoes is the same as that used by show that the improvement of pota- many other successful growers. He

COOPERATIVE SPRAYING OF PO- were compared for yield at the Geneva not to be carried to full perfection. and works the ground frequently and The usual farm practice of selecting thoroughly until the date arrives for seed potatoes from the best yielding planting. Then after the tubers are hills should not be affected by these in the ground he harrows over them age yield of the two plants of the pair, findings," say the experts, "as they are until the plants are of sufficient size to of interest primarily to the expert or demand the two-horse cultivator. Just cent. This rather unexpected result to those attempting to develop im- one or two shallow cultivations after that is all that is necessary. George seed potatoes from high-yielding hills has other work to do when the averhas been thoroughly demonstrated as age grower is cultivating. He is either spraying or is down under the lea of the river angling for bull-heads.

BUY MORE POTATO SEED FROM MICHIGAN.

HEY came back. The growers from Pennsylvania who a year ago grew potatoes from seed purchased in Michigan have returned for more seed. Michigan seed gave them super-yields as compared with crops grown from their own seed. This year their representative purchased 35,000 bushels of certified seed chiefly in Antrim and Emmet counties and being able to secure no more he took an additional 5,000 bushels of table stock which are being resold in the Keystone state for seed purposes. This is another indication that a new type of potato culture is about to become a commercial factor in the potato industry in Michigan. And the larger the number of good growers who produce high-class certified seed, the more successful the business is likely to be.



Selecting Seed Potatoes from the High-yielding Hills is a Practice which Every Potato Grower Should Follow.

Like the Pyramids -built to LAST

"RED CROSS" PRIZE RANGES not only last for years—but bake and cook perfectly. Handsomely ename led in gray, thoroughly reliable and moderately priced.

They burn wood or coal; with gas attachment if desired. A convenientreservoir provides an abundant supply of hot water at

all times. Warming closets, broiler and many other tested, time-saving features make it a delight to use a "RED CROSS".

Distributors Wanted in territory where "Red Cross" products are not at present being sold.

Write Dept. M. for catalogue of Furnaces, illustrated in color; also Plan Sheet on which our engineers will recommend without charge correct installation of "Red Cross" Pipeless Furnace.

Sturdily built for long service. Insures 70° in every room of any size building in coldest weather. Burns less fuel.

"RED CROSS"

EMPIRE PIPELESS

FURNACE



ZE RANGE

CHEAP paint doesn't make cheap painting. One hundred pounds of CARTER WHITE LEAD thinned with four gallons of linseed oil makes seven gallons of the very best paint you can buy. Takes fewer gallons to paint your house, costs no more to apply and "saves the surface" for the greatest number of years.

Our free 16 page booklet "Painting With Lead and Oil" contains valuable information for paint users; also a color card. Write for a copy.

Carter White Lead Company

12042 So. Peoria Street

Chicago, Ill.

OIL PRICES REDUCED



June and July Specials Best tractor oil, per gal. 60c (55 gal. drums) Higher Grade Motor Oil

(30 gal. drums)

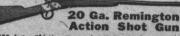
We guarantee these oils to give satisfaction. Delivered freight pre-paid. Price list of oils and greases mailed upon request.

BAYERSON OIL WORKS ERIE, PA.

Rye and Vetch Wanted!

We are wanting Rye and Vetch mixed and pure Rosen Rye. Send samples to O. M. Scott & Sons Co., Marysville, Ohio

One Cleveland Tractor, 1920 Model, just 5200.00. Box DB 625, Michigan Farmer, Detroit, Mich.



Weight 51/4 lbs; Barrel 28"; Full length 43". Solid frame, Blued finish, Walnut stock. Refinished like new. Take paper or brass shells. Black or nitro powder. Price \$9.50; packing charge 45 cents extra.

Francis Bannerman Sons, 501 B'way, N.Y.

Agricultural News

WORLD WHEAT POSITION STRONG.

AT the present moment indications are that wheat stock will be lower by July 1 than for several years. Both Argentina and Australia have much less than last year and the carry-over in the United States will be light. Canada is the only country that has considerable stocks on hand. Consumptive demand promises to be larger than last year. Until next February the international trade will be largely dependent for supplies on North America and to a limited extent upon India. Russia is entirely out of the export

TO SHIP FRUIT UNDER BRAND NAME.

OHIO fruit growers have organized a state-wide organization for the purpose of grading and shipping fruit under a brand name. The term "Buckeye" will be used as a trade-mark. Local cooperative associations are being formed throughout the fruit growing districts of the state.

WANT ACTION ON MUSCLE SHOALS.

THE farm organization Washington representatives were not satisfied that Congressman Mondell's interpretation of the President's position was the last word on the Muscle Shoals proposition. As a result, the announcement has come from the White House that administration officials were willing and anxious for the house leaders to act on the proposed legislation for development of Muscle Shoals with a free hand. It is also said the President has taken no position im support or in opopsition of Henry Ford's proposal.

THE WAR FINANCE CORPORATION DOES MUCH BUSINESS.

A FAIR idea of the immense business transacted by the War Finance Corporation may be gained from the statement by Managing Director Eugene Meyer, Jr., which shows that between January 1 and May 31 inclusive, the corporation received repayment totaling \$78,095,288. Of this amount \$37,737,543 were on loans for agricultural and live stock purposes.

Repayments were made to the corporation during May amounting to \$26,507,833. Repayments of agricultural and live stock loans amounted to \$12,708,756, of which \$9,153,437 was repaid by financial institutions, \$1,471,-097 by live stock loan companies, and \$2,048,222 by cooperative marketing associations.

DEMAND FOR FARMS.

THERE are said to be many inquiries for Upper Peninsula farms, this spring. The Mining Journal, of Marquette, reports that inquiries are commonly for moderate-sized farms costing from \$3,000 to \$4,000.

BEEF MEN OPTIMISTIC.

that their business has turned the corner and started toward better times. Secretaries of the four principal beef cattle societies agree that bad times are behind. Recording of pure-bred stock and sales are all picking up, while the mass of breeders in all districts of the country have awakened from the recent night of despondency and pessimism.

Thou shalt not see thy brother's ox and ass fallen by the way and hide thyself from them; thou shalt surely help him to lift them up again.—Deut.

EASY NOW TO RID YOUR PLACE of FLIES

Widely Known Scientist Discovers Wonderful Chemical That Is Fatal to Flies, Not a Poison-Harmless to Stock.

Flies are one of the most dangerous and annoying things with which the farmer has to contend. Now, through the discovery of E. R. Alexander, widely known scientist, you can rid your house and barns and livestock of these pests almost instantly, and with no trouble at all. This discovery is in the form of an organic chemical that is fatal to flies, and similar pests, such as chiggers, mosquitoes and moths



This new discovery which is called Alexander's Rid-O-Fly, is not a poison. Though it kills flies like magic, farm animals and human beings are not affected by it at all. In addition to killing these insects, Rid-O-Fly is a strong repellant. Flies will not come near stock or buildings where Rid-O-Fly has been used. Rid-O-Fly is particularly valuable for cows and horses, as it is a known fact that flies do until harm to these animals.

So confident is Dr. Alexander that his discovery will rid your house, barns and livestock of these pests that he offers to send a \$2.00 supply for only \$1.00 on the guarantee that if Rid-O-Fly does not solve your fly problems it will cost you nothing. Two big Kansas City banks guarantee the reliability of this offer.

SEND NO MONEY—just your name and address to the name below and this introductory offer will be mailed at once.

ALEXANDER LABORATORIES,

ALEXANDER LABORATORIES, 1546 Gateway Station, Kansas City, Ma.





DEARBORN TRUCK COMPANY Dept. 96 1301 So. Cicero Avenue, CHICAGO

Do You Knowright now is the time to use

LIMESTONE

After taking in your first crop spread Limestone and see the difference in later crops. Kill that soil acid ty! Write for bulk prices today.

for Alfalfa!

The France Stone Co., Toledo, O.



MOISTURE-HOLDING CAPACITY OF SOIL.

Soils vary widely in their capacity to hold water. Tests show that one hundred pounds of sand will hold twenty-five pounds of water. The same amount of clay will hold fifty pounds. An equal weight of humus or decaying vegetable matter will hold one hundred and ninety pounds. From this it can be readily seen why a loam soil containing a large amount of humus will better supply plants with moisture than soil lacking this decaying organic

SHALLOW OR DEEP CULTIVA-TION.

W HICH is the better practice, to cultivate the corn shallow or deep? This is an annual question with the majority of farmers who grow corn. That it has important possibilities is demonstrated by recent experiments conducted by the Missouri Experiment Station. In one plot of corn where the only cultivation was to scrape the surface of the ground sufficiently to kill weeds the crop yielded 39.8 bushels of shelled corn per acre. Corn receiving shallow cultivation vielded 30.1 bushels per acre, and corn that was cultivated at an average



Many Famous Men Got their Training in the Country School.

depth of five inches throughout the season, yielded 23.6 bushels per acre. Shallow late cultivation gave an advantage over the deep cultivations of 4.1 bushels more shelled corn to the

Deep cultivation, if practiced, should be done the first time through the corn before the root systems of the plants are likely to be disturbed by the cultivator. A cultivator with a large number of shovels run shallow is preferable to one with a few shovels which are run deep. The plan most generally followed at the present time is to harrow the corn field once before the corn is up and again before it is large enough to cultivate. This breaks up the crust and serves to dry out and warm the soil. It also reduces the damage done by insects, crows and rodents. Others also use the cultivator before the corn is up, by following the marks made by the corn planter.

SOME ADVANTAGES OF RED CLOVER.

N promoting the use of other legumes, we should not lose sight of the advantages of this old stand-by, red clover. Every intelligent farmer has been thoroughly converted to the rotation idea. Most farmers nowadays realize that the key crop in a rotation is the legume crop. No other legume fits into our popular crop rotation systems in Michigan better than does red clover. This crop can be started without refitting the field. No extra cultivation is necessary. Under good conditions it grows a rank forage crop, is easy to cure and produces a feed of high nutritive value. It is well for us to grow alfalfa and other legumes that have special advantages under unusual circumstances, but for all-around service red clover is a crop that is hard to beat when grown under favorable conditions.

Why We Can Now Have Big Yield Farming

Since oxen tramped out wheat on the threshing floor, no more important invention has been made than the modern thresher that saves all the grain.

FARMERS everywhere are rapidly recognizing the new era of farming—the era of Fordson Farming, the era of farming-profit without the toil and the drudgery unavoidable when old-fashioned methods were employed. For the farmer of today has come to realize the tremendous advantages now offered him through the use of mechanical power-bigger crops, larger profits with time for pleasure doubled.

Highly important in the era of Fordson Farming is the Wood Brothers Individual Thresher. For with it, a big yield is assured because all the grain is saved.

This big yield feature illustrates what is probably the chief advantage in farming with the powerful, lightweight, inexpensive Fordson and the Standard Equipment that operates so perfectly with it.

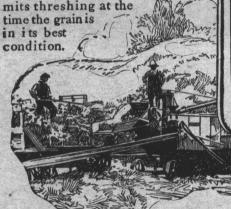
Not only does this combination put the soil into the very best of condition, giving the seed an opportunity to produce its utmost, but with Standard Individual threshing equipment, all of the grain is saved in the very best of condition.

Saving of grain is dependent upon two things: sufficient power, and a separator that will thresh clean. When grain is once blown into the straw stack, there is no means of recover-

Patterned in simplicity after the Fordson itself, and built in large quantities, the Wood Brothers Individual thresher produces results fully up to the Fordson standard and

a price that any farmer can afford. Individual threshing is the coming

method because it per-



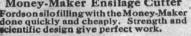
the Fordson itself, this separator often

earns its own cost the first season by

You will understand its extreme

using it to thresh for the neighbors.







The World Famous Oliver No. 7 On thousands of farms, the world famous Oliver No. 7 has been the plowing part-ner of the Fordson from the beginning.



Oliver Single Bottom Sulky For deep mouldboard plowing in trashy conditions with the Fordson. Similar in construction to world famous No. 7 gang.



Good Work With Roller Pulverizer Final Fitting of the seed bed with Ford-son power and the roller pulverizer has meant more bushels for many farmers.



The Amsco Tractor Drill Tractorspeed and accuracy utilized by the Fordson owner with the Amsco special drill. Force feed makes positive planting.





Special Oliver Orchard Plow



Roderick Lean Automatic Harrow Fitting the Seed Bed the Fordson way with the Roderick Lean Automatic Tractor Disc—a special Fordson Harrow.



Roderick Lean "Cutmore" Mower Attaches without changes to the Fordson. Power taken direct from driveworm. Makes a one-man outfit with Fordson.



The Amsco Two-Row Cultivator Cultivating corn is easy for the Fordson farmer with the Amsco Cultivator—spec-ial for the Fordson. Made for hard work.



The Money-Maker Hay Press Baling hay with the Fordson and Money Maker baler is an important operation to the farmer with large haw acreage.



At a price only about twice that of are only five belts and every one of these operates in a straight line. Farmers with no experience, use this Indi-

vidual without any difficulty at all. The simple construction makes it simplicity when you know that there I easy to get at all parts. About 90 /0 |

of the grain is delivered direct to the grain pan from the cylinder.

It is guaranteed that even wet straw will not wrap around the cylinder, and that each Individual will thresh

Constructed specially for the Fordson, the Individual always proves its

Ford Dealers Everywhere Sell Standard Fordson Equipment

They Overlooked the Diamonds

THERE is a modern flippancy to the effect that "What you don't know won't hurt you." It is also a fallacy. For instance:

The farmers of Kimberley were a disgusted, disheartened lot. They said the soil was too rocky to earn them.

them a living.

And all the time their children were playing with diamonds. But the farmers didn't know. They thought the priceless gems were

Don't be like those Kimberley farmers. Know!
Don't seek opportunity in some

distant place and overlook the diamonds that are daily within your grasp. Know!

The secret of economical buying is information. He who is best informed is the one who buys to best advantage. Read the advertise-

上海(())。10年4月

IMPROVED FARMS

In Michigan's Best Counties

We have a few farms, placed with us for sale by some of our stockholders, that offer unusually attractive bargains.

These are not run-down properties, but well stocked, fully cultivated farms, offering pleasant homes and profitable investments.

If you are interested in this kind of property, let us send you details. Among them may be just what you want.

We can help you finance the purchase of any of these farms.

STANDARD MORTGAGE & INVESTMENT COMPANY

Penobscot Building

Detroit, Michigan

Investments of Standard Value



THE AUTO-OILED AERMOTOR A Real Self-Oiling Windmill A year's supply oil is sent with

Oil an Aermotor once a year and it is always oiled. Every moving part is completely and fully oiled. A constant stream of oil flows on every bearing. The shafts run in oil. The double gears run in oil in a tightly enclosed gear case. Friction and wear are practically eliminated.

Any windmill which does not have the gears running in oil is only half oiled. A modern windmill, like a modern automobile, must have its gears enclosed and run in oil. Dry gears, exposed to dust, wear rapidly. Dry bearings and dry gears cause friction and loss of power. The Aermotor

pumps in the lightest breeze because it is correctly designed and well of the lightest breeze because it is correctly designed and well of the lightest breeze o Write today AERMOTOR CO. Chicago Des Moines Minneapolis Oakland





Our Service Department

Always Give Name and Address When Sending Inquries

RIGHT TO VOTE.

Does the wife of an American citizen and taxpayer have equal voting rights with her husband, or would she require a joint deed with her husband?—W. N. J.

The right to vote depends upon the law of the state. Ownership of property is mot an essential.

Marriage makes no difference.-

TELEPHONE POLES.

What height must telephone poles be? Most of the poles along my place are not over eight feet high. Also, can a telephone company set poles along a highway without paying the owner of the land for the right-of-way?—A. S.

There is no provision in the law which regulates the height of telephone poles along the highway.

The Telephone Company may set poles along the highway where they have the consent and approval of this department without paying the owner of the land for the right-of-way.-

SCHOOL PURCHASE OF PIANO.

Has the school board of a district any authority to use school funds for the purchase of a musical instrument for community meetings? The vote was taken at said meeting with no notice to the voters of the district and not at the annual meeting.—E. H. H.

I would say that the board of a district has no authority to use school funds to purchase a musical instrument for community meetings. The school board might purchase a musical instrument for the school and that instrument could be used if community meetings were held in the schoolhouse if the board permitted it.-Coffey.

INTEREST RATES.

Will you please tell me what the legal interest is in Michigan? Have banks, fire insurance companies, or any other company any right to charge more than legal interest?—C. D. P.

The rate in Michigan without specification is five per cent. By contract it may be seven. Pawnbrokers are allowed to charge more than that. That is the limit of interest rates that can be charged. There is nothing to prevent the owner of a note executed by any other person selling it for any price he can get, which may be one cent on the dollar and might show a return of several hundred per cent interest.-Rood.

CUTTING SWEET CLOVER.

I have a field of sweet clover which I sowed late last summer. It is rather this and then get seed from the second growth or should I let it seed from the first growth?—A Reader.

appear. The height is also very important. A few leaves should be left attached to the stubble in order that the buds will start development and produce a second crop.

at the present time it will be necessary for you to cut the plants from eight to ten inches above the ground, while if the blossom buds are just forming, from six to eight inches would likely leave a few leaves attached to the stubble. If the blossom buds cutting the first crop and allowing the

second to mature seed, while if the sweet clover is in full bloom at the present time, would suggest allowing this crop to form seed.

Sweet clover is indeterminate in growth, that is, it does not mature all of its seed at the same time. A single plant oftentimes has mature seed, onehalf mature seed and blossom on the same date. If the first crop is pastured or cut, the plants tend to mature their seed much more evenly.-Megee.

Special Bulletin No. 113 on the culture of sweet clover may be secured from Dean R. S. Shaw, East Lansing, Michigan. This bulletin gives detailed information concerning the special attachment for mowing machine that makes it possible to cut the clover from eight to ten inches high.-Megee.

WILD OATS.

Will you please tell me if wild oats that came up in alfalfa, if cut and fed to stock, will come up where the manure is spread? This field has been seeded to alfalfa for five years and I never saw wild oats there until last year. I do not know where they came from —E M B

Unless manure from stock fed alfalfa hay carrying wild oats is carefully composted, a spread of wild oats can be expected from its use. A small percentage of wild oats apparently retain their germination after passing through live stock. Many seeds also find their way directly into the ma-

Wild oats were brought into Michigan to a considerable extent in seed of western spring wheat, planted extensively in Michigan during the war years. Cutting before seed forms is the most effective way of eradicating this pest.—Cox.

SPRAY FOR WILD MUSTARD.

I have a field of hulless blue barley, sown early this spring, and seeded to orchard grass and alsike clover. This field is entirely green with mustard, and to all appearances the barley and the new seeding have no chance at all to survive. I am interested in learning if there is any kind of a spraying solution that will destroy the mustard and not injure the new seeding.—M. S.

There is no spray that will prove satisfactory under your conditions. The mustard is an annual plant and should not be allowed to produce seed.

The field should either receive clean cultivation or else be frequently clipped to prevent the seeding of the mustard.—Megee.

MATRIMONIAL DIFFICULTIES.

Ten years ago I married a man with whom I lived happily for four years, and then the second woman appeared the first growth?—A Reader.

Whether or not you should take the present crop of sweet clover for seed will depend very largely upon the stage to which the plants have developed. The proper time to cut the first crop is just before the blossom buds appear. The height is also very imhim? Am I lawfully married to him? Can I make him support me, and what support can I make him give, if any?

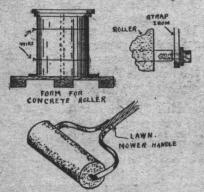
A marriage by one who has a spouse living undivorced is absolutely void, If the sweet clover is in full bloom and needs no annulment; and a subsequent marriage entered into by the other party to the second marriage is absolutely valid. It is possible that the other party to the third marriage would be able to make use of the concealment of the second marriage from him as a supplemental ground for diare just forming we would recommend vorce if that fact were kept from him. -Rood.

ABOUT RATS.

SEE by the papers that rats have begun to eat pipe organs in Lapeer or St. Clair county. Sixty years ago I lived in Wellington county, Ontario. A neighbor, who lived near a branch of the Ervin River, where there were no end of rats, and who had large barns all built on the ground, as bank barns were popular at that time, put his seed grain in barrels and then covered them with lumber and left them until spring, but there was a rat hole left by mistake into a big barrel and in the spring he had no wheat. He took the barrel and put it into the creek and made it water-tight. Then he lined the top end about ten inches on the inside with tin, put it back into the creek and filled it with water up to the tin. Then he covered it with dry wheat chaff and left the rat hole the same as before. He got ninetyfour or ninety-five rats in forty-eight hours. In a barrel so lined that they cannot get a toe-hold to climb, the rats cannot jump out of the water.-James White.

MORE LEGUMES BEING GROWN.

D URING the past three weeks, we have traveled about in nineteen different counties of Michigam. A more generous use of legumes on the farms of Michigan is apparent. Alfalfa particularly has had a great boom. This favor has been shown the alfalfa crop largely because the pioneer growers



Showing an Easy Way to Make a Lawn Roller Out of Concrete and a Lawn Mower Handle.

have quite thoroughly demonstrated the economic advantage in its production. Splendid stands of clover, particularly of the June variety, are to be seen on every hand, and in sections where winter-killing is more common a considerable acreage of alsike will be harvested this year. Fields of pure timothy are becoming scarcer. The majority of hay fields are made up of a mixture of timothy and clover. Sweet clover is becoming quite popular in a good many sections, notably on our lighter soils. It is now probably our most important soil renovating crop, although it is being used in larger and larger quantities as a forage. Soy-beans is also being tested out by a wider circle of farmers and no doubt this crop will in time add materially to the acreage devoted to

PLOW POINTS WEAR RAPIDLY.

M ANY farmers who are using tractors are learning that plow points wear out more rapidly when propelled by the tractor than when horses pull the implement. This is due to the fact that the tractor travels more rapidly and the increased resistance due to speed wears out the points much quicker. It therefore becomes necessary to sharpen the plow points more frequently than is the case when using horses.

The Department of Agriculture will soon publish a bulletin entitled, "Important Cultivated Grasses," which will aid in determining the names of the ordinary varieties of grasses.





Wanted -- Salesmen

We desire to secure the permanent services of local representatives to act as county agents. Prefer men qualified to deal with farmers. We manufacture a high grade line of Paints, Enamels, Yarnishes, Roof-Coatings, Lubricants, etc. Our prices are reasonable. We pay liberal commissions weekly. With us you can build up a business of your own that will increase your earnings yearly. Write for particulars.

THE CERTIFIED MATERIALS CO. CLEVELAND, OHIO

Wanted Position Having sold our large farms, we desire to place our superintendent. He made good in every way, Is 35 years of age, widower, no children. Is man of finest character, well educated, a real man 6 ft., 200 lbs, and a hustler. Address him, Herman R. Franzen, Ephrata, P.

Homespun Smoking Tobacco Mild and Mellow-10 lbs livery guaranteed. We furnish free recipe for preparing. Smoking Tobacco Exchange, Sedalia. Ky

Homespun smoking or chewing TOBACCO Collect on delivery; 5 lb., \$1.50; 10 lb., \$2,50; 20 lb.,\$4. Farmers' Asso'n, Paducah, Ky.

Homespun Tobacco 3 lb., \$1; 10 lb., \$2,50. Farmers' ASSO'N, Jonesboro, Ark.

Mention The Michigan Farmer When Writing Advertisers

Every thinking farmer wants the thresherman who has a good engine just as much as he wants a good

No thresher can do good work without ample, steady power. If the power slows down unnecessarily, poor threshing, poor cleaning, and wasting of grain surely follows.

You do not want a threshing outfit Tou do not want a threshing outfit that breaks down or has to stop and wait for steam, letting all hands stand idle on your time and at your expense.

You work hard to grow and harvest a crop and you want it all saved.

You want neither your grain nor your time wasted.

Hire a Nichols-Shepard outfit with a

Nichols - Shepard Steam or Oil-Gas Traction Engine

Save Your Thresh Bill

The reason is that it is correctly designed and correctly made.

and correctly made.

Strong boiler, easy steamer, and engine with ample power makes the ideal steam engine.

An Oil-Gas Tractor with a surplus of power, easily started, and that saves delays and waits that cost the farmer money.

Get the right outfit to do your threshing and put the money in your pocket that other kinds waste.

Write for Free Circulars Nichols & Shepard Co. (In Continuous Business Since 1848)
Builders exclusively of Red River Special
Threshers, Wind Stackers, Feeders, Steam
and Oil-Gas Traction Engines.

Battle Creek, Michigan \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$

No better paint made. Compare our formula with any other.

OUTSIDE WHITE

75% Pure White Lead 20% Pure Zinc Oxide 5% Magnesia Silicate 90% Pure Refined Linseed Oil 10% Cooked Oil and Shelac Drier.

OUTSIDE COLORS

Pure White Lead Pure Zinc Oxide Ground Colors

90% Pure Raw Linseed Oil 10% Cooked Oil and Shelac Drier.

We guarantee our paint. Write for prices and free color card. Agents wanted. Excellent proposition in unoccupied Territory.

Consumers Paint Co. 1600 Herbert St.

LANSING, MICH You Can Make



"Midget" Marvel
elf-Contained Roller Flour Mill

says M. A. Kamm. Oxford, Mich. Capacities: 15, 25, 50 and 100 barrels of as fine roller patent flour a day as any mill can make, Write for free book. "The Story of a Wonderful Flour Mill," trial offer, terms, etc.

Anglo-American Mill Company, Inc. 2180-2186 Trust Building, Owensboro,



Francisco Farm Notes

By P. P. Pope

E used to think we knew how to make hay. We had no system, no regular plan. When the hay ready to cut we would cut it. When it was cured we would rake it into windrows and haul to the barn. We often made good hay but never knew where we were at, so to speak, and there was a great deal of confusion. We found our work very hard to plan ahead, we did not get a uniform quality of hay, and haying was a bugbear, sometimes it almost became a nightmare.

Now we can speak of system on the farm, we realize that, although it sounds good to talk about and can be

worked out very nicely on paper, a little thunder cloud is liable to knock it into a cocked hat. Especially is this true in hay time. A systematic plan of doing things does not adapt itself readily to

work that is very largely dependent upon weather unless it be very flexible, for no system has yet been devised that can control the clouds and the sunshine. There are a few general principles of hay-making, however, that, when once thoroughly understood, aid materially in relieving the strain and avoiding the confusion of the season.

We married a wife a number of years ago and when we went to help her father make hay we learned some of these things. First, rain or dew will not hurt freshly cut hay any more than that left standing. Second, moisture allowed to accumulate upon and evaporate again from hay in the swath after it is once partially cured, will cause great damage. Third, hay will cure much quicker in the windrow than in the cock; the hand-labor required in making it is much lessened, the time saved will more than offset the slight advantage of the cock in the quality of the product. This refers to hay making with the side de-livery rake and the windrow loader.

With these things in mind we aim to do the cutting in the late afternoon, after the sun is too low to wilt it much, or before moon of the next day, cutting only one day's haul ahead. All of this must go into the windrow that same evening if it has to be done by moonlight. There it remains to cure and when ready for the mow the hay loader and the slings are brought into play.

This method reduces the hand-work to a minimum, all the forking required being to arrange the hay on the wagon and in the mow. It makes a very high quality of product, as there is very little bleaching or scorching and very few of the leaves are lost. The less shuffling the hay receives as a rule, the better the product. The leaves are by far the richest part of the hay and we knock off as few as possible. We have a tedder, a very old one, but it is still good. It has seen a great many years of service or rather of idleness. I do not believe it is used at all more than one year in three and then only in catchy weather or on spots where the hay is extremely heavy.

On account of the very nature of the farmer's work, any system for the farm must be made flexible to suit the exigencies of the occasion, and combined with all this hay making lore must forever be mixed a goodly portion of common snse, brain, brawn and blisters.



Only one-fifth of the buildings owned by the Bell System are shown in this pictur

A Telephone City

Above is an imaginary city, made by grouping together one-fifth of the buildings owned by the Bell System, and used in telephone service. Picture to yourself a city five times as great and you will have an idea of the amount of real estate owned by the Bell System throughout the country.

If all these buildings were grouped together, they would make a business community with 400 more buildings than the total number of office buildings in New York City, as classified by the Department of Taxes and Assessments.

Next to its investment in modern telephone equipment, the largest investment of the Bell System is in its 1,600 modern buildings, with a value of \$144,000,000. Ranging in size from twenty-seven stories down to one-story, they are used principally as executive offices, central offices, storehouses and garages. The modern construction of most of the buildings is indicated by the fact that the investment in buildings is now over three times what it was ten years ago.

Every building owned by the Bell System must be so constructed and so situated as to serve with efficiency the telephone public in each locality, and to be a sound investment for future requirements.

"BELL SYSTEM"



AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy, One System, Universal Service, and all directed toward Better Service

O nionionionionionionionionioni How to Save the Manure

An ex-Secretary of Agriculture startled the country with the statement that "we annually lose ONE BILLION DOLLARS by improper handling of

This enormous waste could practically all be saved by following the principles laid down by certain famous students of this subject. The priceless ideas of these men are fully outlined and illustrated in the

BILLION DOLLAR BOOK "MONEY IN MANURE"



Ohiohiohiohiohiohiohioh



Wanted: Agents in open territory for concrete Tile and Wood Silos. Good proposition. Write E. L. Green, Oxford, Mich.

Trained American Fox Hounds, Rabbit and Skunk W. E. LECKY, Holmesville, Ohio

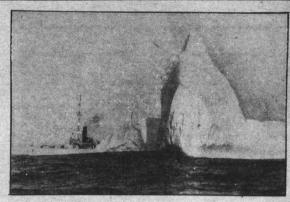
WORLD EVENTS IN PICTURES



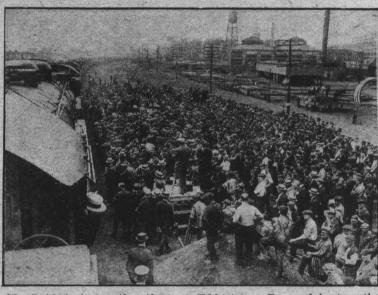
In the recent Milwaukee balloon race, the government tested out the special radio outfit shown above.



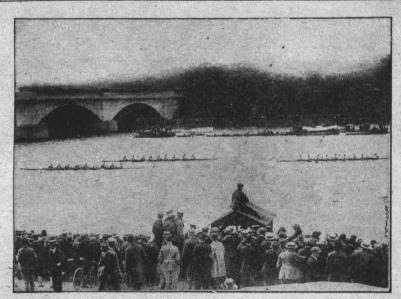
Marshal Foch telling King George of war experiences, upon his visit to old battlefields.



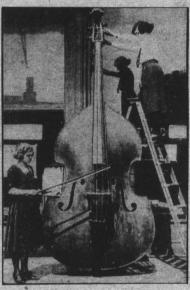
The government has revenue cutters on duty near steamship lanes to warn boats of the presence of icebergs.



The Baldwin locomotive plant at Eddystone, Pa., celebrates the completion of an order for one hundred oil-burning locomotives for use on the Pacific Coast.



The finish of the Freshmen Eight event in the American Henley Regatta on Schuylkill River. The U.S. Naval Academy freshies win from Universities of Pennsylvania and Princeton.



Showing the world's largest violin, which was a feature at a New York music convention.



A view of the Lincoln Memorial on Decoration Day when a hundred thousand people heard President Harding dedicate it. The mirror basin was especially flooded for the occasion.



Miss Mupia Ju, China's only woman aviator, will help in the defence of Chinese government.



The child actors in the Oberammergau passion play think it fun to wear their "stage wigs" when going to school. Thousands from all over the world have witnessed this play.



This locomotive seems to like girls. It pulled this class from their school at Chambersburg, Pa., to Atlantic City, where they will spend a month as part of their school work.

THE CROSS-CUT —By Courtney Ryley Cooper

pleading in the tone now. "Please."

The car creaked upward. Out came Fairchild, brushing the dust from his clothes. But already the girl was pressing the lug wrench into his hands.

"Don't mind that dirt," came her exclamation. "I'll-I'll give you some extra money to get your suit cleaned. Loosen those lugs, while I get the spare tire off the back. And for goodness' sake, please hurry."

Astonishment had taken away speech for Fairchild. He could only wonder-and obey. Swiftly he twirled the wrench while lug after lug fell to the ground, and while the girl, struggling with a tire seeming almost as big as herself, trundled the spare into position to await the transfer. As for Fairchild, he was in the midst of a task which he had seen performed far more times than he had done it himself. He strove to remove the blown-out shoe with the cap still screwed on the valve stem; he fussed and swore under his breath, and panted, while behind him a girl in whipcord riding habit and close-pulled cap fidgeted first on one tan-clad foot, then on the other, anxiously watching the road behind her and calling constantly for speed.

At last the job was finished, the girl fastening the useless shoe behind the machine while Fairchild fastened the last of the lugs. Then as he straightened, a small figure shot to his side, took the wrench from his hand and sent it, with the other tools, clattering into the tonneau. A tiny hand went into a pocket, something that crinkled was shoved into the man's grasp, and while he stood there gasping, she leaped to the driver's seat, slammed the door, spun the starter until it whined, and with open cutout roaring again, was off and away, rocking down the mountain side, around a curve and out of sight-while Fairchild merely stood there, staring wonderingly at a tendollar bill.

A noise from the rear, growing louder, and the amazed man turned to see a second machine, filled with men, careening toward him. Fifty feet away the brakes creaked, and the big automobile came to a skidding, dust-throwing stop. A sun-browned man in a Stetson hat, metal badge gleaming from beneath his coat, leaned forth.

"Which way did he go?" "He?" Robert Fairchild stared.

"Yeh. Didn't a man just pass here in an automobile? Where'd he gostraight on the main road or off on the circuit trail?"

"It—it wasn't a man."

"Oh, please hurry." There was of the machine stared at him. "Don't surveyed the winding road before him try to bull us that it was a woman."

"Oh, no-no-of course not." Fairchild had found his senses. "But it wasn't a man. It—it was a boy, just about fifteen years old."

'Sure?"

"Oh, yes-" Fairchild was swimming in deep water now. "I got a good look at him. He-he took that road off to

It was the opposite one to which the hurrying fugitive in whipcord had taken. There was doubt in the interro-

"Sure of that?" he queried. "I'm the sheriff of Arapahoe county. That's an auto bandit ahead of us. We-"

and scratched his head.

"Don't guess it would have made much difference which way he went," came ruefully at last, "I never saw a fellow turn loose so much speed on a mountain road. We never could have caught him!"

"Dangerous character?" Fairchild hardly knew why he asked the question. The sheriff smiled grimly.

"If it was the fellow we were after, he was plenty dangerous. We were trailing him on word from Denverdescribed the car and said he'd pulled a daylight hold-up on a pay-wagon for the Smelter Company-so when the car went through Golden, we took up

full stop behind him, and a driver mingled a shot with the tooting of his horn, that he turned to allow its pas-

"Didn't hear you, old man," he apologized, "Could you give a fellow a

"Guess so." It was friendly, even though a bit disgruntled; "hop on."

And Fairchild hopped, once more to sit on the tailboard, swinging his legs, but this time his eyes saw the everchanging scenery without noticing it. In spite of himself, Fairchild found himself constantly staring at a vision of a pretty girl in a riding habit, with dark-brown hair straying about equally dark-brown eyes, almost frenzied in her efforts to change a tire in time to elude a pursuing sheriff. Some way, it all didn't blend. Pretty girls, no doubt, could commit infractions of the law just as easily as ones less gifted with good looks. Yet if this particular pretty girl had held up a pay wagon, why didn't the telephoned notice from Denver state the fact, instead of referring to her as a man? And if she hadn't committed some sort of depredation against the law, why on earth was she willing to part with ten dollars, merely to save a few moments in changing a tire and thus elude a sheriff? If there had been nothing wrong, could not a moment of explanation have satisfied any one of the fact? Anyway, weren't the officers looking for a man instead of for a woman? And yet:

It was too much for anyone, and Fairchild knew it. Yet he clung grimly to the mystery as the truck clattered on, mile after mile, while the "Where you bound for, pardner?"

broad road led along the sides of the hills, finally to dip downward and run beside the bubbling Clear Creekclear no longer in the memory of the oldest inhabitant; but soiled by the silica from ore deposits that, churned and rechurned, gave to the stream a whitish, almost milk-like character, as it twisted in and out of the tortuous canon on its turbulent journey to the sea. But Fairchild failed to notice either that or the fact that ancient, age-whitened water wheels had begun to appear here and there, where gulch miners, seekers after gold in the silt of the creek's bed, had abandoned them years before; that now and then upon the hills showed the gaunt scars tire? And why had she not offered of mine openings-reminders of the dreams of a day long past; or even the problem which almost wiped out for more important fact that in the distance, softened by the mellowing rays of a dying sun, a small town gradually gamble he was about to take. And so was coming into view. A mile more,

"If she wasn't guilty of something, why did she run?"



"Well, I wouldn't swear to it. There was another machine ahead, and I lost 'em both for a second down there by the turn. I didn't see the other again, but I did get a glimpse of one off on that side road. It looked like the car that passed me. That's all I know." "Probably him, all right." The voice

came from the tonneau. "Maybe he figured to give us the slip and get back to Denver. You didn't notice the license number?" This to Fairchild. That bewildered person shook his

"No. Didn't you?"

"Couldn't-covered with dust when we first took the trail and never got close enough afterward. But it was the same car-that's almost a cinch."

"Let's go!" The sheriff was pressing a foot on the accelerator. Down the hill went the car, to skid, then to make a short turn on the road which led away from the scent, leaving behind a man standing in the middle of the road, staring at a ten-dollar billand wondering why he had lied!

CHAPTER IV.

WONDERMENT which got nowhere. The sheriff's car returned before Fairchild reached the bottom of the grade, and again stopped to survey the scene of defeat, while Fairchild once more told his story, deleting items which, to him appeared unnecessary for consumption by offi-"Not a man?" The four occupants cers of the law. Carefully the sheriff

the trail a couple of blocks behind. He kept the same speed for a little while until one of my deputies, got a little anxious and took a shot at a tire. Man, how he turned on the juice! I thought that thing was a jack rabbit the way it went up the hill! We never had a chance after that!"

"And you're sure it was the same

The sheriff toyed with the gear shift. "You never can be sure about nothing in this business," came finally. "But there's this to think about: if that fellow wasn't guilty of something, why did he run?"

"It might have been a kid in a stolen machine," came from the back seat. "If it was, we've got to wait until we get a report of it. I guess it's us back to the office."

The automobile went its way then, and Fairchild his, still wondering; the sheriff's question, with a different gender, recurring again and again:

"If she wasn't guilty of something, why did she run?"

And why had she? More, why had she been willing to give ten dollars in payment for the mere changing of a some explanation of it all? It was a Robert Fairchild the zest of the new life into which he was going, the great thoroughly did it engross him that it then the truck stopped with a jerk. was not until a truck had come to a

AL ACRES—Al Finds that Mailplane Delivery is Very Efficient.

-By Frank R. Leet



ned in embarrassment.

"Ohadi."

off here. Stranger?"

"Yep."

"Miner?"

and nodded non-committedly. truck driver toyed with his wheel.

"Just thought I'd ask. Plenty of work around here for single and double jackers. Things are beginning to look up a bit-at least in silver. Gold mines ain't doing much yet-but there is a good deal happening with the white stuff."

"Thanks. Do you know a good place to stop?"

Mother Howard's Boarding "Yeh. House. Everybody goes there, sooner or later. You'll see it on the left-hand side of the street before you get to the main block. Good old girl; knows how to treat anybody in the mining game from operators on down. She was here when mining was mining!"

Which was enough recommendation for Mother Howard. Fairchild lifted = his bag from the rear of the vehicle, waved a farewell to the driver and started into the village. And thenfor once—the vision of the girl departed, momentarily, to give place to other thoughts, other pictures, of a day long

The sun was slanting low, throwing deep shadows from the hills into the little valley with its chattering, milkwhite stream, softening the scars of the mountains with their great refuse dumps; reminders of hopes of twenty years before and as bare of vegetation as in the days when the pick and gad and drill of the prospector tore the rock loose from its hiding place under the surface of the ground. Nature, in the mountainous country, resents any outrage against her dignity; the scars never heal; the mine dumps of a score of years ago remain the same, without a single shrub or weed or blade of grass growing in the big heaps of rocky refuse to shield them.

(Continued mext week).

RURAL HEALTH By Dr. C. H. Lerrigo

IVY POISONING.

O prevent ivy poisoning the simplest and most effective measure is washing the exposed parts with a good suds of hot water and laundry soap, soon after exposure. The poison is an oily principle called Toxi codendrol. It stays on the surface for some little time without doing much damage and thus a man may take a thorough wash at the end of his day's work and get rid of it. Anything short of thoroughness does more harm than good as it simply results in smearing the poisonous oil over a greater surface. The water must be hot and the soap must be worked into a good suds and thoroughly applied with a soft cloth. It is well to follow this with a rinsing bath.

Some workers find much protection from annointing the places most likely exposed with olive oil or vaseline before exposure. This must be well washed off at the close of the day.

Alcohol is a solvent of the oil. It may be diluted with an equal quantity of water and used to sponge the exposed parts. But it must be used freely enough to wash the poison clear. Otherwise it will serve only to spread it farther.

Many persons find protection by taking a solution of the poison in small doses before the season begins. Thus the system becomes accustomed to it it is called hair wire. and gives them immunity.

Fairchild turned absently, then grin- tack of ivy poisoning. The application of very hot water alone gives appreciable relief from the itching, but this "That's it, straight ahead. I turn is helped by the addition of cooking soda, a level teaspoonful to the quart of water. If the eruption is severe apply a hot solution of permanganate Fairchild shrugged his shoulders of potash; use it in one per cent solu-The tion, but remember that this drug will stain the skin a brownish color. The application of lemon juice will remove this discoloration, or in time it will wear away without help.

I do not recommend the much used "sugar of lead." I think that it often prolongs the case though it does give temporary relief from the itching. The blisters may be drained, but be careful not to break the skin badly; just a small puncture is all that is needed.

In very severe cases the patient should be kept in bed, on light diet, and saline laxatives used.

Radio Department

Conducted by Stuart Seeley

GETTING THE MOST OUT OF A VACUUM TUBE.

APPARATUS which is purchased ready-made is usually assembled correctly and connected in a manner to get the best possible results and the only thing necessary for the operator to do is to make sure he has connected the positive and negative poles of the storage battery in the proper place and make all connections secure.

In a home-made set there are several things to take into account. The most important feature is connecting the apparatus in the proper manner to make the tube operate as efficiently as possible. It is quite generally the thing for an amateur builder to totally disregard the difference between the positive and the negative poles of the filament lighting battery, but there is but one way to connect the "A" battery to the negative grid and plate leads and to the bulb and rheostat to obtain the highest efficiency and the longest life from the "B" battery. The rheostat should be in the negative lead to the socket; the grid circuit should have its "grounded" end connected to the negative side of the "A" battery, below the rheostat; the plate circuit should be connected to the positive terminal. If this method is used in connecting up the set the filament need. not be lighted as brightly to get loud signals as is necessary when the grid circuit is connected to the positive side or above the rheostat.

An important consideration is the grid leak. If one is used that has a variable resistance it is well to make several tests in order to secure the best working conditions. The grid leak will be found to have a marked effect upon the brilliancy with which the filament must be burned. If the resistance is too low the bulb will start oscillating with a click when the plate variometer is rotated toward maximum; if it is too high the bulb will howl and make all kinds of peculiar noises in the 'phones.

Frequently a receiving tube is branded as "no good" because it will mot oscillate readily when the plate variometer is rotated; however, this trouble may be overcome by placing a low capacity, or even a variable capacity condenser across the 'phones. Tests of different condensers will readily prove whether or not the difficulty may be fixed.

RADIO NOTES.

The head 'phones used for radio contain almost a mile of wire so fine that

The waves sent out by the modern If prevention fails there is still much broadcasting station are about a quartthat can be done to alleviate an at- er of a mile in length.

"Watch me," said the strong swimmer, "I'm not afraid."



So he matched his strength against the swirl of the rapids, and laughed at the danger, and kept repeating the stunt, until-

It was the day the life-savers had been waiting forthat day the call for help came.

It's an easy matter to smile at coffee warnings when you're going strong.

But a good many strong swimmers won't risk the rapids, and a good many coffee drinkers are beginning to think of the caffeine in coffee.

Coffee can disturb nerves and digestion, and often

There's a safe and satisfying course for everybody in the selection of a table drink.

Postum has charm without harm. It's the safe drink for all, and probably, therefore, it's the better drink for you. Thousands have found it better, and fully satisfying, for them.

Your grocer has both forms of Postum: Instant Postum (in tins) made instantly in the cup by the addition of boiling water. Postum Cereal (in packages of larger bulk, for those who prefer to make the drink while the meal is being prepared) made by boiling for fully 20 minutes.

"There's a Reason" for Postum

Made by Postum Cereal Co., Inc., Battle Creek, Mich.



RADIO RECEIVING SETS

Firth, Westinghouse, Clapp-Eastman for long distance receiving. Small crystal receiving sets range 25 to 50 miles. Radio supplies of standard high grade make. Our Radio engineer will gladly inform you regarding wiring and hookup of your outfits. Write us for prices

JAMES W. DINAN

Glendale 4900

3441 Woodward Ave., Bank Reference: Peninsular State Bank, Detroit, Mich.

Detroit, Mich.

BUILD Your Own and receive daily concerts, market reports, etc. Complete directions with drawing and diagrams sent prepaid for 25c. Send coin or money order today. Special offers on complete Radio Re-ceiving sets and parts,

NEWARK RADIO SUPPLY CO., Dept. E Roseville Station, Newark, New Jersey

Delivered to you Free Mead Cycle Company with

J. I. CASE Separator in fine condition, looks like new. Also a Buffalo Pitts Beaner in fair condition. Will sell cheap.
A.T. SWARTHOUT, Laingsburg, Mich.



PAINT-\$1.17 PER GALLON Get factory prices on all paints. We guarantee quality, We pay the freight. Write today. Franklin Color Works, Dept. M. Franklin, Ind.

TWINE BINDER Get our low 1922 price, Club orders and car lots o specialty. Farmer Agents Wanted. Samples and circ lar free. THEO. BURT & SONS, Melrose, Ohio.

For Sale-Elgin Tractor and three plow outfit in good running order, interchangeable to two-plow motor has plenty of power for all kinds of beit work Buda motor, Outfit practically new, Bargain for cash Address Box H1724. Michigan Farmer, Detroit, Mich

Mention The Michigan Farmer When Writing Advertisers



Property Owners

To introduce the best paint in the world. Made under our new scientific process. Free Paint for Your Own Home to one property owner in each locality we will give you for a little of your time and good will.

Be first to write quick for special introductory offer. We want an agent in every community to use and introduce these wonderful prints at our astonishingly low prices to all property owners.

Write for color card and booklet fully explaining our amazing introductory offer to property owner agents.

TheMartin Laboratories

Dept. B. General Office, 402 Fulton Bldg., PITTSBURGH, PA.

Bee Hives, Section Boxes



Comb foundation, Smokers, etc. Complete outfits for beginners. Agents for the A. I. Root Company, in Mich-igan. Send for catalog. Beeswax wanted.

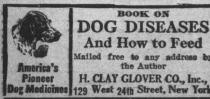
Berry Baskets and 16 quart crates. A grade wood quart baskets, and waxlined paper baskets. Special offer of 200 waxlined paper baskets postpaid for \$1.70, to towns within



Send for Price List.

M. H. HUNT & SON.

Lansing, Mich.



Peonies Write for Special Offer. O. L. RINGLE, Wausau, Wis.

Woman's Interests

Tin Cans for Home Canning

By G. O. Stewart

MUCH may be said of the relative until after the sterilization is comconceded because of the easier handling, transportation, and storing. More length of time and with less expense by using the tin can.

Even in home use, the tin can is the glass jar are: now replacing the glass jar. The ture has this to say: "The use of tin cans is regarded as entirely practical and vegetables of the farm. Their use ous to hot glass jars). for this purpose is recommended because it simplifies the canning opera-tion. The sealing of a tin can is a ing away largely with "flat sour." comparatively simple matter. The use of tin cans for the canning of surplus tin. fruits and vegetables has the further advantage that products so packed are easily handled in transportation and storage."

For sterilization in the pressure cooker, the tin can has a real advantage over the glass jar. A steam pressure of five to fifteen pounds must be developed in the pressure cooker. There is a consequent pressure within the jar or the can. If the glass jars are used, the pressure in the cooker pressure inside the jar will cause the contents of the jar to boil over since the glass jar must not be sealed tight er food products.

value of glass jars and tin cans plete. Since the pressure must be reas containers for preserving leased slowly, there is a consequent products for commercial and home use. loss of time. This is not the case with When considered from a commercial the tin can, for the tin can is sealed standpoint, the advantage of the tin before sterilization and is made to can over the glass jar is generally stand great internal pressure. The pressure in the cooker may, therefore, be released quickly, the cans cooled work can be accomplished in a given quickly, and other cans put into the cooker for sterilization.

Other advantages of the tin can over

No danger of breakage because United States Department of Agricul- there is nothing to break. No loss of

Operator can have plenty of fresh for the home-canning of surplus fruits air while working. (Cold air is danger-

> No danger of broken glass in food. Contents may be cooled quickly, do-

> Berries keep their shape better in

Light is excluded, hence the product does not bleach or lose its color. Contents never boil or agitate on

account of pressure in can.

Cans may be stacked on top of one another in smaller space. Three dozen No. 2 cans may be processed in a wash boiler-no false bottom needed.

Products in tin cans cost less in moving and in transportation than in glass jars.

If the instructions for the cold-pack must be released slowly or the high method are followed carefully, it is entirely safe and practicable to use tin cans for all fruits, vegetables and oth-

Canning Queries

Will you please tell me how long to cook two-quart cans of corn, and twocook two-quart cans of corn, and two-quart cans of tomatoes, I mean the cold-pack way? I use a wash boiler to cook cans in. I find if I spread a cloth over the boiler and then put the cover on I do not need to add water so often and it takes less fuel. —W. J. N.

Cut out and save the following time tables for cooking of fruits and vegetables by cold-pack method.

	William Milliam Millia	Proc or B How
The second second second second	Asparagus 8 Beans, baked	2½ 1½ 3 3 2½ 2½ 4
1	(steamed)	
THE SALES OF THE PARTY OF THE P	Peas 5 Peppers Succotash Summer squash 15 Tomatoes 1½	2½ to 3 2 3 1 ½
The second second second	stim.4. Slanch Minutes. Minutes. Process	Syrup.
	Apples 1 20 Blackberries 15 Huckleberries 15 Sweet cherries 18 Sour cherries 1 Cramberries 1 Curramts 15 Gooseberries 1 15	Water Medium Medium Thick Thick Thick Thick

Gooseberries 1 Loganberries

Peaches

Plums

Medium

Thick Medium

Thick

Raspberries Rhubarb Strawberries 15 10

Canning Strawberries.—This recipe for canning strawberries may be a little tardy but in such case it will be of use next season. In every case reported it has proven very satisfactory. Wash and hull the berries and put in a large pan, measuring a cup of sugar to each quart of berries. Allow them to stand over night. Fill hot jars next morning, add the juice of the berries to fill up the jar instead of water, and process in steam or hot water-bath for sixteen minutes. By this method the berries keep dark and are well distributed through the jar.

HOUSEHOLD HINTS.

To keep the food chopper from slipping, and also to prevent marks on your oilcloth or table, slip a jar rubber between the clamps of the chopper and the table.-Mrs. J. T.

Before frying cornmeal mush dip it in cornmeal mixed with brown sugar. The mush will brown better and less fat is required.-Mrs. L. M. T.

Soap should never be used to clean fine mirrors. Rub them with a paste of whiting and water. When dry, polish with dry chamois to remove powder. A little alcohol in cold water also also gives a brilliant polish.—Mrs. M. P.

Vinegar and salt will brighten up the copper pots and kettles valued as heirlooms. A coat of shellac will keep them bright as long as they are not in use.-Mrs. G. S.

How to Make Jam and Jelly

With Positive Success

New Process Requires Only 1 Minute's Boiling and Never Fails

By Ann Proctor

The greatest cooking authorities in this country—Good Housekeeping Institute, Boston Cooking School, Modern Priscilla Broving Plant, government experts, domestic science teachers, etc.—and housewives everywhere are hailing with delight the New Certo Process of making all kinds of jam. Process of making all kinds of jam and jelly. Anyone, even a child, can now make jam or jelly of excellent quality, with any kind of fruit in a few minutes. Only one minute's boiling is required, and the result is one-half more product from the same amount of

Certo (Surejell) is a pure fruit product, contains no gelatine or preservative. It is concentrated pectin, supplied by Mother Nature in some fruits, now bottled for household use. With it, jam and jelly making is a fasting the resulting preserved to the supplier of the cinating pastime—no guesswork or worry. Cooking authorities call it "the short boiling process" because you boil only one minute. This short boiling saves the natural color and flavor of the fruit, permits the use of fully rip-ened fruit, and makes one-half more product from the same amount of fruit because no juice is boiled away.

With Certo you can make jam or jelly from any fruit. Peach, pear, or rhubarb jam, blackberry, elderberry or cherry jelly, orange marmalade, etc., are easily and quickly made and keep perfectly. Certo "jells" any fruit juice. It simply supplies the necessary pectin to "jell" all the fruit juice.

to "jell" all the fruit juice.

Certo is what you have been looking for. Be the first to use it in your neighborhood so you can tell your friends about it, and show them the excellent results you had. You can get Certo from most grocers or druggists, or we will send it to you by parcel post prepaid, with Book of nearly 100 Recipes for 35 cents. Be sure to include your grocer's name and address. Then we will see that he carries Certo for the convenience of yourself and friends. Try one bottle of Certo—investigate the new, the highly endorsed Certo process of making jam and jelly—and save hours of time and worry and frequent failures of the old method.

PECTIN SALES CO., Inc., 616 East Ave., Rochester, N. Y.

START A BURPEE SYSTEM



Home Cannery for Profit.

We supply a wonderful machine for sealing TIN cans; furnish the Cans, Recipes, and instructions for operating.

You can turn farm, garden and orchard products into cash money, by selling direct to families in towns and cities or to their grocers.

Not fruits and vegetables only, but meats and fish, as well, can be put up by this easy, scientific system.

The Jones "Little Pig Sausage" fortune started with a "factory" consisting of "mother" Jones and a kitchen stove, and its "advertising department" was "Pa" Jones, sick, in debt. and crippled with rheumatism, writing postal cards to city people, on the arm of a wheeled chair.

The U. S. Department of Agriculture has issued Bulletins encouraging Home Canning, and marketing direct to city consumers. These Bulletins illustrate and describe the Burpee machine.

Send for our catalog. You'll be surprised to learn how little it costs to equip a Home Cannery.

BURPEE CAN SEALER CO. Dept. M, 215 West Huron St., Chicago



Devotion to a Great Cause

Our Weekly Sermon-By N. A. McCune

It was but a brief hundred years (this being a review lesson) one can like a map. Here is a mountain of a of them, that's the pity of it), but for the most part there are plains and there is no great idea, no leadership, no inspiration, no romance, no glory. Even God cannot use a small man for

ble? Through



send light and favor." truth into the world? Sometimes it was a prophet, large of brain and soul,

like Isaiah or Jeremiah. The title does not make the man then or now. The private citizen is not infrequently the most dynamic figure in the nation.

The great prophets all believed in the greatness of their nation. But by greatness they did not mean wide territory, or a powerful standing army, or wealthy merchants, or populous cities. These may all have their place, unless we except the standing army. But nations have had all these and not endured. What the prophet desired above all, was a nation that feared Jehovah, and that practiced justice and righteousness. The prophet believed absolutely in national defense. He believed in preparedness. He believed in being ready for emergency. But he stood for moral preparedness. He thundered the truth that social rottenness cannot be counterbalanced by a big army. He looked to God's ideals of justice as the greatest piece of armament that could be adopted. Hence he often ridiculed the idea of alliances with other nations. Such expedients, he said, were but broken reeds on which to lean. In short, the prophet was a man with an ideal.

Now, to have a lofty ideal for one's it in the face of all manner of hindrances is hard. Many a burning optimist goes forth in the morning to reform the world, only to return at night, a dreary cynic. The prophet was a dreamer, but he was more. He did not build up a world in imagination, only. He lived in contact with society. He knew the duplicity of men as well as their sincerity, and he knew the follies of kings only too well. He was acquainted with all the arguments with promote justice and fair dealing with which the rich defended their oppressions. But in spite of all this, he kept his optimism, his faith in the goodness of an over-ruling Providence. He said, the night is here, but the morning cometh! He said, the world is weary with long travel, but we will tighten our belts and go one more lap in the journey.

Such men have kept the world from moral putrefaction. Without them all would have been lost long ago. The name of Toussaint L'Ouverture seems to be permanent. Time does not fade it. Toussaint L'Overture was a black man, blesst with the vision of a free Haiti. So great was his military genius, that, though he had been born a slave, he led his black army to victory

HE history of Judah and Israel over the British, and established prosis one of big men and little men. perity and peace in his island domain. Whittier has a poem on Barclay of Ury, which commemorates the fidelity spread out the long and powerful story of this nobleman to his new-found faith, which was that of the Quakers. man, there, an ant-hill of a man (a lot He had been a soldier and was held in very high esteem. But because of the religious principles which he now prohills, the common folk. But at the root fessed, he was subjected to mob vioof it all is the big man. Without him lence. One day when the rabble had been particularly insulting he said, "I find more satisfaction as well as honor in being thus insulted for my religious a great task. If he does, the small principles, than when, a few years ago, man becomes great in the doing of it. it was usual for the magistrates, as I Who are the men who made the passed the city of Aberdeen, to meet kingdoms of Judah and Israel possi- me on the road and conduct me to public entertainment in their hall, and whom did Deity then escort me out again, to gain my

WE are not far from the dark ages. Looking back over the years king, like Josiah ago that children were employed in or David. Some- English factories from five in the times a quiet man morning till ten at night. No child was never much heard employed under the age of five, the of, like Micaiah. law required! When a child fell asleep Sometimes a at its work, or fell over from exhaustion, he was whipped. Children got up at four, went through snow and rain, while their parents were still in bed, to begin the day's work. The profits from this sort of toil were so enormous that they were counted in the thousands of per cent. Men of humanity saw the awful savagery of the system and strove to put an end to Yet so intense was the greed of stockholders that not even the bitter cry of the children for a long time could arouse the public. One of the factory reformers was Richard Oastler, a poor man, who never had a factory of his own. After years of effort to get a ten-hour day, he was imprisoned for debt and remained in prison four years. Friends raised fifteen thousand dollars, and he was released. On nearing home he was met by thousands of people who had assembled to greet him. The roads were thronged. Even so, Oastler lived in old age in deep poverty, his very name unknown to many. But none of these things moved him. He was the author of an undying saying: "The noblest of all martyrdoms is that of an old age impoverished by the generous sacrifice of youth."

All this is in the spirit of the prophets who pointed Israel and Judah toward the better way of life and strength. That their words were not nation is fine. But to maintain heeded in no way lessens their value. To this day the social teachings of Amos, Isaiah and the others, remain as standards of justice, righteousness and brotherhood which we have not attained. One of the most profitable courses which any Bible class could pursue would be a course on the teachings of the prophets on social justice.

Large concerns are becoming more numerous which have no labor troubles, because the management seeks to every employe. As Amos put it, "Let justice roll down as waters and righteousness as a mighty stream." An interesting discussion may be held on the question, what is a traitor, and what is a patriot? Was Jehoiada who killed the queen, a traitor? Were Washington and others who fought the British king traitors? John Knox put it well: "Resistance to tyrants is obedience to God."

THE SUNDAY SCHOOL LESSON FOR JUNE 25.

SUBJECT:—Review: Judah's Prosperity and Adversity.

LESSON:—Psa. 65:1-13.

GOLDEN TEXT:—Blessed is the nation whose God is Jehovah.—Psa.

DOWN GO THE PRICES

Of Superior

Baby Chicks and 8 Wk. Pullets NOW IS THE TIME TO ORDER

TOM BARRON ENGLISH WHITE LEGHORNS

BROWN LEGHORNS ANCONAS Thousands of satisfied customers are making money with Superior Baby Chicks and Stock.

Read This One. Read This One.
Mr. R. L.
Holmes of Easton Missouri
says:—The 300
Tom Barron
chicks arrived
here on March
29 in fine condition. There
were 12 extras
and all were
alive. I would
like 500 or 800
more.



Read This.
Earl Denton of
Manton, Mich.,
says:— Received my order of
chicks all O. K.
and they surely are a fine
bunch. There
were 1020 and
they are starting fine. I want
to congratulate
you on the
stock you put
out. Will want
2500 next year.

Read This.

This Hen Imported Direct From Tom Barron By Us. Trapnested and Pedigreed 272 Eggs One Year. Baby Chick Prices for June, July and August delivery.

ORDER DIRECT FROM THIS AD. AT THESE BARGAIN PRICES

	\$5.00	\$10.00	\$50.00	\$100.00	
Amer. White Leghorns	5.00	10.00	50,00	100.00	g
Brown Leghorns	6.00	12.00	57.50	110.00	Ē
Tom Barron Ex. Sel. Eng. White Leghorns	6.00	12.00	57,50	110.00	
man Dannen chee Pon Star Mating Chicks	8.00	16.00	75.00	00.00	
		8.50	40.00	80.00	
Broiler or mixed chicks, Odds & Ends. Remember these are not just ordinary stock but purebre	ed. The	e best tha	it money	can buy.	ß
8 weeks old pullets at bargain prices. Send for free	Barga	in list.	we guara	intee you	
complete satisfaction and live arrival.					

Superior Poultry Farms & Hatchery, Box 2053, Zeeland, Mich.

POULTRY

Guaranteed ook **Baby Chicks**



white Leghorns from the largest chick producing center in the world. Remember this is not just ordinary stock. Our females are all selected birds and are bred for egg production. Our flocks are culled by M. A. C. experts, and are headed by vigorous pedigreed males. We are getting testimonies every estimonies every the best lot I ever got from any hatchery." One order will convince you. Write for catalog at once.

at once.

Barron English White Leghorns, extra selected \$10.00 per 100. English White Leghorns, Standard stock \$9.00 per 100. Anconas, extra selected \$10.00 per 100. Anconas Standard Stock \$9.00 per 100.

SILVER WARD HATCHERY
Box 252, Zeeland, Mich.

Pure PULLETS Bred S. C. W. LEGHORNS **OUR SPECIALTY**

2000 April Hatched Pullets for July delivery. We sell our own stock only. Bred and raised on our own farm from our strain of American English Leghorns carefully bred for Egg Production. None Better any where at

SIMON HARKEMA & SONS, HOLLAND, MICHIGAN

Baby Chieks LOOK

Get our low June prices, June chicks for De-cember layers.

POSTAGE PAID, 95% live arrival guaranteed. MONTH'S FEED FREE with each order. A hatch every week all year. 40 Breeds chicks, 4 breeds duck-lings, select and exhibition tramps appreciated. Dept. 15. Gambier, O.

July and August Chix. Order now. S. C. White Leghorns 25 or 1000 at 10c each. R. I. Reds, Barred Rocks, White Wyandottes, \$14 per 100, \$65 per 500, \$120 per 1000. Prepaid guaranteed delivery. GORET BROS. Corunna, Mich.

WHITTAKER'S R. I. RED CHICKS

CUT PRICES FOR JULY
Grade "A" Both Combs, \$20 per 100. Grade "B"
Rose Comb, Hatches of July 5th and 12th, \$15 per 100.
July 19th, \$14 per 100. July 25th, last hatch, \$13 per 100. Single Comb one cent per chick less than Rose Comb. Add one cent per chick on all orders for only
25. Michigan's Gradest Color and Egg Strain, All
breeding stock blood tested for white diarrhoea by
Dr. H. J. Stafseth of M. A. C. Order from this adv,
to secure prompt delivery, or write for free catalog
and culling chart. and culling chart. INTERLAKES FARM, Box 39, Lawrence, Mich

Useful Anconas To install new blood in your next years matings, to improve their laying qualities, to increase their beauty, your cockerels early, a igrand lot of young-sters from prize winning Hogan tested layers at bargain prices, sent on approval. Utility breeding hens at reduced prices to make room for pullets. Order now before it is too late. My 18 page booklet "Geful facts about Useful Anconas" furnishes real information and tells you all about them.

College View Farm, R.3, Hillsdale, Mich.

Buy Chicks Where Quality Counts. All my flocks culled. You get chicks from nothing but best layers. Safe arrival guaranteed by prepaid parcel post. Ask about 8-week pullets. HERMAN J. COOK, 133 W. Main St., Zeeland, ich.

BABY CHICKS 1922 delivery now ready, White Leg-horns, White Rocks, Buff Orpington, Buff Rocks, Barred Rocks, R. I. Reds, Black Minorcas, S. C. Anconas Guaranteed pure bred and live arrival. Postage paid DURAND HATCHERY, Fenton, Mich.

Barron White Leghorn pullets 10 each. Park's Strain Barred Rock pullets 10 weeks old \$1.10 each. Write for special prices on large lots. ROBT. CHRISTOPHEE, R. 4, Holland, Mich.

Day Old Chicks Anconas
W. Leghorns
B. Minorcas
Wew low prices for June and July
Get our catalogue and price-list.
H. H. PIERCE, Jerome, Michigan

NOW IS YOUR CHANCE

Put in your order for June chicks at 9½ cents. And April hatched pullets. Bred from Heavy English Strain from our own free range poultry farm. 100% live delivery gustanteed. Village View Foultry Farm, R.3, Zeeland, Mich.

RHODE ISLAND WHITES win over all breeds at the egg laying contest. \$5; 50 \$8; 100 \$15 order from this ad. Some H. H. JUMP, R. 5, Jackson

S. C. Brown Leghorns, excellent layers Vigorous farm France. Selected eggs postpaid 15, \$1.25; 30, \$2,45 \$2,50; 100, \$5. Floyd Robertson, R.1, Lexington, Ind

S. C. Black Minorca Hatching Eggs. Our choice strain.settings \$1.50; for 50 \$3.00; 100 O. J. DEED RICK, Vassar, Mich. STRICKS POULTRY FARM

Hudsonville, Mich., R. R. 4, Box M. S. C. English White Leghorns, Official records from 9 hens of 208 to 244. Chicks and Eggs. Write for catalogue.

SINGLE COMB BUFF LEGHORN baby chicks. Willard Webster, R. 2, Bath, Mich

Top Quality Chicks Spanish, Minorcas, Rocks Reds, Wyandottes, Orping tons. TYRONE POULTRY FARM, Fenton, Mich.

WHITE WYANDOTTES 207 egg average. Eggs all matings, \$2.00 per 15. \$10.00 per 100 Cockerels, hens and pullets \$5.00 each. FRANK DELONG, R. S. Three Rivers, Mich.

PARDEE'S Ducklings Frice List Free. Box T. Pardee's, Islip. L. I. N. Y.



Baby Chicks

Ten Weeks Old Pullets Best Laying Breeds on Earth

25,000 large strong super-hatched chicks every week from Hogan tested flocks culled out annually by our Poultry Experts.

Prices For June and July

S. C. White Leghorns
English W. Leghorns
S. C. Brown Leghorns
S. C. Mottled Aneonas
Broilers (Odds & Ends)
Extra Selected Stock at \$2.00 per 100 higher.

Per 100 Per 500 Per 1000 \$10.00 \$47.50 \$95.00

\$7.50

Thousands of Satisfied Customers Make Big Money

Mr. F. L. Hess, Chicago. Ill., writes: "I averaged 112 eggs a day from 140 of your pullets and sold, \$158.00 worth of eggs in February."

Mrs Wyttenbach, Amherst, Ohio, writes: "I sold \$357.30 of eggs in two months from 200 pullets of your stock."

Raise Good Stock and Reap a Golden Harvest

Intelligent chick buyers of today do not take chances with ordinary stock. Our enormous output enables us to sell these money makers at a price that positively cannot be equaled.

We Ship Thousands of Chicks Each Year

Every shipment is sent by PARCELS POST PREPAID, and we guarantee 100% live delivery. Order direct from ad. or send for illustrated catalogue.

Write for Prices on Pullets,

Wyngarden Hatchery, Box M, Zeeland, Mich.

Pullets Cockerels

Chicks—Eggs—Breeding Stock—From Proven Layers
BARRED ROCKS ENGLISH WHITE LEGHORNS

ROCKS. Official Records 213 to 257 at M.A.C. In Dec. at Nat'l Laying Contest No. 4 Pullets averaged 24.5. I have won 5 specials so far at this contest, some records. WHITE LEGHORNS. Won cup best utility pen Zeeland [22 pens]. Mr. Foreman Judging. 1st and 2nd pens Holland Fair. 1st Hen West Mich. State Fair. Why take chances when you can buy stock of this kind at bargain prices. Special prices on May, June, July chicks. Write for catalogue.

G. CABALL, Box M, Hudsonville, Mich.



Day Old Chicks and Pullets

From our S. C. English type White Leghorns. hen is a full sister to our two hens that made records of 218 and 207 each at Mich. Agr. College. Notice the close feathering, fine shape and vigorousness of these birds. This is an unretouched picture. Our chicks will produce birds of this kind, and you will be sure of getting big strong chicks; 9½c each by prepaid parcels post, 100 per cent alive guaranteed. Special prices on pullets.

Riverview Poultry Farm & Hatchery, Route 2. Zeeland, Mich.

DAYOLD CHICKS

White Leghorns \$12 per 100; \$6.50 for 50; and \$3.75 for 25. Barred and White Rocks ,White Wyandottes and Rhode Island Reds \$17 for 100; \$9.00 for 50; and \$4.75 for 25. Order from this ad, terms cash with order. Custom hatching 5c per egg, hatchery capacity 9600. Hatchery 4 miles east of Mt. Morris on Mt. Morris on do one mile north and one east. Valley Phone No. 14.5. ROSS WADE, Prop. Meadow Brook Hatchery, Mt. Morris, Mich.

Free ROYCROFT Book

B-A-B-Y C-H-I-X

WHITE LEGHORNS AND MOTTLED ANCONAS Also Black Lieghorns, Brown Leghorns, Buff Leghorns, Bared Plymouth Rocks, White Plymouth Rocks, Silver Wyandottes, White Wyandottes, WE HATCH eggs from Hoganized flocks on free range on separate farms, Send for Price List, Valuable Booklet with first order for twenty-five or more

CRESCENT EGG COMPANY
Allegan Michigan

Baby Chicks Hatching eggs. \$1.50 per setting to \$15.00 per 100. We are listing 17 varieties of pure bred fowls; Chickens, Geese, Ducks & Guineas, also breeding stock. Send for prices and cir cular. Booking now for early delivery. CLINTON HATCHERY & POULTRY FARMS, Wilmington, Ohio.

BABY CHIX
May & June delivery prices. Barred Plymouth Rocks,
White Rocks, B. I. Reds, Black Minorcas, White Leghorns or Anconas, 25 for \$5.56; 50 for \$10.00 or 100 for
\$16.00 | prepaid, 100 * live delivery guaranteed. Our 12th
year producing chix that please. July price 20 less per
chick. Green Lawn Poultry Farm, R.3, Fenton, Mich.

5 to 6 Lb. White Leghorns Larger hens, better winter layers. Free catalog describes them, tells a new way to cull hens, feeding methods, how to make a mash hopper that won't waste feed or clog, and other inf ormation.

A.WAUCHEK, Gobleville, Mich.

Parred Rock. Hatching eggs from Parks 200-egg strain from stock direct from Parks best pedigreed pens. 32 per 15, 56 per 50, 512 per 100. Prepaid by par-cel post in non-breakable containers. No chicks for sale. R. G. KIRBY, Route 1. East Lansing, Mich.

Bred-to-Lay White Wyandottes 59 hens laid 1170 eggs in Jan. Eggs \$2.00 per 15; \$10 per 100. EVERGREEN POULTRY FARM, Blanding & Sons, Greenville, Mich.

100,000 Chicks 10c & Up. Of pure bred finest egg producing flocks. Built directly from laying and exhibition contest winners hatching eggs. Ducklines, Catalog, 20 varieties, Early bookings avoids disappoint ment. Beckman Hatchery, 26 E. Lyon, Grand Rapids, Mich.

Barred Rocks egg contest winners eggs from strain with records to 280 a year. \$2.00 per setting prepaid by P. P. Circular free. FRED ASTLING, Constantine, Mich

Barred Rocks S. O. Reds, W. Wyandottes Bred-to-lay stock Baby chicks eggs, cockerels. Howard Grant, Marshall, Mich

The Old Reliable Breeds S. C. WHITE LEGHORNS Barred Rocks Anconas

S. C. Brown Leghorns

HERE we are, just a few hours from your door, with baby chix from the best breeds. Our growth from one small incubator to 22,000 egg capacity has been steady and denotes honest dealing. Get our prices on chicks from our healthy, free range, heavy laying stock. Send today for handsome catalog in colors.

CITY LIMITS HATCHERY & POULTRY YARD,



COLUMBIA Baby Chicks Buy your English Strain White Leg-horns and Ancona baby chix from the Columbia Hatchery

They are vigorous purebred, heavy-laying stock. Ship-ped by parcel post prepaid. Special price on 1,000 lots. olumbia Hatchery, 24 W. Main St., Holland, Mich.

IZO



From Michigan's Old Reliable
Hatchery. American and English White Leghorns, Anconas,
Barred Plymouth Rocks and R. I.
Reds. Strong sturdy chicks from
frand bred to lay, Hoganized, free
range breeders. Sent by Insured
Parcel Post, prepaid, 100% live delivery at your door. Guarantee
astisfaction, or your money back,
15,000 each week, I4th season. Get
my low price and valuable illustrated 1922 free catalog and place your May and June
orders where you get best quality at lowest prices.

W. Van Appledorn, R. 7, Holland, Mich.

ANCONAS "Superior Quality" Baby chicks and fertile eggs from M. A. O. selected 250 egg strain hens, mating list free.

MANNINGS ANCONA FARM, Coldwater, Mich

CHICKS, Have shipped thousands each sea prices. Freeport Hatchery, Box 12, Freeport, M

Our Boys' and Girls' Page

Just a Little More Fun

By the Boys and Girls

By James E. Reynolds, Fostoria, Michigan.

The funniest thing I ever heard was by my little niece. She said, "I guess I will sing me a little song. I guess I will sing "Home Sick." She meant up there?" "Home, Sweet Home."

By Gladys Washburn, Harbor Springs, Michigan.

"Where are you going, mama?" "To a surprise party, dear."

"Can't I go, too, and Archie and

"No, dear, you weren't invited." "Well, don't you think they'd be lots more s'prized if you took us all?"

By Charlotte R. Stables, Traverse City, Michigan.

When my little brother had first started to have his own chair at the table, and was just learning the names of the different foods, he was at the table one noon, and said, "Pass the potatoes." "But," mother corrected, "say please." The little fellow started to frown, and protested, "But, mother, I don't want please. I want potatoes."

By James R. Blashill, Snover, Mich. My little sister, aged three, asked me to get her a drink, I did so, but before handing her the glass I took a swallow myself. She cried and said, "Mama, Jim is eating that drink up."

By Wright Feneley, Gould City, Michigan.

The funniest thing I ever heard was you?" said the city boy. what my little brother said when my loving him. Grandpa, hadn't shaved moved on.

for about a week, and Jack said, "Grandpa, your face isn't level."

By Harold Jervis, Williamston, Mich. Father, to his Jewish sons upstairs: "Sammie, Ikey, what are you doing

Sammie-"O, nothing."

Father-"Ikey, what are you doing up there?"

Ikey-"Oh! I am just helping Sammie."

By Mary Rogalewski, Sand Lake, Michigan.

One of the funniest things I ever heard of was what my uncle told me about a negro soldier, when they were going to France. My uncle was on watch that night and a storm arose on the ocean, and the negro soldier became seasick and began to pray and said, "O, Lawd, O, Lawd, please call dis ocean to attention."

By Cecil Warren, Alanson, Michigan.

A city boy was walking along the road when he saw a country boy seated on a fence. Wishing to start a quarrel, he said, "What is that over in that field?"

"It is corn," answered the farm boy. "Why you are not going to get more than half a crop, are you?"

"Of course not, the man we rent it from gets the other half."

"You are not far from a fool, are

"No, not more than ten feet," said grandpa took him on his lap and was the country boy, and the city boy

Our Letter Box

T HIS letter box will be where the boys and girls can express their views, tell of themselves and things about the farm, or ask advice. The most interesting letters each week will appear here. Address your letters to me.—Uncle Frank.

Dear Uncle Frank:

Have you room in your cheerful little corner for another niece? If you have, I surely will come again.

I live two miles west of Redford village, on a 160-acre farm, on Grand River avenue. I just love to live on a hungry. farm.

I am sending in the correct answers to the Read-and-Win contest. I think it is a wonderful way for the boys and girls who will be the farmers and farmers' wives of tomorrow, to learn facts about farming and live stock.

I know it would be a great help to the mothers and fathers if they would also find and study the answers to the

also find and study the answers to the questions in these contests.

We have taken the Michigan Farmer for a long time and hope to continue. I am thirteen years old and would like boys and girls of my age to write to me.

I hope I am not taking up too much room in "Our Letter Box." I am an-other niece. Lucille Stuckey, Redford, Mich.

agree with you that mothers and fathers would come across many interesting things if they tried to answer Mich. these contests. Also, we always nav room for one more.

Dear Uncle Frank:

Dear Uncle Frank:

I am another farm boy. I live on a 160-acre farm. The fruit trees have just been in blossom, and they certainly were beautiful this year. It is nearly strawberry time. When they are ripe we can eat strawberries and cream, as Alta L. Littell says. Our school is out. At the last day we had a very interesting program. The boys were in a doll drill. I am ten years old. We have a white and black cat. He is a very proud cat and will not drink milk, unless it is strictly fresh. We try to fool him by putting morning's milk with the fresh night's milk,

but he just walks away and won't touch it.—A Friend, Henry Massey.

I wish I could have seen your drill. Probably a good way to make your cat drink milk is to let him get a little

I thought I would write you a letter. I am a girl ten years old. I have a brother and sister. My sister's name is Madeline and my brother's name is

I am in the fifth grade. My brother is eight years old and he is in the third. My sister is six year's old. My little sister calls me Boferine. I have a little cousin at Lansing. His name is Lyle. He has a kiddy-car, he calls it his "beil." He makes believe he has a blowout and has to atom. has a blowout and has to stop and blow his tires up.

My papa's name is Frank and we also have a pretty black horse named

Frank. I will close wishing you good luck. Katherine Obsterle, Webberville,

Your cousin is undoubtedly getting his auto training early.

Dear Uncle Frank:

Dear Uncle Frank:

Our school was out on May 19. We had ice cream and cake. I have lived in Canada a long time. I went to school where they were five pupils so we didn't have much fun. We had to walk three miles and a half to school last summer. When I was in Canada I caught gophers and got seven cents a tail. My brother and I made \$11.85. It is very cold in Canada. Will close. Your Nephew, Lyle Murry, Caro, Mich. Tell us a little more about Canada

Tell us a little more about Canada if you can. All of us would be glad to know more about it.



THRESHING the Farquhar way rinkershing the Farquhar way insures clean grain rapidly delivered. We have manufactured farm machin ery for more than sixty years, and our present modern Threshers are the result of continuous field experience.

The Rake Separator above is for the farmer who does his own threshing. Made in two sizes with capacity up to 600 bushels of wheat a day. Suitable for Gas Engines 6 H. P and larger.

Below is our Vibrator equipped with Self Feeder and Wind Stacker. This is the ideal Thresher for large crops and merchant work. Five sizes to take care of all requirements.

Also the Farmuhar Pag and Rean Thresh.

Also the Farquhar Pea and Bean Thresher and Peanut Picker.

For economical threshing power we offer a complete line of specially designed Steam and Gas Tractors and Portables. Catalog fully explaining Farquhar Threshing Machinery sent free to grain users on request, Address:

A. B. FARQUHAR CO., Ltd. Box 512, York, Pa.

Also Sawmills, Cider Presses, Potato Diggers, Grain Drills, Cultivators, etc. Write for particulars.



Sick Baby Chicks? GERMOZONE is a positive remedy for roup, colds, bowel trouble and such costly silments. Preventive as well as curative. A wonder worker for poultry. On market over 20 years. Endorsed by many thousand users. Don't loss your baby chicks. Get GERMOZONE TODAY. At drug and seed stores. If no dealer, order by card. 75c and \$1.50 sizes. Postman will collect. No extra charise. Omaha, Nebr.

POULTRY

If you want fine Pullets for fall and winter eggs, we can furnish

can furnish

Leghorns, Anconas, Rocks, Reds, Buff
Orpingtons
Eight weeks and three months old; also other breeds
Yearling Hens and Cockerels
Write us for description and price list. We will
send you stock from our Pure Breed Practical Poultry—stock that will make money for you on your farm.

STATE FARMS ASSOCIATION

201 Chase Building, Kalamazoo, Mich.

200,000 **Baby Chicks**

FOR 1922
Shepard's Anconas, English Type White Leghorns and Brown Leghorns and Barred Rocks. Why pay two prices when you can buy direct? Our chicks are from strong, vigorous flocks of fine quality and excellent layers. Chicks are shipped prepaid with 100% live arrival guaranteed. Order now, catalogue free.

logue free,
KNOLL HATCHERY,
Holland, Mich.

CHICKS WITH PEP



Big June and July Price Reduction
Try some of our fullblooded DON'T
STOP LAYING KIND of chicks for
June and July. They will pay you big.
Rocks, Reds, Anconas, Minoreas,
W. Wyandottes 13c, Leghorns 10c, Orpingtons 15c, Broilers 10c, 5 off on
500 and 10 s on 1000 lots. Free Catalog.
Prepaid. Safe Delivery.

HOLGATE CHICK HATCHERY,
Route 5, Holgate, Ohio

BABY CHICKS

Barron White Leghorns 100, \$10.00; 500, \$47.50; 1000, \$95.00. 1000, \$95.00.

Park's Strain Barred Rocks 100, \$12.00; 500, \$57.50; 1000, \$10.00.

Good healthy, chicks, odds and ends 7c each. 100 white delivery guaranteed. Parcel post paid. PINE BAY POULTRY FARM. Holland, Mich

Baby Chick Prices Slaughtered

English and American Leghorns now \$9.50 per 100 delivered. Anconas \$10.00. Rocks \$15.00. Our flocks cannot be beat for egg production. Our Anconas are Champions. Only one grade—the best. Special prices for larger orders. Catalogue free. Progressive Poultry Farms, Box Q, Holland, Mich.

Selected hicks Tremendously low prices after June 28th. Write now before entire outout is sold. Litchfield Hatchery, Litchfield, Mich., J. H. Adams, Owner,

S. C. Black Minorca Ergs No. 1 pen \$3.00 pe setting. From No. 2 pen \$2.00 per setting. R. W. MILLS, Saline, Mich

W.Chinese goose eggs 40c each. Pekin duck \$1.50 for 18 R. O. Br. Leghorn \$1.50 for 18 \$8.00 per 100. Mrs. Claudia Betts. Hillsdale, Mich

SINGLE COMB WHITE LEGHORNS

baby chicks and hatching eggs from our flock of high producing hens raised on free range. Write for cir-cular. RALPUS. TOTTEN, Pittsford, Mich,

The Junior Artists

By Uncle Frank

NOTHING surprised me so much as the response to our drawing contest. Over 200 drawings, most of which show some real artistic talent, made me realize that there was more art ability in this state than I ever thought there would be.

Again the girls scored heavily in the number of entries in the contest, but much to my surprise the boys show up very well in the better quality of work. In fact, I believe they beat the girls in

All I can give this week is the names of the winners, as I have not had time to get the prize-winning pictures for printing. In next week's issue these drawings will appear and perhaps also some of those of the boys and girls who received honorable mention. I have departed from our usual custom in giving honorable mention because

so many of the drawings showed real ability. Some time later we will try another drawing contest. Perhaps then I shall

assign a certain subject. What do you

Riddle Contest

THE following riddles were sent in by one of our girls. The five most correct and neatest answers will receive \$1.00 each. This contest closes June 29. Address your answers to Uncle Frank, Michigan Farmer, Detroit, Michigan.

- 1. To what islands should hungry people go?
- 2. Why is the eye like a very severe school master?
- 3. What flower is most likely to be found in a shoemaker's shop?
- 4. Why is Sunday the strongest day?
- 5. What tree is nearest to the sea?
- 6. What is it that goes through the woods, yet never touches the ground or the trees?
- 7. Why are pen, ink and paper like fixed stars?
- 7. Why is charity like an umbrella?
- What flower would you wish for when oppressed with woe?
- 10. How many eggs can one eat on an empty stomach?

think of having a cartoon contest? It seems to me that would be interesting. However, I am open for suggestions.

Well, below are the names of those who drew prizes as well as pictures. And then follow the names of those who received honorable mention. Many others showed worthwhile ability but I had to put the limit somewhere.

The Winners.

Jack Vander Plough, Decatur, Mich. Erma Moore, East Lansing, Mich. Nellie E. Lewis, Fremont, Mich., R. 1 Maurice Peterson, Bear Lake, Mich., RR 1.

Russell Starr, Kingsley, Mich. Honorable Mention.

Lauretta Brown, Harbor Beach, Mich., RR 5. Muriel Young, Grand Rapids, Mich., RR 2. Arline Hall, Blissfield, Mich.

Beth Early, Nashville, Mich. Albert Alfridson, Whitehall, Mi Pamelia Lott, Coldwater, Mich. Ellwyn Gilbert, Memphis, Mich. Glenn Young, Grand Rapids, Mich.,

Rex Ellis, Reed City, Mich., RR 2. Dorothy Wieland, Lansing, Mich RR 5.

Donald Haynes, Mason, Mich., RR 1.
Harold Coles, Montgomery, Mich.
Ariel Denton, Saranac, Mich.
Marjory Hillman, Six Lakes, Mich.
Ruth Ellison, Mason, Mich., RR 5. Mildred Helfer, Ithaca, Mich., RR 5.
Mildred Helfer, Ithaca, Mich.
Donald Marsh, Hope, Mich., RR 1.
Fred Dessegine, Custer, Mich., RR 2.
Eva Lovell, Pellston, Mich.
Robert Kewagoshkum, Pellston, ich.

Blood Will Tell

Day Old Chicks

Special for June and July \$10.00 and \$12.00 Per 100.

Our English Type White Leghorns and Brown Leghorns are the greatest laying strain of

Eleven years of breeding has made this stock good. With long deep bodies and large combs. They have the egg producing qualities in them.

Eleven years of hatching and shipping chicks assures you good first class chicks. We guarantee safe arrival and satisfaction, or your money back.

17,000 Chicks Every Week Till August 15th.

Prices for June and July 1922. S. C. English type White Leghorns, are good and profitable layers, and our extra selected are of the very best layers.

It has never been our aim to put out cheap chicks, but to give our customers chicks that will be good layers and bring our customers a good profit.

We have been in the poultry business eleven years and are offering you chicks of the best layers at a very reasonable price.

S.C.Eng.Type W.Leghorns, extra selected \$3.00 \$6.00 \$12.00 \$57.50 \$115.00 S. C. English Type White Leghorns 2.50 5.00 10.00 50.00 100.00 S. C. Brown Leghorns, extra selected 3.00 6.00 12.00 57.50 115.00 S. C. Brown Leghorns, standard 2.50 5.00 10.00 50.00 100.00 We ship chicks by parcels part.

We ship chicks by parcels post and pay the postage up to your door, and guarantee safe arrival. Our terms are cash with order, but we will book your order if you send one-fourth of the amount with the order, and the balance just before chicks are to be shipped.

Prompt Shipment

Order from this adv. to save time and we will write you at once when to look for the chicks and also will mail you our instructive catalogue, or write for catalogue before ordering.

The Wolverine Hatchery,

H. P. Wiersma, Proprietor,

Zeeland, Mich.



From flocks mated to Pedigreed males—from dams with records as high as 287 eggs in one year.

You can now get Day Old Chicks or Pullets from the greatest of all strains at prices almost as low as the common Merchantiel stock is demanding! REMEMBER—June, July and Aug. chicks from the Utility Hatchery and Farms make exceptional layers, for fall and wincer profits. A small investment with us will help YOU decrease the cost of living!

—FERRIS STOCK FREE MALES FREE Our annual Util-ty Co-operative Offer Breeding Males -265 to 300 Egg Strain, FREE! With each and every 25 pullets bought during the months of June, July and Aug. we will send you'one choice

we have mated pedigreed males from this famous strain, to our choicest females, and the combination gives a rare value in egg blood. It gives chicks that spell DOUBLE PROFITS for you. Poultry men of today realize as never before the value of quality, and with this motto in mind we sired our choicest flocks with pedigreed males, in order to give to our patrons, the best quality, the surest possible investment.

will send you one choice male, mated to pullets bought.

Offer expires Sept.

Your chance to order from a firm where selection is unlimited, where tremendous supply insures you against delays—where prices are fair—where your patronage is appreciated.

Pullets from same rigid quality stock as chicks. Pullets come out of the 8 weeks pullet.

BARGAIN PRICES ON CHICKS—PILLIFTS

BARGAIN PRICES ON CHICKS—PULLETS

Immediate delivery, select your own ages and stock, and simply advise us when it is desired, 100 \$ lived.

 Fullet Prices

 6 wks.
 8 wks.
 10 wks.
 12 wks.
 16 wks.

 90c
 \$1.25
 \$1.35
 \$1.50
 \$2.00

 85
 1.15
 1.25
 1.40
 1.90

 85
 1.15
 1.25
 1.40
 1.90

 80
 1.05
 1.15
 1.30
 1.80
 Day Old Chick Prices
de A Grade B
Up to 500-10c
Up to 1,0009-%c Day Old Chick Frices
Grade B
Up to 190-14c
Up to 500-19c
Over 500-12c
Over 500-11c
Note carefully: Group B. in both chicks
and pullets refers to the standard Utility Hatchery stock.
Group A. is the
Supreme quality Ferris Pedigreed
Sired stock.

Sired stock.

80 1.05 1.15 1.30 1.80

TERMS—Cash with all orders to be delivered within 30 days. If delivery is desired 30 days after ordering we will accept your order with 25 \(^2\) deposit, the balance to be in before shipment is made. Order direct from this ad, and save time. Stock guaranteed. We have 8000 very choice pullets for immediate delivery. Order now! Free literature sent on request. Send mail to

A Free Poultry
Culture Book
We will send you absolutely free. Book
explaining every
phase of poultry
keeping. A world of
timely Hints, sent
free to our customers. Order now and
get this valuable
Book Free.

Utility Hatchery & Farms Dept. 8, Zeeland, Mich.

Baby Chicks Pure Bred for 1922 LOOK AND LISTEN WHAT WE SAY AS TO PRICE

Bred To Lay and they do it. Buy them and be convinced. Quality means Success. To your door prepaid parcel post. Live delivery guaranteed. Order from this Ad. and save delay in your order. No order for less than 25 chicks.

S. C. White Lephorns, S. C. Brown Leg., S. C. Buff Leg. 10c Bach Barred Rocks, S. C. R. 1 Reds, Anconas 13c "White Rocks, W. Wyandottes, B. Minorcas, R. C. R. I. Reds. 15c "White Rocks, W. Wyandottes, B. Minorcas, R. C. R. I. Reds. 15c "Odds & Ends Broiler Chicks 10c "

Catalogue Free for the Asking

Wolf Hatching & Breeding Co., Gibsonburg, Ohio



Makes Producers!

CHICKS-BRED-TO-LAY S. C. W. Leghorns, S. C. Anconas and Barred Books. Quality chicks that please, guaranteed full count, 100 \$\frac{2}{3}\$ alive on arrival, parcels post paid. Circular. SUNNYBROOK POULTRY FARM, Hillsdale, Mich

HA! HA! \\ \begin{cases} 75,000 \\ 10c \text{and up.} \\ 10c \text{and up.} \end{cases} \\ \text{CHICKS} \\ \text{Buy Hi-grade Profit Paying Bred-to-Lay Chix. From tested egg strain. Best foundation stock ever produced. Hatching eggs. duckings. 10 varieties. Cir. stamps appre. Laurence Poultry Farm. R. 7, Grand Rapids, Mich.

Additional Poultry Ads. on Page 734

BREEDERS' DIRECTORY

Change of Copy or Cancellations must reach us Ten Days before date of publication



The reward of pure breeding; the accomplishment of quality. Success has again contributed more laurels to the already remarkable record of

Imp. Edgar of Dalmeny

The Sire Supreme

At the International Live Stock Exposition, where gathers each year the elite of North American Cattledom to compete for the covetous awards, five more honors have been bestowed upon the "get" of Edgar of Dalmeny. You too may share these honors. A bull by this world famous sire will prove a most valuable asset to your herd Write us today.

WILDWOOD FARMS ORION, MICHIGAN

W. E. SCRIPPS, Prop.

Sidney Smith, Supt.

REGISTERED Aberde en-Angus. Ten heifers, six bulls from eight to fourteen months. Best of breeding, the growthy kin d that make good. Resenable. Inquire F. J. WILBER, Olio, Min.

Brookwood Guernseys

Birmingham, Mich.

During the past year, we have completed Advanced Registry with 7 Guernsey Cows—two of which were heifers with their first calves.

The average butter-fat production of these cows was 650 pounds, and three of them were leaders of their respective classes for the State of Mich.

We have for sale a number of good bull calves rom these cows and their daughters, sired by cosetta's Marshall of waddington, No. 54420, rand Champion Bull at the Michigan State Fair ast year.

Our herd is not large, but it is select. Visitors are always welcome at the farm. Prices are reasonable, considering the quality of the stock.

JOHN ENDICOTT, Proprietor

Registered Guernseys

A fine bull ready for heavy service \$125.00 J. M. WILLIAMS, North Adams, Mich.

GUERNSEYS -REGISTERED BULL Calves. Containing blood of world champions. A. R. cows. Federal inspected. HICKS' GUERNSEY FARM, Saginaw, W.S. Mich.

Yearling Guernsey bull and two bull calves for sale, whose dams are on test. All fine stock descended from class leaders.
M. HOMPE, R. 5., Grand Rapids, Mich.

Registered Holsteins

It was through the daughters of Flint Maplecrest Boy that

Flint Maple crest Boy that
Sir Ormsby Skylark Burke
Our Junior Herd Sire.

produced the Junior Champion and Reserve Grand
Champion Heifer, at the Michigan State Fair this
year, in a class of 38.

His get won first in Calf Herd, also first in get of
sire, in a class of 13.

A son of either of these great bulls will help the individuality and production of your herd.
We have bulls at dairymen's prices, and we also
have bulls at the breeder's price, from dams with
records up to 38 lbs. of butter in seven days, and
1168 lbs of butter in one year.

Ask us about a real bull, a Maplecrest or an Ormsby,
JOHN H. WINN. Inc... Rochester. Mich. JOHN H. WINN, Inc., Rochester, Mich.

Holstein-Friesian pure-bred bull cal-herd. Prices are right. Larro Research Farm, Box A, North End, Detroit, Mich.

A Good Note accepte din payment of finely bred reg of the best, and at prices within reach of all. Write GEO. D. OLARKE. Vassar, Mich.

The Traverse Herd

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

TRAVERSE CITY STATE HOSPITAL Traverse City, Mich.

Registered to sell, 42 lb. breeding, guaranteed O. K. shipped on approval.

B. B. Reavey, Akron, Mich.

\$100 EACH

Bull calves ready for service. Grandsons of King of the Pontiacs. From dams with A. R. O. Records of 27 to 29 lbs. for seven

J. B. JONES FARMS Romeo, Mich.

Registered Holstein Bull

porn Nov. 2. 1919. Dam at 8 yr. 22, 920 milk, 885 lb. putter: at 7 yr. 305 days 16,281 milk, 654 lbs. butter. She there A. H. O. daughters, one above 25 lbs. in 7 la. 99 in 20 days. He is sired by a 24 lb. grandson of Colantha Johanna Lad. Also three heifers 2 yr. old, one fresh heifer calf ty side. Other two due in May, Bred to sife above. State and Federal full accredited herd. Priced for quick sale. Pedigrees and photo on one fresh heifer calf by side. Other two due in May. Bred to sire above. State and Federal full accredited herd. Priced for quick sale. Pedigrees and photo on request. VERNON E. CLOUGH, R2, Parma, Mich.

Holstein Bull (alves from the famous Pontiac on our ranch north of Clare, Michigan. For particulars W. C. CORNWELL, Saginaw, Mich.

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

For Sale King Segis Breeding

Bulls of show type that are out of

Grand River Stock Farms Cory J. Spencer, 111 E. Main St. JACKSON, MICHIGAN

Whitney Farms Holsteins A grandson of Duchess Skylark Ormsby ready for service. Nicely marked bull calves from three weeks to six months of age. These calves have the type and are priced to sell. Herd under Federal supervision. Pedigrees and prices from WHITNEY FARMS, Whitney, Mich.

32 Lb. Bull, \$150

Pure bred, registered, federally tested. Dam, a dau ghter of King Segis Pontiac, 37 lbs. Good individual mostly white, 1 yrs. old. Guaranteed healthy an breeder. Priced to sell quickly. Pedigree on request ALBERT G, WADE, White Pigeon, Michigan

BARGAIN PRICES

three young pure bred Holstein bulls, whose is all have high milk and butter records, Send for pedigrees and prices. JOSEPH H. BREWER, Grand Rapids, Mich.

Registered Holsteins for sale at all time both sexes best of breeding and priced right. Our herd sire a 26 lb. grandson of Maplecrest Korndyke Hengerveld. Herd under state and federal supervision. HENRY S. ROHLFS, R. I., Akron, Mich.

\$75.00 Buys A yearling bull ready for light sire average 33.34 lbs. butter for 7 days. Dam has 18.33 lb, record made at three years old.
OSCAR WALLIN, Unionville, Mich.

\$50 A Year gets a granddaughter of Maple in Wayne Co. Cow Testing Ass'n. Federal tested, no reactors.

M. L. McLAULIN, Redford, Mich.



SOTHAM'S Earliripe Hereford Beef Contract

Will insure your getting highest possible prices for young Hereford Beeves. Out of the proceeds of such beeves you pay no Commissions, Yard or Feed Charges Produce quality beef at the minimum cost and do away with speculation in feeders. Raise your own and assured of receiving the highest possible price. This "Sotham's Earliripe Hereford Beef Contract" guartees you.

tees you.
"Earliripe Hereford Beef" producers in over fiftee
Michigan Counties. "Earliripe Hereford Beef" is cut in many of Detroit's finest markets. Write for further information or investigate personally.

T. F. B. SOTHAM & SONS, [Cattle Business Established 1835] Saint Clair, Michigan

Herefords

Repeaters, Beau Donalds, Fairfaxes, and Farmers represented in our herd. Repeater 173rd, a son of old Repeater, at head of herd. Both sexes and all, ages for sale.

ALLEN BROS.,

(Farm at Paw Paw, Mich.)
Office 616 So. West St., Kalamazoo, Mich.

Reg. Herefords for sale. Two good bulls 8 and 20 mos able. Prices reasonable. REED SCHULTZ, R. 3, Homor, Mich.

HEREFORDS for sale. A few extra good fall calves for sale.
RALPH CALHOON, Bronson, Mich.

Brookwater Farm JERSEYS and Duroc JERSEYS

Come to the farm BROOKWATER FARM, H. W. Mumford, Owner, write for prices.
Ann Arbor, Michigan
J. B. Andrews, Lessor.

Jersey Thoroughbreds

For Sale Registered Jerseys, Cows and Heifers. Herd, O. A. Bristol. Fenton, Mich.

JERSEY BULLS nearly ready for service Spermfield Owl breeding. Herd tuberculin tested. FRED L. BODIMER, Reese, Mich.

Lillie Farmstead Jerseys Bull calves from R. of M. cows.
COLON O. LILLIE, Coopersville, Mich.

BUTTER BRED JERSEY BULLS
FOR SALE
CRYSTAL SPRING STOCK FARM.
Silver Creek. Allegan County, Michigan. For Sale Jersey Bulls Ready for Service: Oxford Lad. Majesty breeding. WATERMAN & WATERMAN, Packard Rd., Ann Arbor, Mich.

Milking Shorthorns Bull calves for sale. Also 2 cows. ROSEMARY FARMS. Williamston, Mich.

Central Mich. Shorthorn Breeders' Assn. offer for sale both milk and beef breeding. all ages Write M. E. MILLER, Sec'y. Greenville, Mich.

Live Stock and Dairying

HOLSTEIN BREEDERS ENJOY BIG mixture until rosin is dissolved, then CONVENTION.

breeders was Kansas City, where one of the most constructive programs yet held by this progressive group of was the thirty-seventh annual convention. They changed the constitution of the organization to give the board of directors authority to elect the secretary, treasurer and superintendent of advanced registry. A better basis for judging Holstein cattle was unanimously adopted.

Exhibits were put on by the associthe National Dairy Union, which simply drove the simple but profound truths about the dairy business and flies can readily reach the material. what it means to the race, deep into the minds and hearts of the most retir- BETTER THAN A POUND OF BUTing members of the ultra-conservative group.

head of outstanding Holsteins country were sold for the average

In next week's issue a detailed re-J. H. Frandsen, dairy editor and counselor of the Capper Farm Press, will ter-fat daily. be published.

JERSEY BREEDERS HOLD FARM MEETINGS.

THE progressive Jersey breeders of Oceana county put on a series of farm meetings on Wednesday, June 7, These get-together sessions were held in barms on the premises of O. O. An- ing high-test cows in the Soldiers' derson, Sam Odell, Charles Krause and Corwin Estate.

Professor Brownell, of the dairy department of the Michigan Agricultural ers present at the meetings some very interesting talks on judging, breeding, value of lectures given under the identical conditions in which the farmer is obliged to carry on his business is greatly enhanced, and lessons accom- HIGH-TEST COWS FOR MONTH OF panied with practical demonstrations bring advice right down to where the practical man can get the kernel. Thus did it seem at this series of gathof their talks.

Despite the exceedingly busy season points and everyone seemed well repaid for thus spending the day.-C. B.

FLY REPELLANT MIXTURES.

HE dairyman finds the fly an expensive inhabitant of his premises. by annoying the cows. It is the prac- during the month. tice now to protect the cows through the use of repellant mixtures. The extension division of the college suggests this mixture: Take twelve ounces of crude carbolic acid, twelve ounces of turpentine, twelve ounces of oil of tar, and three-fourths of an ounce of tannin. To these should be added enough kerosene to make five gallons of the mixture. Use this macattle in the stable night and morning.

Another mixture recommended is to use one part of water, two parts of rosin and one part fish oil. Boil this from the corn field.

add six parts of water, two parts of oil of tar and two parts kerosene. Boil HIS year the mecca of Holstein the whole mixture fifteen minutes and apply with a brush.

A poison mixture for flies is made as follows: Mix one part of formaldemen was carried out. The occasion hyde in twenty parts of water. Add enough corn syrup to sweeten, and sprinkle on floors or in the mangers. If sprinkled in the mangers, it should be on the leavings after the cow has eaten and this should be swept out before she is fed again. Small amounts of formaldehyde will not injure the cow, but she should not be fed too much. The poison may also be placed ation, the government, the states and about the barn, out of reach of dogs and cats. Use wide dishes with flaring rims and keep them well filled so the

TER-FAT PER DAY.

A cooperative sale was held in which THE fourteen cow-testers now employed in Michigan were working gathered from the four corners of the full time during the month of May. In the fourteen associations the 3,305 price of \$470 per head. The top figure cows in milk averaged a total of 830.7 of \$3,200 was paid for a forty-pound pounds of milk and 32.3 pounds of butter-fat during the month. This means that the average cow in these associaport of the big event written by Prof. tions is producing approximately 27.7 pounds of milk and 1.07 pounds of but-

TWO NEW ASSOCIATIONS START WORK.

SINCE the first of June two new cow-testing associations have begun operations. One in Eaton county is under the supervision of Hans Kardel, who has had experience in feed-Home herd at Washington, D. C. The other association is located in Calhoun county where Percey Parkyn, who has had a great deal of experience in do-College, gave the breeders and farm- ing official testing work over the state, has been secured as tester. Interest is developing rapidly in many localicare and feeding of dairy cows. The ties and we may expect a large number of new associations added to the list during the remainder of this year.

MAY.

A COW owned by Chester Ball, of Van Buren county, took first place erings, with fine specimens of the in butter-fat production among the dairy breed housed in well-equipped cows in the testing associations of the barns it was possible for the speakers state for the month of May. She gave to illustrate practically every feature 104.1 pounds of butter-fat. The cow was a registered Holstein. Another registered Holstein, owned by the a good crowd was out at the different Michigan Home at Lapeer ranked second with a total of 102.03 pounds of butter-fat for the month. L. L. Wheeler, of Jackson, was credited with third place with another registered Holstein, which gave 74.56 pounds of fat. The highest amount of milk was given by a grade Holstein, owned by M. Sweg-Flies reduce the milk flow materially les, of Wayne. She gave 2,536 pounds

LAST YEAR'S PROFIT MAKERS LOSE MONEY.

THE profit in the feeding of dairy cattle has been reduced during the past year. Many cows that made a profit a year ago are now being kept at a loss. The detection of these "red ink" cows and their removal from the terial in an atomizer and spray the herd may be the means of giving the dairymen a profit instead of a loss.

It is just as feasible to increase the soap shavings, four parts of pulverized feed produced from the pasture lot as

Gombault's Caustic Balsam

Human and Veterinary

As a veterinary remedy its curative qualities have been acknowledged for many years in cases of Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Spavin, Ringbone and other bony tumors.

A Perfect Antiseptic Soothing and Healing

For treatment of Rheumatism, Sprains, Neuralgia, Lumbago, Sore Throat, Stiff Joints, Cuts and Bruises it is invaluable. \$1.50 per bottle at druggists, or sent by parcel post on receipt of price. The Lawrence-Williams Co., Cleveland, O.

Saginaw Silos











NATURAL LEAF TOBACCO, CHEWING, 5 lb., \$1,75; 10 lb., \$2; smoking, 5 lb., \$1.25; 10 lb. \$2., 8end no money; pay when received.
TOBACCO GROWERS UNION, Paducak, Ky.

HEREFORD BREEDERS HOLD IN-AUGURAL SALE.

MICHIGAN Hereford breeders held their inaugural auction at the well-known Sotham Hereford Farm, at St. Clair, on June 14. The purpose of this sale, as stated by T. F. B. Sotham, is to increase the number of breeders of white-faced cattle in the eastern districts of Michigan. Not only did they succeed at the sale in interesting a number of farmers in taking the initial step in the breeding of Hereford cattle, but the animals offered sold better than the breeders had anticipated. Mr. DeGeus, of Prairie Farms, paid the highest price for Domino Fairfax, an outstanding young bull bred by Mr. Sotham, the price being \$345. Thirty-six animals were sold for breeding purposes at an average price of \$151.

The following were among the buyers of breeding stock: Charles Ruff, of St. Clair; Chas Smith, of Smover; Merriman Brothers, Deckerville; Harry Lemberg, St. Clair; Frank Ridley, of Deckerville; Jacob DeGeus, of Prairie Farms, Alicia; Chris Stein, St. Clair; Burton Baird, Smith Creek; R. W. Anderson, Clarkston; Richard Goff, Deckerville; Ralph Walker, St. Clair; R. W. Baker, Marine City; Ralph Welser, St. Clair; Gov. W. T. McCray, Indiana; David Chaffee, Byron; E. V. Bailey, Clarkston; Ralph Schriner, Marine City; Mr. Spencer, of Lansing; Paul Wayner, Harbor Beach; Elmer Paige, Port Huron; W. H. McCarty, of Bad Axe; Jack Henry, Croswell,

Eleven breeders contributed animals to the sale as follows: Robert W. Baker, Marine City; David Chaffee, of Byron; Ward Dunston, of Clarkston; Solomon Knechtel, Elkton; Harry Limberg, St. Clair; W. H. McCarty, Bad Axe; Earl C. McCarty, Bad Axe; Geo. Peddie, Cass City; Warner Ramsey, Port Hope; August Rink, Port Hope, and T. F. B. Sotham & Sons, St. Clair.

The sale was preceded by a Hereford hike in which a number of Michigan breeders and interested live stock men visited fifteen Hereford farms located in the thumb of Michigan, On these farms over 500 head of well-bred Hereford cattle are kept. Much was observed by the tourists in the way of economical methods of producing baby beef. The tour and sale were considered a very decided success by the breeders interested.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

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

Injured Back.—Last winter our five-year-old cow injured her back; since then she walks in a humped-up man-ner, turns with some difficulty and is unable to swing head from side to side. She is thin and has a spavin on each hock. What shall I do for her? E. L. C., Old Mission, Mich.—Give her sixty drops of fluid extract of nux vomica in feed or water two or three times a day. Rub back with camphor-ated oil twice a day. Injured Back .- Last winter our fiveated oil twice a day.

Thrush.-Have a three-year-old colt that has thrush in foot; can you give me a remedy for same? R. V., Capac, Mich.-Keep foot dry and clean, apply equal parts of calomel and iodoform to diseased frog daily.

Poisoned with Coal Tar.-I have a three-year-old heifer in poor condition, caused by applying coal-tar disinfectant, full strength, on her to kill lice. I applied this remedy fifteen months ago and she has not been well since. She applied this remedy fifteen months ago and she has not been well since. She is weak, easily affected by the heat, makes a noise breathing. What can be done for her? F. C. A., Harrisvile, Mich.—Recovery in such a case is very doubtful. She has been ailing for the past fifteen months, nature must do the work, but it has failed to bring about a recovery; therefore, her ailabut a recovery are covery a recovery a recovery a recovery a re

CATTLE

FRANCISCO FARM SHORTHORNS

FEDERAL ACCREDITED HERD
One red Scotch bull ready for service. Two bull calves ten months old. Poland-thina weanling pigs ready to ship. P. P. POPE, Mt. Pleasant, Mich.

Clayton Unit Shorthorn Breeders' Assn. Scotch, Scotch Top and Milking Shorthorns for sale all ages. W. J. Hinkley, Sec'y, Flushing, Mich.

The Maple's Shorthorns

Kirk Levington Lad, by imported Hartforth Welfare, in service. Bulls and heifers for sale. Gobleville, Mich. J. V. Wise,

Shorthorns for sale. White and Roan bulls by Imported sires or from Imported dam.

J. A. BARNUM, Union City, Mich.

BIDWELL SHORTHORNS

that will put weight on your dairy calves—the difference will soon pay for the bull. Now selling good Scotch and Scotch topped yearlings, reasonably priced. We guarantee every animal to be a breeder. Federal Test. One hour from Toledo, Ohio, N. Y. C. R. R.

BIDWELL STOCK FARM, Tecumseh, Michigan

Richland Shorthorns

Annual Sale June 21st at the farm.

Thirty Heifers—Fifteen Bulls. Best lot we have ever offered. Write for Catalog. Plan to attend. Special prices on Bulls in order to make room for this Sale. Office at

C. H. Prescott & Sons, Tawas City, Mich. Herd at Prescett, Mich.

FOR SALE Polled Shorthorn Cows & Heifers

in calf and calf by side. Also a few young bulls. Herd headed by Victor Sultan and Royal Non-

parell.
We can please you in richly bred cattle with quality at farmers' prices.
GEO. E. BURDICK, Mgr.
Branch County Farm, Coldwater, Mich.

Claradale Milking Shorthorns We invite the discriminating breeder and farmer, who is in need of a real built, that will transmit the combine qualities, beef, milk, high in butter fat, type, character, beauty. We do state official milk testing. Come and see us or write for circulars and reasonable prices. F.W. Johnson, Custer, Mich., Mason Co. Box 26

Fairacres Stock Farm One light roan, two year old, Shorthorn bull for sale at reasonable price. Fine animal. Write George W. Miller, 1639 First National Bank Bldg., Chicago.

Milking Shortforns of best Bates breeding, bulls, cows and heifers for sale.

E. H. KURTZ, Mason, Mich

Don't you want a good Shorthorn, priced in keeping with the times R. 3. Woodland, Mich

For Sale Purebred Shorthorns, two cows. two heifers and two bulls, all good ones.

J. A. Batcheler, R. 3, Howell, Mich.

Brown Swiss Bull Registered Brown Swiss bull, nine months old, from good milking strain, from the French herd. For information write. C.M. French, Barry Co., Middleville, Mich.

HOGS

BERKSHIRES

O. C. COREY, 2428-30 First National Bank Building, Detroit, Michigan



Spring pigs by Walt's Orion, First Sr. Yearling Detroit, Jackson, Gd. Rapids and Saginaw 1919 Phillips Bros, Riga, Mich.

Sows & Gilts

bred for July, Aug. and Sept. farrow for sale at reasonable prices. Also a few high class spring and fall boars ready for service and one 2 yrs.old boar, a grandson of Panama special, at a bargain if you can use him. We guarantee satisfaction. Write for prices and description or better come and see them. Visitors always welcome. Sows bred for spring farrow all sold.

Thus. Underhill & Son,

Salem, Mich.

Collinsdale Duroc Farm, Lyons, Mich., R.1. Greatest Blood Lines in Duroc Hogs

Herd Boars by Great Orion Sensation, Pathfinder, Duration and Great Wonder I Am. Now have for sale three yearling boars by Wolverine Sensation. For sale at all times, sows, gilts or boars registered. Sold under a positive guarantee and worth the money. Write for prices worth the money. Write for prices,
L. A. BURHANS, OWNER

AM SELLING

a great offering of bred Duroc sows and gilts March 4th. They are mostly bred to Orion Giant Col., son of Ohio Grand Champion. Get on mailing list for catalog. W. C. TAYLOR, Milan, Mich.

Woodlawn Farm Duroc Hogs

DUROC JERSEYS: A few choice bred gits for gale. CAREY U. EDMONDS, Hastings, W.ch.

Westvie v Duroc Bred Sows all sold. Have two spring boars left at a reasonable price. Will book orders for April & May Pigs.
ALBERT EBERSOLE, Plymouth, Mich

Burge Jersey Bred sows and gifts bred for Aug. and service boars. Shipped on approval. Satisfaction guaranteed. F. J. Drodt, R. 1. Monroe, Mich.

Duroc Jerseys heavy boned, low down type breeding stock for sale.
CHAS. BRAY, Okemos, Mich.

Oakwood Farm offers choice gilts of Orion Col. breeding bred to Pathinder Orion for Ang, and Sept. farrow. RUSH BROS., Romeo, Mich.

DUROC-JERSEYS Do you want a good Pathfinder boar pig?
E. D. HEYDENBERK, Wayland, Mich.

BIG TYPE CHESTER WHITES

one hog in each community to advertise my field, Write for agency and my plan.
G. S. BENJAMIN, R. F. D. 10, Portland, Mich.

Big Type Chester White March boars. Sired by Model's Giant and Hill's Big Buster. Out of grandaughters of Alfalfa Wonder. LUCIAN HILL, Tekonsha, Mich.

CHESTER WHITES
Pig from MONSTER No. 107335.
They are hard to beat.

Start fight with a Boar They are hard to Reese, Mich.

Chester Whites, bred gilts and fall pigs of excellent quality and breeding. Satisfaction guaranteed. F. W. Alexander, Vassar, Mich.

O.I.C. & Chester White Swine. Strictly Big Year sold out of everything but a few choice fall gilts. Will book orders for Spring pigs. Of the best Prize winning blood lines. Will ship C. O. D. And record them free in purchaser's name.

NEWMAN'S STOCK FARM, R.4. Martlette, Mich.

O. I. C. fall glits ready to breed. Orders booked for spring pigs. Write or call and see our herd. We ship C. O. D. and Register free. GEO. M. WELTON & SON. Middleville, Mich.

O. I. C. Gilts to farrow in Aug. and OLOVERLEAF STOCK FARM, Monroe, Mich.

O. I. C. Bred gilts all sold. Orders booked for spring pigs.
A. J. BARKER & SON, Belmont, Mich.

O. I. C. Bred sow's all sold. Booking orders for spring pigs.
H. W. MANN. Dansville, Mich,

O. I. C. pigs at very reasonable prices for June and July shipment. C. J. THOMPSON. Rockford, Mich.

O. I. C'S. last fall gilts due Aug. and Sept. Spring pigs not akin. Big Type. 1.2 mile west of Depot. Citizen Phone. OTTO B. SCHULZE, Nashville, Mich.

L. T. P. C. Fall Boars

at bargain prices. Fall gilts open or with breeding privilege. Write or see them.
A. A. FELDKAMP, R. 2, Manchester. Mich.

Big Type Poland China Spring boars at \$15 each.
Sired by Clansman Buster and Hovers Liberator.
Also gilts bred for Sept. farrow at \$40 each, All stock shipped on approval. Come and see them or write DORUS HOVER, Akron, Mich.

L. T. P. C. Boars ready for service also gilts, bred sows out of best of blood lines. They are right, so is the price. Nuf sed.
M. M. PATRICK, Grand Ledge, Mich.

For 30 years we have been breeding Big Type Poland China hogs on the same farm. We have sold over 10t head each year for the last 15 years for breeding purposes. There's a reason! The farmer has found our kind very profitable. We now offer 25 sows and gilts bred for summer farrow 303-450.

JNO. C. BUTLER, Portland, Mich.

L. T. P. C. Gilts bred for Spring litters all mer-Gilts bred for June and July litters also Fall Boars and Spring Pigs. Clyde Fisher, R 3, St. Louis, Mich.

L.T.P.C.\$15, \$20 & \$25

Spring pigs with real breeding at the above prices. We are also offering a few choice fall glits bred for summer farrow. Hart & Cline. Address F. T. HART, st. Louis, Mich.

Large Type P. C. Largest herd of individuals in state. Everything sold. Nothing 40 offer until spring pigs are ready to ship. I thank you. W. E. LIVINGSTON, Parma, Mich.

Big Type Polands. We have been looking in our spring crop of pigs and show any lover of Polands some real litters and some great prospects. Why not visit us and see one of the good herds of the country and price some of these great prospects? You at a laways welcome here. Our usual Fall sale, Oct. 18. Can spare a few pigs of spring farrow, now.

WESLEY HILE, R. 6, Ionia, Mich.

Big Type P. C. some very choice boars double in., Bmune, out 1100 lb. sire and mammoth sows from Iowa's greatest herds. E.J. Mathewson, Burr Oak, Mich.

Large Strain P. C. nothing more for sale at present, I thank you.
H. O. SWARTZ, Schoolcraft, Mich.

Big Type P. C. Boar pigs that can't be beat in Mich. Sired by Big Bob Mastodon and Peter A Pan. 50 head to pick from. C.E. Garnant, Eaton Rapids, Mich.

BIG TYPE Poland Chinas, leading strains at lowest prices. Both sex, all G. A. BAUMGARDNER, R. 2, Middleville, Mich.

LEONARD'S B. T. P. C. Herd headed by Leonard's Liberator, Orders booked for boar pigs at weaning time. Call or write E. R. LEONARD, St. Louis, Mich.

Hampshires book your order for spring boar pigs now ready for summer farrow. JOHN W. SYNDER, R. 4. St. Johns, Mich.

SHEEP

A Real Bargain at Kope Kon Farms

We offer 40 big healthy yearling Shropshire and Hampshire Rams all registered at \$25,00 each Come or write while the picking is good. S. L. WING, Coldwater, Mich.



GRAIN QUOTATIONS

Monday, June 19. Wheat.

Detroit.—Cash No. 2 red \$1.18; No. 2 mixed and No. 2 white \$1.16; July \$1.13.

Chicago.—No. 2 hard \$1.13; sample grade red \$1.10; September \$1.10%.
Toledo.—Cash \$1.17; July \$1.12%.

Corn. Detroit.—Cash No. 2 65c; No. 3 yel-

low 63 1/2 c. Chicago.—No. 2 mixed 60% @61% c; No. 2 yellow 61@62c.

Oats.

Detroit.—Cash No. 2 white 40c; No. Chicago.—No. 2 white at 35@39½c; No. 3 white 33¼@35c.

Beans.

Detroit.—Immediate and prompt

New York.—Choice pea beans \$10@ 10.50; red kidneys \$9.25. Chicago.—Michigan choice, hand-picked \$9.80@10; red kidney accord-ing to quality \$9.90.

Rye.
Detroit.—Cash No. 3, 90c.
Chicago.—86@87c.

Seeds.

Detroit.—Prime red clover, cash at \$13.50; alsike \$11.50; timothy \$3.25.
Toledo.—Prime red clover \$13; alsike \$11.80; timothy \$2.90.

Feeds.

Detroit.—Bran at \$25; standard middlings \$26; fine middlings \$28; cracked corn \$29@29.50; coarse corn meal \$28; chop \$23.50@24 per ton in 100-pound sacks.

Hay.

Detroit.—No. 1 light timothy \$22.50 @23; standard and light mixed \$21.50 @22; No. 2 timothy \$20.50@21; No. 1 clover mixed \$17.50@18; No. 1 clover \$16@17; rye straw at \$14@14.50; wheat and oat straw \$13.50@14 per ton in carlots in carlots.

WHEAT

WHEAT

Wheat harvest is in full swing already in the southern part of the winter wheat belt. Threshing returns in Texas and Oklahoma have been disappointing and trade estimates upon the Oklahoma yield now range around 25,000,000 bushels, compared with the government's forecast of 32,000,000 bushels. The Canadian acreage is estimated officially at 22,464,000 acres or 794,000 acres less than last year. The crop has had a better start this year, however, and the yield may yet exceed that of 1921. The European crop is about up to the average in all countries except France, Germany and Poland where it is below the average. Wheat prices reached a new low point for the season last week but the market is showing more resistance to pressure and the undertone is more firm. Mills are supplying their wants without attracting attention and exporters Mills are supplying their wants without attracting attention and exporters have been indifferent until the last few days when breaks began to uncover liberal export sales and it is now reported that most of the heavy deliveries at Chicago on May contracts have been placed.

CORN

The corn market is primed for a moderate advance. The after-planting movement has come and gone, heavy feeding operations have cut down the farm stocks and the new crop needs

OATS

Cash oats prices are the lowest since favorable, with dry weather, weeds, rust and chinch bugs all playing part. Demand is only fair. The Canadian acreage is placed at 16,934,000 acres or 16,000 acres less than last year.

HAY

Few hay buyers are in evidence and only the better grades are wanted, while most of the arrivals are low grades. The markets are generally

FEEDS

The trend of the feed market continues downward. Rather large quantities of wheat feeds, especially bran, are being offered although flour mills are not operating heavily. Offerings of high protein meals are not exces-

sive but the demand is extremely limited. Total stocks of cottonseed and cottonseed cake at southern mills on June 1 were 132,919 tons as compared with 231,781 tons on the same date a year ago. Hominy feed has declined but gluten feed has held unchanged.

POULTRY AND EGGS

Egg prices passed through the most serious decline since the storing sea-son started but the loss has not been drastic. Storage stocks are of record size and are still accumulating so that operators are doubtful of selling them advantageously in the coming fall and winter. With much lower prices this year, however, consumption has expanded and the storage stocks, even though large, should be absorbed in

though large, should be absorbed in due course.

Chicago.—Eggs miscellaneous 21@21½c; fresh firsts 22c; ordinary firsts 20½@21c. Live poultry, hens 21½c; broilers 32@40c; roosters 14c; ducks 20@25c; geese 12@25c; turkeys 25c.

Detroit.—Eggs fresh candled and graded 23@23½c. Live poultry, broilers 42c; heavy hens 25c; light hens 23c; roosters 15c; geese 13c; ducks 20@22c; turkeys 30c.

BUTTER

BUTTEK

The butter market has been holding within a limited range for the last month. Receipts increased sharply during the period but the demand expanded likewise and drastic declines were prevented. With the market showing stability, storage operators have been coming to the conclusion that it will be impossible to buy butter much more cheaply and have been purchasing freely from the June make. Production continues to show an excess over any recent year. Lower scores of butter are becoming more cess over any recent year. Lower scores of butter are becoming more plentiful and are more difficult to

The potato market has lost some of its recent strength. Shipments are slightly above the average of the last ten months. The supply of old stock is decreasing rapidly and will be practically gone by the middle of July. The crop of early potatoes in the intermediate states is estimated at 20,672 cars of 200 barrels each, an increase of 1,700 cars over last year. New Bliss Triumphs are quoted at \$2.75@3.25 per 100 pounds, and Irish Cobblers at \$4.50@6.50 per barrel in middlewestern consuming markets.

BEANS

The bean trade estimates that only about 20 cars of beans are left in Michigan, the nominal quotations being \$9.75@10 per 100 pounds f. o. b. shipping stations. Roumanian and Bulgarian beans are coming in freely amd are priced at \$7.50@7.75 at the eastern seaboard.

DETROIT CITY MARKET

Strawberries seemed to be the chief commodity on the market this week, with supply and demand both good. Green peas, beets, carrots and spinach also moved well but poultry, eggs and rhubarb were draggy. Asparagus sold for \$1.50@2 per dozen bunches; beets 35@60c per dozen bunches; cherries \$4@5 per 24-quart case; eggs 29@40c; peas \$1.75@2 a bu; radishes 75c@\$1.50 per bu; potatoes \$1.50@1.60; rhubarb 25@50c per dozen bunches; spinach 75c@\$1 per bu; strawberries \$3.50@6 per 24-quart case.

GRAND RAPIDS

cores of butter are becoming more cores of butter are becoming more lentiful and are more difficult to ids markets, thousands and thousands ove.

Prices on 92-score fresh butter were: ever produced in the state, were sold

Chicago 35%c; New York 36c. In Detroit fresh creamery in tubs is selling for 33½c per pound.

POTATOES

The potato market has lost some of its recent strength. Shipments are slightly above the average of the last ten months. The supply of old stock is decreasing rapidly and will be practically gone by the middle of July. The crop of early potatoes in the intermediate states is estimated at 20, 672 cars of 200 barrels each, an intermediate of 200 barre will probably begin moving next week. Old potatoes were draggy at \$1@1.15 per bushel. Jobbers were bidding \$9 per cwt. for white beans but none are offered. Grains were steady. A spurt has taken place in hogs but other live stock was unchanged, Green peas have advanced in price as a result of greet advanced in price as a result of great damage done to the crop by lice, quotations early this week having a range of \$3@3.50 per bushel. New vegetables in the market are wax beans, celery, cabbage and carrots, all home-

INCREASE IN HOG PRODUCTION.

The survey of the spring pig crop by the Department of Agriculture on May 1 has been made public and shows a net increase in the number of pigs saved in eleven corn belt states of 14.5 per cent over last year. The number of litters farrowed was 22.8 per cent larger than in the spring of 1921 but reports of heavy losses were confirmed as the average number of pigs saved per litter was seven per cent less than a year ago.

Wipe Out Every Rat and Mouse

Amazing New Discovery Quickly Kills Them All. Not a Poison.

Rats, Mice, Gophers—in fact all Rodents can now be wiped out easily and quickly. Imperial Virus will do it. This new discovery is a fluid, true Virus. Entirely harmless to humans, poultry, stock, pets, etc.



YOU CAN GET YOURS FREE

Here's how! Send \$1.00 today (currency, M. O. Check, etc.) and we will send you by return mail, postpaid, two regular, full sized (double strength \$1.06 bottles of Imperial Virus. Use one to rid your place of these pests, and sell the other to a neighbor, thus getting yours free. Special inducements to represent us.

If more convenient, send no money, just your name and address. Pay postman \$1.00 and few conts postage when two bottles arrive. Guaranteed to do the work to your entire satisfaction within 30 days, or your \$1.00 will be cheerfully refunded.

Imperial Laboratories Dept. 850 2110 Grand Ave., Kansas City. Mo.



Brings You This Horse Drawn Deming Sprayer

SAVE \$50 by acting nowment we secured a limited Sprayers which we offer y catalogue price. These spra complete in every respect, it cart with shafts, 50-gallon

American Manufacturers' Export Co., 41 Park Row, New York

Live Stock Market Service

Monday, June 19.

DETROIT

Cattle.

Receipts 698. Dry-fed strong, grass-ers dull. Best heavy strs., dry-fed.. \$ 8.50@ 9.25 Handyweight bu., dry-fed.. \$ 8.00@9.25 Mixed strs., hfrs, dry-fed. 7.50@ 8.00 Handy light bu., dry-fed.. 7.00@ 7.25 Light butchers 5.00@ 6.00 5.00@ 6.00 4.00@ 4.75 3.25@ 3.75 2.50@ 3.00

 Canners
 2.50@
 3.00

 Choice light bulls, dry-fed
 5.50@
 6.00

 Bologna bulls
 4.00@
 5.50

 Stock bulls
 3.50@
 4.00

 Feeders
 6.00@
 7.00

 Stockers
 5.00@
 6.00

 Milkers and springers
 \$ 45@
 70

Veal Calves.

Hogs.

Receipts 1407. Market is active and 15c higher. Mixed hogs and pigs\$

 Roughs
 8.75

 Extreme heavies
 9.50@10.25

 Stags
 5.25@ 5.75

Sheep and Lambs. Receipts 178. Market dull.

 Receipts 178.
 Market dun.

 Best spring lambs
 \$ 12.50

 Fair spring lambs
 \$ 9.00@10.00

 Light to common
 7.00@10.00

 Fair to good sheep
 5.00@6.00

 Culls and common
 1.00@2.00

 Vearlings
 5.00@10.00

 3.00

 Heavy sheep

CHICAGO

Hogs.

Estimated receipts today are 56,000; holdover 2,540. Market steady to 10c lower. Bulk of sales \$10@10.50; tops holdover 2,540. Matrice scan, 10 ps lower, Bulk of sales \$10@10.50; tops \$10.80; heavy 250 lbs up \$10.35@10.55; medium 200 to 250 lbs \$10.50@10.75; light 150 to 200 lbs \$10.70@10.75; light lights 130 to 150 lbs at \$10.25@10.55; heavy packing sows 250 lbs up \$9.35@10; packing sows 250 lbs up \$9.35@10; packing sows 200 lbs up \$8.90@9.40; pigs 130 lbs down \$9.25@10.30.

Market is steady to 10c lower. Beef steers medium and heavy weight 1100 lbs up \$9.20@9.85; do medium and good \$8@9.20; do common at \$7.25@8; light weight 1100 lbs down at \$8.65@ 1ght weight 1100 lbs down at \$8.65@ 9.50; do common and medium \$7@8.65; butcher cattle heifers at \$5.50@8.50; cows \$4@7.25; bulls bologna and beef \$4.25@6.35; canners and cutters cows and heifers \$2.75@4; do canner steers \$4@5.50; veal calves light and handy-weight \$7.75@9; feeder steers \$5.25@ 7.85; stocker steers \$5.50@7.85; stock-er cows and heifers \$3.75@5.75.

Sheep and Lambs.

Estimated receipts today are 14,000. Market steady to strong. Lambs 84 lbs down \$11.50@13.50; do culls and common \$6@10.50; spring lambs \$8@\$11.35; ewes \$4.50@6.50; ewes cull and common \$2.50@3; breeding ewes full mouths to yearlings \$4.50@5.

BUFFALO

Receipts 120 cars. Dry-fed steady; grassers 25c lower. Choice to prime shipping steers 1400 lbs up \$9@9.65; good to choice shipping steers \$8.65@9; light native yearlings of good quality \$9@9.55; best handy steers \$8.50@9; handy steers and heifers at \$8.50@9; handy steers and heifers at \$8.50@Ms.75; western heifers \$7.50@8.25; light Michigan butchering heifers \$7@7.70; best fat cows \$5.50@5.60; cutters \$3@4; caners \$2@2.50; best heavy bulls 4; canners \$2@2.50; best neavy buns \$4.50 5.50; heavy bologna bulls \$4.50 @5; common bulls \$4.60 @5; best feeders 700 to 800 lbs \$6.50@7.25; medium feeders \$6.50@6.75; stockers good at \$5.50@6; light common \$4.50@5.50; best milkers and springers \$60@85; mediums \$35.050

mediums \$35@50. Calves, receipts 2,000. The market is steady with tops at \$10.75.

Hogs,

Receipts 70 cars. Market is strong. Medium and heavy \$11.25@11.40; yorkers and pigs \$11.40@11.50.

Sheep and Lambs.

A0; pigs 130 lbs down \$9.25@10.30.

Cattle.

Estimated receipts today are 23,000.

Cattle.

C

New Super-Virus Kills Every Rat

Improved Virus, Not a Poison, Quickly Wipes Out All Rats, Mice, Gophers.

At last a perfected rat virus that can be depended upon to destroy rats, mice, gophers and other rodents. Anywhere, at any time.

at any time.

The virtue of any rat virus is in the Danys organisms—disease breeding organisms that kill only rats and other



Repeated tests of virus made with salt solutions, agar, and bouillon as media for carrying the Danys organisms, show that decomposition occurs which destroys the organisms in a few

which destroys the organisms in a rewdays.

Hunter Super-Virus is made with a different and superior carrying medium. Decomposition does not occur. The Danys organisms, in billions, are kept alive and virulent, even for months, until used. Stands shipping in any weather.

alive and virulent, even for months, until used. Stands shipping in any weather.

Bait prepared with this Super-Virus is a tempting desert to the wariest of rats. In a few days they are dead. Meantime the diseased rats foul their runways, spreading the virus organisms and exposing other rats to the disease. The same with mice and gophers. Yet it is harmless to people and all animals except rodents.

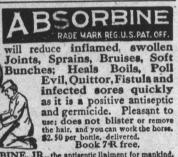
Lowest in Price

Hunter Super-Virus is sold on a positive guarantee. Send only \$1.00 for a 30 c. c. \$2.50 bottle postpaid. Over 20 to 50 times more rat külling effectiveness than an equal quantity of any other form of virus. Or, if you prefer, send no money, but pay the postman the \$1.00 and few cents postage when he delivers the package. If not satisfied with results in three weeks, ask for and get back the \$1.00 promptly. Send today to the

HUNTER LABORATORIES

New Nelson Bldg.

HUNTER LABORATORIES
Dept. 111 New Nelson Bldg.
KANSAS CITY, MO.



ABSORBINE, JR., the antiseptic liaiment for mankind, reduces Painful, Swollen Veins, Wens, Strains, Bruises; stops pain and infiammation. Price 51.25 per bottle at dealers or delivered. Will tell you more if you write. Liberal Trial Bottle for 10c in stamps.

W. F. YOUNG, 186... 268 Temple St., Springfield, Mass.

SHIPPERS FOR HIGHEST PRICES Quick Returns Consign to The E. L. Richmond Co., Detroit, Est. 1893. FRUIT

Farms and Farm Lands

"Broad View" Farm Only \$3000

Broad View" Farm Only \$3000
3 Cows, Horses, Poultry.
Heifer, full implements, vehicles included if you act quickly; remarkable opportunity, close RR town and beautiful lake; convenient oity markets; 80 acres; half heavy yielding loamy tillage; good pasture; wood-lot; lots of fruit; attractive 7-room house with delightful outlook; substantial barn, poultry house, grangy, etc. Other affairs force sale, \$3000 takes all, part cash.

V. R. CUMMINGS, Rockford, Mich.

400-Acre Village Farm With 400-Acre Village Farm With
4 Horses, Poultry, 20 Cows and
Heifers, 3 steers, 4 calves, bull, 18 hogs, poultry, full
modern implements, cider mill, etc. included if taken
now; on paved street and bordering river, all advantages at door; 3 tenant houses renting \$50 monthly;
150 acres fettile loam tillage for big variety crops;
40-cow spring-watered pasture; about 200 cords wood,
100,000 ft. timber. 100 apple trees; good 2-story 8-room
house, gas heat, \$9-ft. basement barn, silo, 2nd barn,
garage. Retiring owner's price only \$6000, part cash,
Details page 51 Illus. Catalog 1200 Bargains FREE.
STROUT FARM AGENOY. 814 BC Ford Bldg.,
Detroit, Mich.

350 Acre Dairy and general purpose farm, clay loam; not stony, edge village, 12 room house, 3 barns, silo; all best condition. Beautiful home. Registered Hoistein herd, horses, sheep, complete set farming tools, \$11,000. Terms. 40 acres, improved well-located buildings insured \$1300. Price Farm \$1500. Terms. Other bargains. Write your wants. Interstate Farm Agency, Waverly, N. Y.

80 ACRES, half cleared, fine orchard, frame barn 30x36, good well, hard wood land, one mile to school, 6 miles to Evart, Price \$2400. \$900 down and 10 years time given on the remainder, write W. F. UMPHREY, Evart, Mich.

For Sale 151 acres near Big Rapids, Mich. Good buildings, \$35 per acre, Write OLARK DICKERSON Owner, Paris, Mich.

WANTED To hear from owner of land for sale, O. K. HAWLEY. Baldwin, Wisconsin

If You Want to Sell or exchange your proper-JEROME PROBST. Ann Arbor, Mich,

Want to Hear from owner having 10 acres or more old apple orchard for sale, within fifty miles. A. L. FOSTER, 1309 West Forest Ave., Detroit, Michigan.

WOOL

Following a slowing down in foreign wool markets with declines of five to ten per cent on coarse grades in London and Australia, the domestic market has become less active. Prices at the laborate was shade lower a sale in Texas were a shade lower, although the Boston quotations came higher. The American Woolen Company made the third successive advance in cloth prices during the week. Mills are resisting further upturns in prices of raw material and are not taking all the wool offered. The course of the market will hinge upon the trend of prices abroad, the progress of tariff legislation and the tenacity of owners of the remainder of the clip not yet in manufacturers' hands.

Boston quotations were as follows:
Michigan and New York fleeces, de-laine unwashed 52@54c; fine unwashed 42@44c; half-blood unwashed 47@48c; three-eighth blood unwashed 45@47c; quarter-blood unwashed 43@44c 47c; quarter-blood unwashed 43@44c.

FEEDER SHIPMENTS FALL OFF.

Total shipments of stockers and feeders from the twelve leading markets have decreased fifty per cent in the last few weeks, although the potential demand if prices were lower is undoubtedly broad. Kansas City reported a decline of fifty cents on some grades last week and further revisions in the price scale can be expected although no bargain counter is prabable at any time this year. On western markets breeding cows and heifers are said to be so scarce that quotations are merely nominal.

A DAY WITH THE CHICKS AND CHICKENS.

(Continued from page 727).

Here Mr. H. M. Elliott, of M. A. C., spoke on farm management on poultry farms. He said for the general farm flock of from 300 to 500 hens were the most profitable. When they were larger the overhead costs increased as well as the cost of feeding.

At the Holland hatchery the profitableness of the fruit and poultry combination was evident. This farm raises four popular breeds, has a 60,000 egg hatchery and a fine apple and peach orchard. In the orchard, Mr. Foreman spoke on the future of the poultry industry. He was very optimistic, even in view of the fact that farm flocks are rapidly increasing in size. He said that efficient poultry raising was just in its infancy. Prices for both eggs and poultry have been good, and could come down some and still leave a good profit.

The last stop was at Simon Harkema's farm near Macatawa Park. Mr. Harkema is working a combination of greenhouses, truck farming and poultry. He has a 21,000 egg hatchery and 2,000 laying hens. He hatches none but the eggs his hens produce.

At this place Professor Stafseth, of M. A. C., gave an interesting talk on poultry diseases. He told of chicken pox and bacillary diarrhea, which were still problems that can not be controlled. The bacillary diarrhea is similar to white diarrhea but it is transmitted through the egg. When one is in doubt as to this disease he should take a blood sample which can be procured from the vein on the under side of the wing and send it to the college for amination.

Professor Stafseth said there was great need for work along poultry disease lines and that the college was not equipped to do it as it should be done. He urged the poultrymen to use their influence to get a department established for that purpose.

A serving of coffee and doughnuts by the Holland Poultry Association ended a full day of poultry education and sight seeing. A noticeable thing was that there was as much enthusiasm at this last meeting as the first one in the morning. This indicates that when you get interested in poultry, the interest and enthusiasm is untiring.



Baby Ancona



The S. C. Anconas have proved to be the most valuable fowl We have the Bred-To-Lay Sheppard Strain, and are offering these chicks at extremely low prices, let us have your order and prove to you the wonderful laying ability of our birds.

For those who prefer S. C. White Leg-horns we have some of the very best stock obtainable. Get some of our chicks and you will be on the road to success. We pay all Parcel Post charges and guarantee chicks to reach you in first-class condition.

Prices of selected Chicks from June 20 to August 1.

per 100 \$11.00 \$10.00 Order direct from adv. Prompt-shipment. Satisfaction guaranteed. Write for prices on yearling hens.

M. D. Wyngarden, Zeeland, Michigan R. 4,

Royal



Guaranteed to Satisfy

10c EACH POSTPAID

June 27th to July 30th

Brown Leghorns English Type White Leghorns

Get your order in at once. A hatch each Monday and Tuesday between above dates. Our chicks are from heavy laying selected breeders, with large combs and deep bodies. Our chicks are hatched right and will live. Safe arrival guaranteed. Order direct or send for our illustrated catalog.

ROYAL HATCHERY, R 2, ZEELAND, MICHIGAN

THE GUNN BEAN HARVESTER . AS STANDARD AS A HOE

1 MAN - 1 "GUNN" - 1 DAY can readily harvest 2%
acres of beans. Wet weather need not stop the bean
harvest if you have a "GUNN." ROOTS are realily left
in the field. Beans dry much faster - threshing is cleaner. NO EASIER
CHEAPER way to HARVEST BEANS. WAY TO HARVEST BEANS.
F. D. BULLOCK, Sales Agent
T16 Paimer Avenue KALAMAZOO, MCHIGAN
DOALERS WRITE FOR TERMS

POULTRY

WHITE Get famous Ferris White Leghorns and increase your poultry profits. Pedigreed, trapnested, egg bred for 22 years, Eggs-chicks-pullets-males, Records to 313 eggs. Shipped Co.D. propadd and on approval. Lake, vigorous of the control of the co GEORGE B. FERRIS 934A Union Ave. Grand Rapids, Mich

CHICKS

Thorough-bred Varieties of Tom Barron English White Leghorns, S. G. R. I. Reds, Parks Barred Rocks, Strong and He althy chicks from tosted heavy producing stock, correct in plumage and color as well as being EXCELLENT LAYERS, 100 per cent live delivery guaranteed. Order your May and June chicks now at my new low prices. Interesting catalogue free. Importer.

BRUMMER'S POULTRY FARM, Holland, Mich.

BABY CHICKS

We have just the chicks you have been looking for, the large, strong, vigorous kind from free range flocks that have been culled for heavy egg production. Shipped prepaid parcel post. Safe arrival guaranteed. Ask about 8 wk. pullets. Catalog free.

Gilt Edge Poultry Farm, Zeeland, Mich

GUARANTEED CHICKS AND PULLETS!
Low prices for pure-bred stock. Single Comb English
Whites, Brown Leghorns and Anconas and Barred
Rocks. Catalog free. Free Delivery. Fairview
Hatchery, Zeeland, Mich. B. 2, John Bos & Son,

From January 1, 1922 to July 1, 1922

A loss to cooperation284 A short pig crop604	
A stick of timber572 A worth while life516	From J
Acres of diamonds118	
An agricultural policy356 Annual sweet clover420	Transmitted the second
Bankers and farmers 2 Bar the barberry452	Unscrambling the egg316 U. S. Grain Growers' meet-
Be of the same mind540 Better crop statistics484	What of the future?388
seed laws meeded628 Big days for the dairyman.484	Where enthusiasm works.284 Why sell now?540
Boys and pigm648	Wisdom without punishment420
Breeding hogs increase540 Capper-Volstead bill146	Your agricultural attitude.178
Community breeding projects 82	Agricultural News.
Consolidated school452 Current Comment, 2, 34, 58,	A big home-coming608 Additional fire protection.518
82, 178, 210, 244, 284, 316, 356, 388, 420, 452, 484, 516,	Advocation immigration holiday486
540 572, 604, 628, 648, 682	Agricultural commission630 conference 36
Despise not the good284	motion pictures318 department approbation.318
Diversified farming gains452 Employer vs. employe604	Agriculture to be represent-
Eradicating tuberculosis316 Experience as a teacher 2	ed
Farmers' bank'g problems 34	Another alfalfa seed rec-
credit needs	Another bid for Muscle
week is a success146 telephone lines420	Shoals
Farm implement prices316 interest rates452	Apples for Cloverland492
Feeding steers at M. A. C.604 "Filled" dairy products356	Book on Michigan agricul- ture608
Forests and the farmer540	Boys' and Girls' Club work in Cloverland552
Getting at the tax problem 58 Hard to understand702	Bounty system, abolition of
Help for the home-seeker. 702 Hubam and the dairyman. 356	Breeders' and railroads promote better stock704
Hy Syckle, 2, 34, 58, 82, 106, 146, 178, 210, 244, 284, 316,	Bug men to attack grass-
356, 388, 420, 452, 484, 516, 540, 572, 604, 628, 648, 682	Bumper potato crops in
702. Investigating our talents 2	Emmet county249 Buy explosives by the car-
Just one disadvantage702	load
Keep the sight good316 Large or small seed484	increase
Lessons in marketing572 Let us have the facts388	Change county agent in Charlevoix county 11
Let facts talk	Chickens, increasing interest in704
Looking after our visitors.682 Lost motion in farming284	Cholera outbreaks 4
Marketing bill passed178 Michigan's agricultural rank	Cloverland corm crops114 butter704
beauty spots516	favorable for honey production84
Michigan land values420 tax statistics388	Indians630 raising reindeers249
More farm-grown fruit210 silos needed516	road building368 sugar beet prices422
Now for the best market210 Oleo. and the farmer572	suitable for bees323 wheat704
Our distant markets648 duty to our community 58	Colony to settle in Delta518 Commercial banks are larg-
Peace and prosperity210 Placing the home first540	est source of credit to farmers422
Potato acreage for 1922572	Conditions getting better., 574 Conservation work appre-
Present vs. pre-war prices.244 Producing for less money.216	ciated
Publisher's statement 82 Pure-bred bulls win628	County takes over the fair grounds518
Rural vs. urban styles628 Sacrifices to a fault516	Cow-testers needed, more.574 Dent corn shows fine 4
Soldiers as trained farmers	Development bûreau issues tourist booklet 492
Speed waterways project. 178 Spray poisons on fruits 648	Does it get cold in upper Michigan?399
Stick to the old farm540 Sugar beets in Europe604	Edison farmer finance plan
Talking and thinking316 Fax the trucks420	Endorses ship subsidy bill.574 Egg prices in U. P422
The agricultural conference106	Electric blasting machine, purchases630
program 58	Escanaba wants relief486 European food situation524
average and success648 diversified community484	Explosive purchase, good.684
eliminator is broken356 farmer is on the job604	Fair association plans ed- ucational exhibits368
farmers' marketing bill.146 taxes	Farm bureau mam seeks senatorial toga542
farm temant356 French vine and wine648	credit bills move slowly.486 loans, about358
leader to tie to388 market milk problem284	organizations and Farmers' Week 36
message of the flowers, 628	rate case on542 women want prices sta-
plunger vs. the plugger 484 revival of the spelling school106	bilized318 Farmers' farm loan assn368
road-building program110	holding potatoes 4
rural school682 seed and the crop284	market by water route684 request Grimm seed249 Federal aid roads in Mich
potato business682 significance of dirt604	Federal aid roads in Michigan658
soil fertility problem628 spirit of romance628	fertilizer corporation pro- posed486
sugar situation106 Sunday egg388	highway bills358
super-optimists648 survival of the fittest702	marketing board108 Federated fruit growers elect Nichol542
tax exemption evil356	Feeding sunflower silage650
transportation problem 244	wild game422 Fertilizers less expensive.704 Filled milk legislation 670
This is clean-up time452 to our farmers' advantage	Fish hatchery for Clover-
mothers	land
Infair freight rates 146	to establish

Unfair freight rates......146

Tanuary	1,	19	22	to	July
Forestry tion for Mic	chig	an .	• • • • •		158
For conscinuing increase	ervi atio e ir	ange ng w	fou vild estri	ight life. ction	158
transfe to de cultu standar	r of	tmer	it of	agi	ri- 318
France s French-C Friday ta A. C. Fruit ass	hy appeakes	on s er b cha	ugar ill, rge	the.	390 286 M.
Fruit ass erate himts for promise men ha	or C	love	rlan	d	608
Gases for Gogebic of bercu	r fa coun llin earl	test	enen o gi	ve t	.524 u- .323
Grand Ra ers o	tes apid rgai	ts s da nize	iry	farn	704 n- 108
Harding j gin w Heavy sh Highway	pres rool ipm bill	ente clot ent pass	d wi	th v	ir- 486 .552
legislati markers Holds an	ion s, to nual	pla me	ace.	g	. 114
Herbert M to Mi Hundreds instru Immigrati	etrictiv	tert e a law	aine ddre	d b sses	.293 .650
Income fr Increase tomol Industrial land	in to biles	vev	s am	d at	1- 359
land Internatio Iron mine Kenyon's Land-clean	suc	cess	or . hool	s i	.286 n
Menor demonstrated meeting schools the U.	trati s . P.'s	new	sci	158, ence	.323 518 .422
work Land for i tenure i igan Last year	indu n no	stria	al sc	hool Mich	.658
shore Little dan fires	age	fro	m f	ores	1 4 t \$4
Live stoc Ionia Ioan bill Loans to t Lumbering	cou	activ nty	ities	i i	. 4 .608 .658
M. A. C. st Marketing Menomine	lav e is	nts' v, uj	paga	aent ds kins	.650
center Michigan nated to be ad land wool of	farn aga lver high	ner inst tised	disc	Fin	148 542 569
land wool of first pou Midland of reau e Mines and Mining sit	erect	ion		200	108
Money mo	re pers	plent	iful ploy	ed	486 704 518
Muscle Sh house continuation of Nearly do	onsi confe uble	deringeren	er, 2 ng . ce . ld in	Irom	318 704 250 650
county highways produce varieties No county wild rice	g for	Clo	verl	and	216
Nursery lie	cens	e re	gula	tion	404
Oil, possi U. P. One agent	for	two	COIII	nties	114
Opinions of Volster	of the desired of the	he bill ltura	Cap	per-	214 t-
ment Opposes at ments	char tack of a	iges ks of gric	de ultu	part	286 108

y	1,	192	?2			
1	Ore	chard	ists n	lan or	rganiza	12000
	Pac	ckers'	and	sto	ckyard	.704 S
	Pai	d-up	insur	ance	for so	1- 542
	Par	ns b	inyan ig wi	s har	nmer.	.492 I-
	Ple	tura	lexp	osition	1	.427
	Pot	ato c	ompers 1	tition	annua ge	.608
	n	mee	ting ient i	m lar	ge	.148
	Pot	atoes	. Jano	ther t	riumpl	. 330 h
	Pra	irie c	hicke	ns ne	eed ed pro	- 4
	Pre	nonin	or for	tonni	ota	180
	Pro	tect	farm	ers	ign in	t
	Dro	prose	ecutio	n	oboon	524
	Pro	ucts	n 101	tarn	es tax	.250
	Put	olic	hearing e rat	ig of	tele	.108
	Ltan	I W at V	mves	ligatic	m, ask	STATE OF THE
	Rai Rai	lroad nfall	situa in Cl	tion, toverla	he nd or the	492
		copp	er co	untry		.180
					by th	
	Roa	d wo	rk fo	r 1922		114
	Roo Sag	sevel inaw	t high	nway ers u	nite to	158
	Sale	do m	mee	ing	nite to	108
	See	d pota	ato ce	rtifica	tion.	432
	She	rates ep en	for	stock stock	freight	286 658
	Sila	ge tes	st at	Chatha	e not	492
	Sme	sever	and i	n Mi	chigan	
	Sold	iers' 318.	bonus	s, the,	214, 2	250,
	Som	e U.	P. liv	re sto	ck fig-	323
	Sout	hern	pota	to cr	op is	330
	Stat	e hor	ates t	o seu	lers	286
	Soy-	bean	mea	l for	dairy	650
	Sov-	heans	for	Clover	land	252
					inanc	
	Sugg	gests burea	an u for	u. P.	iltural y of	492
	Test	ing	adapt	ability	y of	454
	Test	vari	eties	for C	lover- diver-	518
	The	re is sity.	safet	y in	diver-	330
	Trut To a	h-in-fa	abric ise g	rapes	ties	108
	pr	omote	the	bee	indus-	518
	pro	otest	age	inst	foul	286
	reg	gulate eign	imp seed	orts o	fefor-	214
	rei	icies (e ins	S. vet	foul of for-	10
	stu	idy co	oper	ation	in Eu-	542
	Town	nship	to fu	rnish	hospi-	
	Tube Tube	rculo rculo 308.	sis ca sis-fre	impaig e cat	gn3	358 30,
,	Turn	ing s	tump	lands	into	18
	Usin f	g Mi	chiga seed	a-grow	n al-	4
E2009	VV 51 57 (ag are	reni	near		O IS A SECURIOR OF THE PARTY OF
1	War Wasi	finan	ice bi	ll	ing	74
		нау с	onsor	laate		.08
	Whea	cks a	d rye	crop ry low	s4	30 29 1
	Will	worm coope ional	progr	in big	s sec-	04]
	30 M	SERVICE SERVICE			Col Carton	Wat laws

side?55	2
grow russet rurals56 Wool checks going out63	(
grading dates for next week	29
Farm.	Religions
Account book, what it says	7
Adjustments recommended	
Agricultural exports large.71	9
Alfalfa and timothy 2 acreage increases56 campaign in Benzie coun-	5
ty	6
gives excellent crop 6	5
grows his own seed 1	1
test, values of26	0
when to cut	L
American grain reaches Russia288	8
ty 13 experiences 24 gives excellent crop 6 grower, an old 52 grows his own seed 1 seed-bed, an infirm 65 test, values of 26 when to cut 55 wrinkles, some 54 American grain reaches Russia 28 Another new wrinkle 26 At the Farmers' Round-up)
Axe handle, to improve187 Barberry bush488 Barnyard gosstp38 Bean crop, making a good.609 cultivation655	1
Barberry bush	5
Bean crop, making a good.608 cultivation	
cultivation	
about	3
ern grown331	
Be sure you are right366 Borers, are they good sail-	į
Cabbage maggot and pota-	
ors?	
Corn. seed. make sure that	å
it is good579 dates for planting579 Clover, better stands187 Hubam, as a farm crop455	Š
Clover, better stands187 Hubam, as a farm crop455	
late sown	롈
seed is scarce 10 what ails the crop? 3	
Concrete tanks renaiming 414	
tion	
Consolidated school question	0000000
vields not reduced by	
soy-beans	
yellow?629	
Crapo, Governor, farm389	
reports fairly good625	
reports fairly good625 reports723 that does not rob the	
farm	
farm	
for	
Demand speed pedigree537 Dimming the headlights 494	
Drainage campaign for San- ilac487	
Drains making nermanant	
Economic land survey679 Electricity, repopulating farms with85 Exhibit of friendly ememies155 Export of farm products, 115,	
Electricity, repopulating farms with85	
Exhibit of friendly eme-	
Export of farm products, 115, 180.	
Farm crops, talks on bet-	
Farm crops exhibits152	
labor in demand522 Mr. Foster finds his 33	
notes	
have best comeback537 incomes in Michigan703 repair shops423, 461 work delayed549 Farmers' 1922 auto tour .467	
work delayed549	
and faithing, bitchy told	
facts about Ogemaw705	
Feed markets, trend of138 Fender cracks494	
facts about Ogemaw705 Feed markets, trend of138 Fender cracks494 Fertilizing value of legumes88 First spring plantings389 Fly breeding places, descriptory525	
First spring plantings389 Fly breeding places de-	
Forest activities will be	
curtailed 14 Forestry work, to promote 583 For the past 45 years 389	
rour norse nitch for blow-	
ing	
Francisco farm notes, 12, 40,	

462, 495, 522, 550, 580, 609,	1
633, 655, 688, 708. Geology exhibit154	
462, 495, 522, 550, 580, 609, 633, 655, 688, 708. Geology exhibit	
Gives value to leisure425]
Good roads save money252 Grains, mixing increase	
yields	
Has successful year 10 Hay, control of heat in 651 movement of 579 makers; troubles, some .681	
makers; troubles, some 681	
Health, 527, 503, 559, 591, 617, 637, 665, 691.	
Hide, how to tam414 Home-canning of meats demonstrated14	:
Hot-bed, lengthening the season with287 How shall we farm in 1922?	
Hubam clover as a farm	
crop	•
Incinerator for every home.	
Increasing number of crops	
Insect tax547	
Insurance, crop, sound bas- is for	
Jim Crow and how to treat	
him	
Killing a willow clump494	
Legumes, fertilizing value	
will boost	
Lime badly needed	
Lagging operation Ford's 84	
Machinery prices decline. 522 Making of a pork chop107 Manure spreading, utilizing	
where to apply 549	
Maple sugar and syrup profits147 Market demands, meeting 5	
Marketing costs, to cut421	1
Marl deposits, utilizing 59 cheap and easy to pump.211 Mechanical loading of ma-	
nuro 347	
Melon aphis	1
Michigan woman operates fox ranch547 Millet, why grow?631	,
Mint field, more oil from 319 Mortgages which never	
duck farmers oppose duty on potash	
Need for food abroad is large	
Nitrogen is free707 Oats, what farm trials tell us about353	
Oleo, much used534	
Oleo, much used534 Pennsylvania buys Michigan seed potatoes 13 Planning a new home219 Plenty of game this winter	
Points to consider when purchasing a farm117 Poisoned baits252 Possibilities of peat 84	
Possibilities of peat 84 Potash tariff 66	
Potash tariff	
tion on	
Michigan seed259 plant close together707	4
seed, growing583 seven hundred bushels on three acres115	
Potato acreage to double 522	
digger, new type321 ground, did you plow early?683 seed, treat163	
early?	
shipping restrictions 159 stocks available 164 to get big crops 330	
Power and farming190 saw tested158 Prospects in an agricultur-	
Prospects in an agricultur- al community157 Purchasing power of farm	
products maintained687 Put trees on waste land119 Quack grass, a fight against	
recipe	

THE	
Railroad tariffs and pota- toes	(
toes	
es	(
Roadside, caring for322	1
Robust beans make good317 Round-up farm mechanics' exhibit155]
Rural agricultural school in Michigan 35]
schools, modern 47	
Soils, why they wear out522 Schools, hot lunches at 84 Scraps291]
production, opportuniti-	(
ties in	
Seeds, better	
corn	(
Soy-beans, experience with]
plow early for609 Special loan advocated for	3
dry-land farmers217 Squash, why not mik-fed? 42]
Sugar beet growing, side lights on187 beets, Chili to grow575	I
imports from Brazil increase581	
Sunflower silage successful	1
Sweet clover 42	
peculiar results from320 Takes homestead land114 Talks on federal reserves.190	
They tell the world. 213 Thistles, exit	
The mierior is costly	
durability of	
ing safe	
Tool, a complete garden291 Tractor, housing185 discing in oats107	
garden, works well211 study	
Tenant farmer problem, 430, 249.	
Trees like feeding, he finds 42 United States exports large for 1921207	
Vegetable crops important,]
Michigan's487 Wagon seat, home-made330 Weeds, get them early549	
in corn field, controlling.609 What Europe owes us496	. \$
What shooters should know655	404
Wheat acreages increase in Huron county363 crop shrinks481	5
Whitewash, government 13.	
exterior	
Who pays for it? 85 Windmill does double duty	
Wind power	
normal	
Women's session interest	,
ing	
would insure crops	
Why truck crops fail on mulch son	
ver not successful425 Farm Organizations.	
Agricultural bloc513 conference at Washing-	
ton110 and industrial conference	
Agriculture and the feder-	
al reserve board450 Alfalfa campaign for Cal-	Y
houn	
for appropriation for wheat rust control449	
asked to establish com- mission company at	
Attempt boycott of farmers' com. house382	
Beet growers' hold annual meeting 60	100 mm
Big campaign progressing.417 Caro shippers name officers	
again	
Certified seed business364 Cloverland tarmers' insti-	
tute	

M	I	C	H	I	G	A	N		F
Coop	era	ativ	e at	В	comi uffa	nis lo	sion	41	1
ma S Cróp	rk	etir	ng	b	ill	pas	sses	180	6
Dogn	\mathbf{R}	1188	ell	SI	\cdot om $_1$	ng	DOS	-	
Eleva gro Farm	ato	or e	exc	hai	nge			679	6
Farn con Farn	i k	entr	ate	ed	ues effoi	rts	ours	574 46	5 1 7
Warm		reg	mi	zati	ons	C	00D-		
Farm	er	s'	ins	titi	ites	in	. U.	18	6
Farm File Grain Gran	cla 1 g	rov	vei	s e	elect	ing	del	18	6
Gran	ge	ch	oo al	ses	pla	ces	for	46	2
					etined .				
ner Grati	ws	co	un	ty	get	s	new	32	8
Hold Lena	- 81	nec	ಆಶವ	LUL	me	CULL	G	240	2
Live	es	olu	tio	ns xch	ang	e e	lects	36	
MINISTER OF STREET	-00		**					48	1
Loca Merr	ne ill rea	r	0-0	р.	has	g	ood	350	0
SIII	1ec	etio	ns	at	Det	roi	t	550)
177100000000	ot	co	nt	ent	wit	h p	res-	41	7
Mills	e	nco	ura	age	wo s' p	or p	eers	44	9
Mucl									
Natio	ona	al g	ra. me	nge	ation	isia is		18	
ur New	ax	to	D:	av	sold	1ers	5	20	6
1921	w	ents	ne	ass	ocia y all	so	$d \dots$	21	8
No s Oppo Plan	ale	es 1	sal	es	is s	ess	ion.	32	9
Pota Pota	to	shi	so	uth	ts I	leav	уу	49	1
Pres	er	on t ac	ia im	nd inis	strat	ion	pro	18	b
Publ	cor	ty	in	cre	ases	3 1	milk	44	6
Reas Reor	on	8 10	or I	ine.	agr	1cu	ltur-		
Reso	ga	Bac	e f	air	ass	ocia by	the	45	0
Reso Sagin	ar	m	bui	rea	u	arn	ners	17	5
Shor	wir tag	ge i	n br	fine	e wo	ools	Mid	250	3
Shor	ers	et	199,6-1	arı	ners	ED LASS	crub		
State	ne f	etir	ng a h	our	eau			15	6
off State State Stud	9 8	rar	ige	ne	otes	3 .		1 22	0
Stud	yir	bat	e m	ich	igar	ı's	tax	6	0
Suga	r	CO	\mathbf{m}_{1}	oan	les	u	eray		
Tells	b	oar	d	of c	trac lirec rmi	ctor	s to	1250 A	3
To s Tour	mic	acin	m	POI	PAPI			22	0
Tusc	sh	ore,	, S1	art	S DO	oost	ing.	42	6
	cha	ing	e i	n (cons	titu	tion	42	9
U. P War Way	fin	aran	ce	co	rpor	atio	\mathbf{n}_{1}	28	8
Woo	pro	nar	kei	9		• • •		67	900
Worl	ws ld's	s d	air	y (ong	res	s	67	
Wou	ld	tal	on	tru	omn	n-ta	bric		
Abso	es	s o	n	foot	rce.	•••		2 70	4
Action Ador Alfa	ti(on	itti	ne	a st	and	of.	52	0
ın go	od	for	t. rh	og	pas	tur	e	54	4
Amo	un	t o	f g	rai	ant	ser i	ien. vice	9	-
At w	ha	led it ti	ime	e ir	Hf	e sh	ould	48	8
da: Baby tor	ıgı	how ie	coa	ted	wear	a		55 72	9

Cooperative commission house at Buffalo414		I
marketing bill passes senate		1
Crop commission house565 Dean Russell's coming post-	Beet factory lime112	I
poned	Bluish combs	I
Farm bureau dues328	Breed characteristics744 Broken leg mends slowly .503	
concentrated efforts574 Farmers' 1922 auto tours467	Bronchitis	I
Farm organizations cooperate	Buckwheat and middlings, value of360	I
Farmers' institutes in U.	for cows 38	I
File claims at once220 Grain growers electing del-	keeping it sweet652 Butter-milk for pigs516	
egates	Canada field peas	I
mational meeting462 leaders pleased186	Cannot breathe through	I
good, story of a491 opposed to coal strike .328	nose	I
news	Carrots and beets for cows 86 Castor oil, only591	I
Gratiot county gets new farm bureau agent350	Cement tile for drainage.112 Chattel mortgage182	I
Hold successful meeting. 252 Lenawee Pomona passes	Chicks die in shell, 533, 645 with weak legs673	I
resolutions364 Live stock exchange elects	Claim against estate606 Clover catch on wheat456	I
officers481 Local wool poor arrange-	seeding on light soils 86 Community questions576	N
ments	Comparative breed weights	N
year	avoiding	III
nections at Detroit550 Michigan potato growers	expired	1
not content with pres- ent achievements417	Conveyance by married woman520	1
Mills encourage wool pool.449 Monroe farmers' pioneers	Cooperative association 290 Cottonseed meal for steers 6	0
in new type county or- ganization115	Cowpeas or soy-beans for soil building488	0
Muck problems to be aired 60 National grange legislation	Cow vs. horse manure290 Crops for low land360	
recommendations186	Cultipacker for wheat456 Dairy ration, 150, 182, 212, 290	
tax to pay soldiers256 New officers of county	324.	E
agents' association217	Dangerous amimars 6 Dewberry culture632	I
No sales tax this session.417 Opposing sales tax329	Diabetes, dieting for559 Divorce and entirety424	I
Plant quarantine meeting. 459 Potato shipments heavy. 491	Dog tax	I
Potatoes, southern491 Power on land186	Drainage	Î
Present administration pro- farmer364	in incubators533 Ducks, care of200, 699	Î
Publicity increases milk consumption446	mating	
Reasons for the agricultural bloc211	weak	I
Reorganize fair association at Bad Axe450		I
Resolutions adopted by the farm bureau175	Dyes, home-made502 Eggs, color of443	I
Saginaw county farmers win 36 premiums350	soft-shelled673 Eminent domain and con-	I
Shortage in fine wools256 Shorthorn breeders of Mid-	demnation	H
land organize350 Somerset farmers' club	of another	I
meeting426 State farm bureau156	Exemption	F
officers for 1922148 State grange notes 10	Exposing poisons182	I
State. hort. meeting220 Studying Michigan's tax	Eyes swell shut233 Fall sowing of rye and vetch686	
probate	Farming contract544	1
Switzerland needs wheat491 Sugar companies delay	Feeding breeding geese275 pork scrap307]
making contracts103 Tells board of directors to	questions]
establish terminal com- mission nouses220	sour milk]
To sell produce in Detroit.256 Tourist Ass'n, the Huron	applying after wheat 6 for muck]
Shore, starts boosting.426 Tuscola farm bureau makes	onions	
change in constitution	Fever with T. B665 Fixtures456	
U. P. Grange membership.328 War finance corporation285	Flies, getting rid of652 Foul brood424	1
Wayne farmers favor road program426	Freckles, can they be prevented?503	I
Wool markets679 pool progressing417	Gas plant residue as lime substitute392	1
pool for 1922328, 537 news	Geese inbreeding410 mating200, 274	77.77
World's dairy congress679 Would take truth-in-fabric	vs. hens	
bill from committee220	Goose eggs, care of594 Goslings, hatching51	
Abscess on foot 24	Grain with soy-bean hay and silage 86	
Action on lease	Grass for blow-sand112 Hair, contrary617	4
Alfalfa, getting a stand of 520 in wheat290, 324	troubled about591 Has no right324	20.00
good for hog pasture544 seed, home-grown329	Hearing, has trouble491 Hens lose feathers411	5
Amount of grain per hen. 97 Another important service	making broody442 on shares306	-
added488 At what time in life should	with roup200, 307 Highway, access to 6	**
the first baby come? 50 Auto-intoxication617	vacating	3
damage	Holding two offices392 Horse nettle606	-
tongue coated723 Backward child559	Hubam clover314 scarifying544	-
	scarnying	1
Balanced ration for Jerseys Balancing a ration 80	Husband's rights in wife's property	

	Interest rates 6 Incubator, second-hand533
	Land contract
	Law of the road 86 Leg weaness 562, 595
	Liability on note456
7	to fence and for damages424 Lien for stallion charges 86
	of chattel mortgage 38
	with alfalfa324 hydrated, for acid soil.212 Liver enlarged621
	spots
	Lost instrument324 Malmutrition637
)	trouble
;	Manure is realty212
	Market poultry233
-	Market poultry
:	Moles, removing527 Muck ground for the root
	crops
	ment
	Negotiable instrument324 Neuralgia, a cure for 617 New house on old founda-
3	New house on old founda- tion392
)	tion
	Onychia of finger-nails665
	Oral contract performed one side324 statements in making contracts456
	contracts
3	Outdoor whitewash652 Partition of land290 Patents, question regard-
	ing
	Polypus in nose591 Poor road work366 stand of sweet clover488
	Possibly rhoumatism 379
3	Potatoes or soy-beans632 Poultry house floors 96
1	Potatoes or soy-beans 632 Poultry house floors 96 questions 97, 135, 344 troubles 595
5	Preparing strawberry land.464
2	Promissory note686 Property arrangement424
	Promissory note
	moulting
	lame306
	Rabbits, Angora718 Raising pigs without milk.212
	queries
	for butter production. 309 for small Jersey
	Ram installation 6 Receives blow on ear617
,	Recovery for improvements
2	Removal of tree360 Renewing endorsed note488 old stand324
;	Rice, wild
	of land owner246 of second mortgage112
	on road
	to interest576 Roads, impassable544 repair fund706
	Rooster chokes379 Roup and chicken-pox274
2	Sand burrs, getting rid of 652
1	Sale of exempt property.652 Scale, treating potatoes520 School attendance is com-
1	pulsory
Ĺ	Second-hand incubator533
5	husband has no rights324 Setting hens eat eggs673
	have lice672 Short queries and replies 254 Sick cockerel233
	turkey
3	Some current questions .424
7	Sore-eyed chicks620 throat from riding691
7 5 5 2 2 5	Soy-beans
3	Statute of limitations182
1	Storage charges for hay 392 Styles, troubled with591 Summary proceedings652
3	Sudan grass324

Surface waters 80	Rheumatism 29	Get together, keep togeth-	700	u de la companya de l
Sweet clover and timothy 6 for pasture246, 520	Rickets311, 721	er	Pigs, weaning598	Al's fertilizer would help
for poor solls576	Ringworm	Gratiot Durocs sell well417	feed the young581 Plum Creek Duroc sale353	Where bluff failed578 Work and play578
Taxes on purchased property360	Scabs on legs	Great promise234 Guernsey champion596	Poisoning predatory ani- mals 14	Horticulture.
Tax on land contract652 sales246	Segregate diseased from well cows351	record for Michigan294	Pound a day, a	Apple orchard experience. 464 scab, watch for552
Teeth, may be caused by .559	Shy breeder55, 383		Prizes for Michigan 53 Proper feeding saves pigs.347	Asparagus460 Blessing in disguise, a87
Telephones246 Testamentary capacity150	Sick pig239 dog551	Handling cream on the farm697	Pure-bred Durnam is the champion mother413	Bordeaux controls potato
Tile drain	pup	Have ambitious program 52	value of602	leaf hopers 87 Calyx spray important for
cause suffering617	Sitfast	first calf 45	Rack for feeding sheep, 116, 201.	codling moth control120
To get catch or clover424 Tractor costs544	Skin glands inactive279 Sluggish kidney action643		Record, a good 89 Red-Polled breeders en-	Candy pails in the garden 87 Canning factory, fruit grow-
Tractors on highways424 Transfer in fraud of cred-	Sore leg	cholera, watch for607	thusiastic129	Canners and growers to co-
itors150	shoulder721	house hollow tile for 479	Saginaw county Holstein good producer413	operate 25 County pools nursery or-
Treating potatoes for scale	throat	market, decline checked.601 on pasture720	Sale of E. A. Hardy and	der 25
Trees on roadside112, 324 Trespass by animals576	Split teat	raising a sound farm en-	Walter Green353 Save the coming pig crop.346	Cranberries in Michigan 428 Dahlia tubers, planting 552
stock	Stiffness in hind quarters.205 Stifle lameness383, 535	terprise	Schlaff dispersal sale353 Sees effect of alfalfa cam-	Dusting for red bug120 what it will do584
Tuberculosis in flock411 possfbly,96, 718	Stringhalt	continue to advance296 fattening119	paign	Fertilizer, interesting tests
Turkey eggs, hatching488 management443	Suppression of milk 29	pasture for510	Shall we continue the grain when herd is on pas-	on vegetables121 Fruit cooperative associa-
with weak legs672 Turkeys, raising young594	of urine311, 567 Surfeit599	Holstein calf club man, new236	ture?508 Sheep land, morthern areas	tions form exchange 25 growers discuss problems
with worms621	Swamp fever535 Sweeny173, 535	dispersal sale241	good	317
Turnips and buckwheat, to turn under424	Swollen gland311 Teat stricture311	herd, Shiawassee596 meeting170	why not keep?566 Shorthorn breeders' sale623	organize, western Mich-
Warehousemen's rights456 Waste by mortgagor 38	Thrush	Holsteins sell well at Howell674	Silage, alfalfa565 clover instead of corn477	igan's288 service for122
Waterproofing cement wall	Unthrifty mares55, 351 Vaginitis, 383, 479, 599, 643	to be sold, choice597	fed steers pay out204	growing on upward trend
Weak chicks	Warbles599, 643 Worms, 55, 173, 447, 535, 677	Horse, balky510 buyers want specialties.723	weight of169 Skim-milk tops the feed	uninjured in Michigan583
What can be sown for hay crop?488	Live Stock and Dairy.	Horses, more useful361 tonic for413	Spring lambs become nu-	Fruits, Michigan standard- izes
Who owns furniture?246	Additional prizes for Hol-	Hunting slacker cows in	merous	picking ladder724
Widow's rights 6 Wild rice	steins	Antrim county236 Huron breeders hold annu-	freshened cows642 Steady interest in better	Garden, an earry nome359 frosted, saved584
oats	Among Michigan's live	al meeting413 county farmers fatten	sires	notes
Wood for silo	stock breeders350 Annual breed meetings 26	cattle for spring mar-	Sterilizing necessary696 Sticker is the winner 37	Grapes and currant plants,
Worms im poultry532 Veterinary.	meeting of the Michigan swine breeders' assn.139	ket	Stockers and feeders at year's high point601	grow your own 25 Horticulture in πs infancy.326
Abnormal appetite677	Amother tester goes to work	Increases demand for pure- bred animals535	St. Louis creamery does	Hot-beds, sowing seeds in 396 Hothouse business good . 496
Abortion	state herd481	milk consumption137 Injecting hogs in flank	big business	Less planting-more cul-
Azoturia	Australia's cattle industry suffers724	saves meat204	Stock men at annual meet 62 Stomach worms in sheep.696	Lice, new method of rid-
Barrenness415, 677	Ayrshire breeders' farm or-	International grand cham.483 prize winners3, 109	Summer hog prices lowest	ding plants of460 Lime, the use of121
Blood in the milk239 Breeding question173	ganization143 Beef, home consumption	Jersey breeders' club, or-	in June	M. A. C. Hort. Show154
Bruised hind leg447 shoulder279	of720 Better stock improves de-	ganize	for steers347 Surplus problem, the212	Melons for home use, grow- ing610
udder173	mand for better sires679	Kent cow-testing ass'n 89 Lamb crop, spring, short 676	Swat the poor cow, but	Michigan fruit farm notes, 218, 396, 519, 654.
Bursal bunch	Bidding good at Bornor's sale238	Lambing off com and soys.720 Lambs, feeding for278	feed the good one611 Testing association did it719	New apple varieties recommended552
Cattle cough	Big cows most profitable294 Bred sow sales going well.204	it pays to dock446	The man, the cow, the feed	use for automobile tire 61
indigestion141	Breeders will cooperate346	young, handling308, 382 price trending lower723	This may require some	York fruit growers' co- operative doings120
stocking	Briefs for cow owners309 Butchers can help566	Leading milk and butter	time, but it might pay.412 To avoid bad habits565	Zealand spinach552 Nicotine dust for psylla273
Club foot	But it is a change for the better508	ty565	have field men143	Nitrate of soda for early
over-eats677	Butter market stronger136 Calves, keep them growing	Live stock board for cooperative marketing 89	Trend of feed market138 T. B. eradication158, 169	garden
Contagious abortion383 Cough447		eliminates farm waste 83	efficient	Orchard, annual bearing400 fertilization, value of181
Diarrhea	register	exchange officers 288 men, a new service for 696	on the defensive201	Peach growing, outlook453
Docking aged ewes383	Cattle, light, growing demand for510	have own commission house599	testing, does it pay?674 to further campaign 37	Peaches, advantages of thinning703
Eczema351 Effects of purpura173	Castrating colts622	sales	work in Michigan204 work, will continue when	Pear, Cayuga, recommend-
Enlarged glands55, 279 Eversion of womb (casting	Cheese, to make better675 Chicago area dairy trou-	Livingston county cow-test-	funds are available565	Planting for polination122
the withers)479 Exostosis	bles	ing ass'n reports675 Lost opportunity534	Turning the herd to pas-	Preserving fruits, profits in
Failure to come in heat, 76,	Condensed milk market281	Market service, hope to retain580	ture508 Tuscola heifer sets state	Protecting early plants
Feeding pregnant animals	Consumers want a clean and wholesome supply	Marketing program to be	milk record412	Remove the soil banks
cottonseed meal 29 unbalanced ration to the	of milk	held in abeyance601 Marshal Foch fights for	Two farms and two results 26 Veal, preparing for market	from peach trees645 San Jose scale87
brood sow	way to turn683	milk 37	476	Scale control by dusting120
Feline diphtheria699 Fetlock joint rameness383	Cow, kicking, to cure412 -testing ass'n profits 64	May milk prices696 Meat, Chinese eating more.720	Water for dairy cows675 Wayme leads523	Shall we cultivate the or- shards?272
Fibrous tumors205 Fits	testing work, a year of 6 testing work summarized	Meat prices, the way of380 Michigan live stock ex-	Wants Jersey men of state to come to Oceana508	Spray injury and control648 Spraying brings profits551
Fleshy weak mare447	719	change meeting 53	Weigh the market milk444	bush fruits
Forage poison	Crippled pigs347 Dairy calf, bringing up696	milk producers plan developing nicely675	What a cow-tester found294 Will boost legume crops349	suggestions326 Spy, a new120
Geo. Cobb, Jackson, Mich.567 Hog cholera279	congress	Midland starting to ship live stock313	hog prices decline?566	State fruit exchange certain120
Hoof-bound contraction447 Horse pants311	schools for Tuscola coun-	Milk, cooling	Winter dairying profitable.168 World's record shattered508	Strawberry patch493, 181
Indigestion, 28, 55, 76, 239,	Dairymen to market prod-	funds for T. B. fight414	Would improve dairy business	Sweet corn, growing584 To give plants an early
311, 447, 567, 599. Infected udder569	ucts357 must stick413	getting folks to think in terms of477	Young herd sire for Hill- crest Farms310	keep bugs away496
Knuckling205 Lame pigs415	to meet 10	has mo substitute 26 keep sweet	Opinions and Comment.	Tematoes and melons724 wilt resisting273
Leaking milk677	Did it pay?349 Directors of live stock as-	producers' plant349	Decided improvement490	Trees, repairing damaged. 362
Leucorrhoea	Do not get dizzy when you	producing clean719 Milking for exercise 89	Do rabbits injure trees?654 your own garage work490	Vegetables, should consume
Light milker567 Loose teeth311	read this 26	machines improve qual-	Farm profits vary widely.546 Holding two offices458, 548	more
*Loss of appetite101, 173	Duroc-Jersey breeders of Gratiot organize221	scrubbing does not kill	Hubam vs. Biennial sweet	Actions and words562
Lousy pigs	Durocs sell well310	bacteria in236 Shorthorns sell well565	Clover	Animal food for growing chicks672
Lumbago	Earliest grains cheapest204	More sheep for Michigan. 649 Organization helped, a case	its from mammoth clover546	Artificial lighting232 Bee house, profit from442
wound311	Ewes refuse to own lambs, when238	where	Has promising variety of	Bees, spring management.378
Mange	breeding winter care of 59 Experiences of cow-tester.348	Organize to distribute milk 64 Other milk and alfalfa	soy-bean546 Muscle Shoals578	keep them cool609 Bulk in green food neces-
Milkless sow	Feed prices go up276	campaigns292	Owners were once tenants	sary
Necrobacillosis239	Feeding more carefully136 Filled milk matter, the214	Parade for Farmers' Week 89	Plunging, about548	Capons, success with 50 Chicks, care of young629
Out of condition311 Ovarian cysts239	First honors to Perry Hicks	Paralysis in pigs414	Protective tariff needed458 Puzzled548	Chick remedy, a simple718 suggestions621
Paralysis239, 351, 415 Parasitic grease heel567	Five-day calf brings good	Pasturing, avoid early476	Railroad discrimination 578	Cockerel auction sale507
Partial loss or power141	Flock at lambing time172	Perplexed dairymen are	Regarding rented lands458 Roadside trees458	Colony house plan, the344 Curing clover for poultry, 718
Perverted appetite721	Fly pest, fighting the642 Freshening time import-	convinced543	Rural mail box654 School question, 490, 548, 654	Egg prices, future135 producer's outlook258
Preventing sore necks 383	ant	worms, watch for676	Sweet clover question490	yield, increasing232
Remedies for flies721	tion low508	first414	help458	Eggs, preserving475 proper nests save275

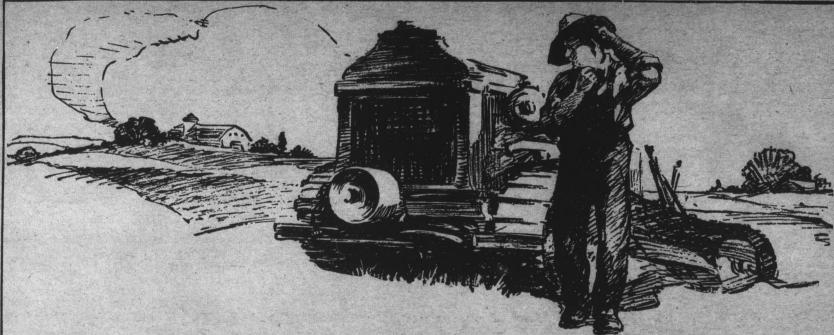
JUNE 24, 1922.	
Feeding young chicks506 Feed prices going up276 For bigger poultry profits.285 Geese, some suggestions410 Gogebic poultry show84	
Geese, some suggestions. 113 Gogebic poultry show 84 Grand Rapids' poultry show	
Hubam popular with bee- men	
locating	
Make broilers pay	
Pious poultry	
roosts, ideal 96 shippers, a few suggestions 51 products sold at premium	
work, another step in 718 Rabbit round-up	
rees?	
Stove brooder fuel345 Swarming and its control 651 Sweepstakes birds at Grand Rapids74	
Turkeys, hatching410 winter care or50 feed for166 young management of .605	
hatcheries506	
American Novel	
Artificially fed infant128 Asparagus, fresh or canned	
Books for seventh graders.502 Bran recipes439 Breakfast room502 Brings nature to children 94 Button loop edge438	
balanced ration270 Canning home, sense in .638	
queries	
death	
Citron	
Colors for crocheted rugs.712 to set in wasn goods590 Cranberries, candied129 Crochet chatelaine bag162 Curtains and spreads, new	
to dry	
bed	
dren?	
Fabric tests	
Fastening cut crochet 71 Floral helps for June 692 Flower bed, the 558 Folk songs for children 70 Food values 375 For the woman voter 228 Furniture, old made new 302	
refinishing	
Health culture, lessons in, - 130, 194, 229, 269, 301, 335 rural, 527, 503, 559, 591, 617, 637, 665, 691, 723. Hat bag	
Home and other activities.228 decoration	
remedies502 Household demonstration in U. P48 exhibits at Farmers'	
suggestions21, 470, 662	
Is your work drudgery?196 Javelle water712 Kitchen, aid to orderly406	

THE	
Lace for undergarments692 Lead children to nature374 Learm to eat "anything"590 Lettuce, eat more407, 528	I
Married women may teach	1
Mending children's stock- ings	1 1
Moccasins, home-made616 Need of the hour, the 20 No guest room303]
more double standard 21 On judging values 48 Painting, preparing surface for	I I I
Pastry scraps, using the692 Pathfinders, the, 69, 95, 131, 163, 194, 270, 301, 338, 437, 471.]
Pets and flowers, teach care of618 Plan, what is your?558 Poorly nourished children.268	1
Pork supplies energy 21 Recipes 439 Removing stains 374 Rhubarb "tones" system 616	20.02
Rugs and their care 48 Rural school, reviving the 70 School lunch, the, 20, 406,,	,
268, 270. Service books for home makers375 Seven daughters of great	,
She would be a diplomat. 558 Short cuts, 71, 131, 302, 439, 528.	'
Something to take care of 340 Spring wedding menus340 season, a longer470 Spring's choices offerings.528	,
Strawberries and cream, 662 Sweet-tasting potatoes 268 Tea social side of	
The little girl's wardrobe 712	
To finish doily edge	
U. S. Bulletins 439 Want a "better sire" team?	
Waste box, a nandy438 When the son marries228 things refuse to stick616 Wily moth, controlling the.590 Winter salads furnish variety and vitamines270	(
Woman fire fighter, a407 keeps civil service job590 help govern New Mexico	
Women at Farmers' Week 71 to work for disarmament]
Your child's reading 21 Boys and Girls.	I
A club boy's international experience	(
Busy bee helps Bessie304 Charlotte high school judging team98 Club girl raises \$1,000 bull]
project begging of unique business	1
sentiment in	2070 707
343, 377, 409, 473, 505, 530, 561, 619, 695, 717. Corn club plan	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Drawing contest695 Financial side or club	9
work	7
History of North Huron pig club	7
made my corn crop408 raised my pig22 In charge of club live stock	7
work	I
530, 561, 592, 618, 640, 670, 694, 716. Marketing, trained in 563	E
Mast for amateur wireless 22 Meat packer awards72 Michigan canners score in Washington560 ranks well230	I M
Money-making contest441	

MICHIGAN I	
stunts 640, 592, 530 makers among club mem-	
bers	
poultry project work 165	
tame crow	
New girls' leader in U. P342 Perseverance gets results.492	
Potato club demonstrate value of disease-free	
Poultry project pays198	
Profit and experience in clubs	
Pussy willows304 Pussy willows304	
Pussy willows	
Reasons "Why I Like the Farm"	
Round-robin letter198 Saginaw county boys at	
show	
Spelling contest	
leaders' notes 46 Three-time potato campaign	
Trapping the skunk 230	
Uncle Sam vs. the bad man 132 What milk will do for the	
What milk will do for the boys and girls231	
boys and girls231 the runt did376 Why I like the farm, 37, 441,	
Johnnie left the farm716	
some boys do not quit the farm 22 Win a dollar267	
Wonder where I'm going?	
Word contest	
Word contest	
Magazine. A help to autoists366 An indestructible book668	
Another important service	
added	
Bible, influence of615 Blind Man's Eyes, 18, 44, 68,	
92, 124, 160, 192, 224, 262, 298, 334, 370, 402, 323, 468, 698, 526, 554, 586, 614, 626	
Better homes exposition. 244 Bible, influence of	
Dean Russell to speak im Michigan	
Fight for life or cash, a111 Galilean clinic404 Greater respect of law is	
Have you the seeing eye? 122	
He could not be hid 227	
Hidden mysteries436 Income tax in a nutshell .118 tax118 Introducing your friends .556	
Is the church narrow? 93	
Michigan's senior senator.398 Mills of God, the715 On immigration 430	
On immigration	
arations	
Riding to a fall685 Roosevelt the Christian73	
Some questions and answers	
Soul of an immigrant, the 195 Starting a community	
Sunshine Hollow	
Tariff bill, the	
world loves brave men639	
Thoughtful letter, a264 Two more letters300	
Was Lincoln a prohibition- ist?161 What think you of Christ?	
we know of God 372	
Where moth doth not corrupt	
World's greatest move- ments	
430	STATE OF
POETRY. A little bit of heaven334 Bright valentine167	
Discipline and derelict500 Down on the farm 552	
Echoes	
Farmer's best friends, the 224 Home and Love	
My garden	
Plowing in the spring time402	

Service the measure342
Step-mother the
Sonnets of spring
pine tree and the star586
To the men of rural Amer-
ica
"Why Johnnie left the
farm,"
Wishin'127
Illustrations.
Alfalfa field—with buck-
wheat
Ames, Nellie, and ner prize
Apple tree in Marquette
pig
Austrian cloth for spread 639 Auto tire border for posy
bed 61
bed
Balden, Alvin, herd sire545
Barberry bushes in field of
Barlow, Miss Louis, and her
prize Aberdeen Angus
Calf164
Barn in Shiawassee Co. 425
Barnum, J. A., prize-win-
calf
Bee colonies378
Bee colonies
Bope's Dr., farm, marking and planting mint on 369 Boy, 19, invents smalest radio set
and planting mint on 369
Boy, 19, invents smalest
and lamb
and lamb
prize-wirning Hamp- shires
shires
Breakfast-room table502
Brimmer, Mr. Charles, and
his bee barn442
Burlap for drapes638
Button loop edging438 Candy pails in gardens 87 Canning club of Eaton Co.504
Canning club of Eaton Co. 504
Cattle, herd of683 Charlotte high school judg-
Charlotte high school judg-
ing team
A. C285
Child with hatful of chicks
Closson R R orchard of 402
Clough, Vernon E., cow of 564
Clover field 81
Chickens belonging to Mr. A. C
charges304
Club leaders getting ready
for "weenie" roast716
judging nure head hogg 100
judging nure head hogg 100
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's farm33 Correct placing of silver and dishes on table204
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's farm33 Correct placing of silver and dishes on table204 Cow holding Jersey world's
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's farm33 Correct placing of silver and dishes on table204 Cow holding Jersey world's
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's farm33 Correct placing of silver and dishes on table204 Cow holding Jersey world's record179 Crapo farm389
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's farm33 Correct placing of silver and dishes on table204 Cow holding Jersey world's record179 Crapo farm389 Herefords on389 Crates of apples fertilized
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's farm33 Correct placing of silver and dishes on table204 Cow holding Jersey world's record179 Crapo farm389 Herefords on389 Crates of apples, fertilized and unfertilized from six trees255 Crochet chatelaine bag162
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's farm33 Correct placing of silver and dishes on table204 Cow holding Jersey world's record179 Crapo farm389 Herefords on389 Crates of apples, fertilized and unfertilized from six trees
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son204 Corn field on Mr. Foster's farm33 Correct placing of silver and dishes on table204 Cow holding Jersey world's record179 Crapo farm389 Herefords on389 Crates of apples, fertilized and unfertilized from six trees
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son
judging pure-bred hogs189 Colt owned by J. M. Hicks & Son

77
Hat bag439 Hemlock Hangicraft Club
and samples of work607
Hogs, feeding566 Hog in good condition676
Goltrop, Miss Grace 46 Horseman, the good, will
Horseman, the good, will fit his team for spring
work414 Horses, two and colt361
Horses, two and colt361
Horton, Mr. George B682 Hot-bed, or cold frame, for
growing early vegeta-
bles
Ice loading 83
Ice loading
International grand champion
prize winners3, 109
pig
Keister, H. A., prize Min-
Jarvinen, Tneodore, and pig73, 266 Keister, H. A., prize Minorca owned by96 orchard owned by551
Lace for undergarments. 592
Ladder, a hancy
in charge of Michigan
land clearing323 Manure spreader348
Map showing percentage of
advance in farm prices
trend in prices for eggs. 258
Marl mining 59, 211 Maple sugar shanty. 147, 491
Maple sugar shanty147, 491
Market report broadcasted by wireless517
by wireless517 Marvin, Mr., field of alfal-
fa owned by523 McNamara farm, beef pre-
pared on
Mice gnawed trees, graft- ing of
ing of
Moccasin pattern
Orchard
operation287 Peaches, thinned703
Pifer, Frank, and his prize
pig670
pig
Plowing with tractor 683
Plumb, square and level109 Pope, P. P., some pigs of633
Poland-China herd leader 705
Polhemus, Kenneth, and
Polhemus, Kenneth, and his trained calf440 Potato digger, new type320 Potatoes, crates of, show-
Potatoes, crates of, show-
spraying 421
Power outfit
Pride of Gencarnock 3d109
Quack grass, a weed245
Quack grass, a weed
Rack for feeding sheep116
the farm, a handy489
Radio for market reports. 573
Repair shop on subscriber's farm, plan of423 Rye, results of growing on
Rye, results of growing on
soils under three methods
Schmalzried, Fred, spray-
Scribner, Mr., Holstein
Scribner, Mr., Holstein herd of
Shiawana Farm two-year
01d cow
Since, Wm. wind-propell
ed electric plant on
Singe sunnowers147 Simcoe, Wm., wind-propelled ed electric plant on farm of610 Smith, Mr., in strawberry patch181
patch181
patch
Snow, W. A., spraying out-
Snow, W. A., spraying outfit of
Stearns, T. C. twins of 266
Stenson, Ted, among his
potatoes,376
Sudan grass and soy-beans.
Sudan grass and soy-beans, grow well in Oakland
county
Mr. Pope
Tractor belt operates ma-
Tractor belt operates machines in repair shop. 423
plowing
on scales
Turkeys, feeding605 Miss Ramsdell's flock 50
Unique arrangement for
convenience and order
in kitchen406 U. P. farmers interested in
land clearing
Wagon seat, home-made330 Wang, E. A., farm and
buildings of 81
Wordenka little and the
Wardrobe, little girls712 Williams Clyde and sister 22
Wardrobe, little girls712 Williams Clyde and sister 22
Wardrobe little ourle 719



Is Your Tractor

Chart of Recommendations

Chart of Rec	ommendations
Trade Name Motor Oil	Trade Name Motor Oil
AkronH. Allis-Chalmers—All ModelsH.	Trade Name Motor Oil Magnet B
All Work—Both ModelsH.	MidwestE. H.
Androws Kinkeds E H	MidwestE. H. Minneapolis, 12-25 and 17-30 .H. Minneapolis, 22-44 and 35-70 .E. H.
Appleton H. Armington H. Aultman-Taylor, 22-45 E. H. Aultman-Taylor, 30-60 E. H. Ayltman-Taylor 15-30 E. H.	MogulH.
Aultman-Taylor, 22-45E. H.	MohawkH. Monarch-IndustrialH
Ayltman-Taylor, 30-50E. H.	Nilson Junior & SeniorH.
AutomotiveH.	Oil Gas 20.42
Automotive. H. Avery Model C. H. Avery Model C. H. Avery 8-16, 12-25, 25-50, 14-28, 18-36, 40-65. E. H. Avery Track Runner. H. Beter F. H.	Ohio
Avery Track RunnerH.	ParrettH.
Devos	Peoria.
Bates Steel Mule—All Models.H. Bear.	Plow ManH.
Best Tracklayer, 30E. H.	Port Huron
Bates Steel Mule—All Models H. Bear H. Best Tracklayer, 30. E. H. Best Tracklayer, 60. E. H. Big Farmer E. H. Big Four, E-B E. H. Biltwell. H. Boring. H. Burnoil E. H.	QuadpullH.
Big Four, E-B E. H. Biltwell H.	ReedH.
BoringH.	Reliable
Capitol—All Models E H	RexH. Rumely Oil Pull, 12-20E. H.
Case, 10-18 and 15-27H.	Rumely Oil Pull, 16-30E. H.
Case, 20-40 E. H.	Rumely Oil Pull, 30-60E. H.
Cletrac, 9-16 and 12-20H.	Russell "Giant," 30-60E. H.
Capitol—All Models E. H. Case, 10-18 and 15-27 H. Case, 22-40 E. H. Case, 20-40 E. H. Cletrac, 9-16 and 12-20 H. Coleman E. H. Common Sense. H.	Rex. H. Rumely Oil Pull, 12-20. E. H. Rumely Oil Pull, 16-30. E. H. Rumely Oil Pull, 20-40. E. H. Rumely Oil Pull, 30-60. E. H. Russell "Big Boss," 20-35. E. H. Russell "Giant," 30-60. E. H. Russell "Little Boss," 15-30. H. Russell "Junior" 12-24. H.
Dakota	Samson Model MH.
DepueH.	Savage AE. H.
Dill HarvestingM.H.	Shelby Model CH.
Eagle, 12-22 and 16-30E. H. E-B. 9-16 and 12-20H.	Shelby Model DE. H.
E-D. 10-32	Samson Model M
Farm HorseE. H. Farquhar, 15-25H. Farquhar, 18-35 and 25-50H.	TitanH.
Fordson	Toro
Fordson H. Flour City Junior, 20-35 H. Flour City Junior, 20-35 H. Flour City, 30-50 and 40-70. E. H. Fox. E. H. Fox. E. H. Frick, 12-20. E. H. Frick, 15-28. H.	TraylorH.
Fox. E. H.	TriumphE. H.
Frick, 12-20E. H.	Twin City, 12-20 and 20-35H.
Frick, 15-28H. Good FieldH.	Topp-Stewart. H. Toro. H. Townsend—All Models. E. H. Traylor. H. Triumph E. H. Truindaar. H. Twin City, 12-20 and 20-35. H. Twin City, 40-65. E. H. Twin City, 60-90. E. H.
Grain BeltH.	Uncle Sam—All ModelsH.
Grain Belt. H. Gray. H. Great Western. H.	VimH.
Hart-Parr—All ModelsE. H.	Wallis CubH.
Heider-Model 'D"	Wallis Cub. H. Waterloo Boy N. H. Wellington, 12-22 and 16-30. E. H. Wetmore. H. Western. E. H.
Holt Caterpillar, T-35H.	WetmoreH.
Holt Caterpillar (10 Ton)E. H.	Wheat E. H.
Hart-Parr—All Models. E. H. Heider—Model "C" H. Heider—Model "D" H. Holt Caterpillar (5 Ton). H. Holt Caterpillar (10 Ton). E. H. Holt Caterpillar (15 Ton). E. H. Huber Light & Super Four. H.	Western E. H. Wheat E. H. Whitney E. H. Wichita. H.
Illinois Super Drive, 18-30 and	Wilson
Illinois Super Drive, 18-30 and 22-40. E. H. Indiana, 5-10. H. International, 8-16. H. International, 15-30. H.	Yuba Ball Tread—All Models . H.
International, 8-16H. International 15-30H	Barrer and the second
J. T	
Keck GonnermanE. H.	KEY
La Cross H.	
Lauson, 12-25 and 15-30. H. Leader, 18-36. H. Leader, 12-18 and 16-32. E. H. Leader, 18-35. E. H. Leonard Four Wheel Drive. H.	M. L. — Polarine Medium Light.
Leader, 12-18 and 16-32E. H.	M. H.—Polarine Medium
Leader, 18-35E. H. Leonard Four Wheel DriveH.	Heavy.
LibertyE. H.	H.—Polarine Heavy.
London Model S, 12-25H.	E. H.—Polarine Extra Heavy.
N. B. For recommendation	
mobiles and trucks consult	chart at any Standard Oil

Behaving to Suit You?

HEN your horse gets an orn'ry streak you know just how to handle him because you've had years of experience with horses. But how about your tractor? You see, a tractor's a human sort of thing. It has cranky spells whenever it feels it isn't being treated just right. And a lot of this mis-treatment comes from wrong lubrication.

Use Polarine

Made in Four Grades Seals Pistons Against Loss of Power

Did you ever stop to think of the great number of parts to be lubricated; parts which can and will go wrong with improper lubrication?

You don't have to use guess-work in finding out which lubricants will keep your tractor in good humor. The chart to the left tells you what grade of Polarine to use to obtain the full power the tractor was designed to deliver, to reduce your repair bills to a minimum, to give long life to your tractor, and to effect the greatest saving in fuel.

For years the Standard Oil Company (Indiana) has maintained a comprehensive laboratory with a department especially equipped to make lubricating oils and greases. The chemists of this Company, working with the lubricating engineers, have perfected a grade of Polarine which gives correct lubrication for every make and type of tractor. These men know just why it is best for you to use Polarine, The Perfect Motor Oil.

Standard Oil Company

(Indiana)

910 S. Michigan Avenue

CHICAGO

Co. (Indiana) station,