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KANSAS FARMER.

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KANSAS	FARMER	CO., -	- 1	TOPEKA,	KANSAS
	GILL FEELIS				

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ADVERTISING RATES.

ADVERTISING RATES.

Display advertising, 15 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.54 per inch per week.

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Address all communications to

KANSAS FARMER CO., 116 West Sixth Ave., Topeka, Kans.

correspondents that on opening a communication, the editor first looks for the signature. If this is not found he consigns the communication to the waste-basket without reading. Life is too short to spend in reading that which is not worth signing with the real name of the writer.

Again we are compelled to remind

THE RAILROAD COMMISSIONER QUESTION.

In his annual address before the Kansas Federation of Commercial Interests, President Herbert Hackney presented many points worthy of the consideration of every citizen. Lack of space prevents the insertion of the entire address here, but the following excerpts deserve consideration of every producer:

"It has been suggested that our constitution be amended prohibiting this federation from endorsing any candidate for any State office until such candidate has been nominated by some political party or faction.

"This I believe would be an unwise move at this time. It would seem to me to be too much like waiting till the mischief had been done before indicating what would be satisfactory.

"I believe that this federation can not express too strongly the fact that it is an absolutely non-political organization; that it is non-partisan to the extreme; that it has no desire to dictate who shall be Governor of Kansas, United States Senator for Kansas, or who shall fill any other position of honor in the State or for the State except as follows:

"This federation should with equal energy and determination declare itself in terms unequivocal and in a manner to be fully understood and appreciated by all parties and factions of parties that the members of the board of railroad commissioners must be satisfactory to this federation or the entire force of this organization will be used to help the party or faction which will name candidates for railroad commissioners who will be satisfactory to the business interests of the State.

"A matter of the most vital importance to every citizen, to every business interest, and to every industry of whatever nature of the State of Kansas, is the matter of free passes.

"This federation should exert its entire force, if necessary, and induce all political parties to put an anti-pass plank in its platform and ganization should see to it that the party in power enact a law which will make it a penal offense for any railroad officer to offer free transpostation to any one who is not a bona fide railway employee upon the pay-rolls of such railroad company, and any one not a bona fide employee of a railroad should be deemed guilty of a misdemeanor for accepting a pass or using

"The definition of railroad employees should be incorporated into the bill and read as follows: A railroad employee under this act shall be understood to be a person who is engaged in railroad service and who has no other business occupation.

"If our people will confine their efforts to matters pertaining to the busi-

ness welfare of the commonwealth of Kansas, and if they will sink out of sight all personal, political, or sectional feeling for the sake of securing business and financial success for all interests of the State, we can command the respect and attention of all political parties and factions. We can well afford to let the politicians have all the glory and all the political emoluments if they will let us have the members of the board of railroad commissioners."

The meeting at which this address was delivered broadened its membership. Several granges and other farmorganizations were represental. Mr. Hackney is a business man of large ability. His shipping interests are so affected as to direct his attention forcibly to the matter of discriminations in freight rates. This question of discrimination is the big question. It will not probably be settled until there shall be created a rate-making power above the railroads.

DON'T BUY A GOLD BRICK.

There are other as glittering propositions made to farmers as the offer to sell a block of brass for half the price it would be worth if pure gold. A good many "gold bricks" are just now offered under cover of the pure gold of "cooperation." Word has gone out that the farmer has money, plenty of money, more money than he knows what to do with. How much fiction there is in this representation the farmer knows. But the report has brought to the farmer's door cunning schemers who want his money and don't care how they get it. The success of some well-managed cooperative enterprises under the auspices of the Grange, and others with wise managements from other sources, together with the general trend of thought toward cooperation as a means of combating trusts, has turned the schemers' attention strongly to cooperation as the plan under which to "work" the farmers.

Let it be understood that we have no word of discouragement for honestly promoted and honestly and efficiently conducted cooperative enterprises. They are often profitable to the cooperators. But our advice to farmers is to be careful about entrusting their interests or their contributions to persons about whose honesty and competency they have not been well assured from reliable sources.

These remarks are prompted at this time by the receipt of a letter from one of the most pretentious promoters in this country. This letter seeks especially to interest the agricultural papers in a great scheme.

With a few omissions made because we do not care to advertise the scheme, the letter is as follows:

"---, February 11, 1904. "Publishers Kansas Farmer, Topeka,

"Dear Sir:-The enclosures will be self-explanatory. E-18, '—-', was written by a farmer, ——. He has written by a farmer, —. He has farming interests in —. He is probably as well qualified to speak for the rank and file of farmers as any man who follows the plow and better than many who follow the pen.

"E-54 is reproduced from January

15 number of -What it refers to might be well to do, although in many letters from our subscribers we are advised against it. Not one reader has favored this suggestion, but rather they see that — has been instrumental in establishing the -- unaided. Therefore, in equity it should have the honor and benefits that are bound to accrue.

"I know how you felt about this movement in the past, but you may as well dismiss your doubtings and prejudices. Nothing can stop the development of the -- and cooperation by farmers. The demand by farmers to control marketing and regulate prices is growing every day. Wherever the idea is born it is like a lighted match in a pile of kindlings—the whole neighborhood is inflamed. What farmers want to know is the best plan and how to proceed. The plan of the —— is the best. It has been the most widely advertised. It has the best propaganda material that any farmers' movement ever had.

"The question with you should be: Will I ignore the demands of farmers, jeopardize my own interests and delay the day when farmers can try cooperative marketing and price-making on every crop they grow? You can be valuable now in helping to establish - and in directing it after established. You can, if you wish, become a stockholder in what can be made the most valuable publishing plant in the country and all without a dollar invested on your part.

"Distinctly understand I am not begging. Far from it. -- and its publisher can afford to be more independent now than ever before. I see millions of friends in the near future. Methinks I see the dawn of the time when one farm-paper will monopolize the agricultural field, if it is forced to this position. But again, I say, I do not desire it this way. Even after the is fully established it will need many of the best men of the country to direct it, and these should be drawn from the ranks of editors and publishers. My only object in writing you in this way is in the interest of agriculture of our own country and the world present and future

Your very particular attention is asked to a copy of '---' by this mail. Other information will be sent you if requested.

"This letter is written to only a few of the leading publishers. If the ideas it expresses meet with favor, a meeting may be called to discuss the matter further. Yours truly,

-, Publisher. "P. S.-Enclosed find stamped envelope for prompt reply."

The words printed in black letters state the essence of the letter. We are offered what is represented to be a valuable interest "and all without a dollar invsted on our part. Then who is going to pay for it? Does the writer of the letter propose to "hold up" farmers and divide the swag with respectable people as hush-money?

In the letter reference is made to "E-54." Here is an excerpt from the first paragraph of E-54:

"The — would like to have the assistance of all the farm papers, or of

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the leading ones, to build the machine of cooperation. The farmers are anxious to try the plan as soon as they understand it, and they are anxious that the other papers help. The fear on the part of the farm papers is groundless. Even though farmers can not control marketing when the trial is made, what harm will be done? What farmer would not risk 50 cents or \$1 to Make the Trial."

E-54 contains many platitudes about the interests of the dear farmers but the essence of the entire appeal to the writer is contained in the question printed in black letters. This readily explains how we are to become a stockholder, and all without a dollar invested on our part.

Thank you, Mr. Promoter, we buy and pay for what we get, and will not take your proffered interest as hushmoney.

The proposition to sell to farmers gold bricks at 50 cents to \$1 apiece seems like a small retail business, but when it is remembered that there are 180,000 farmers in Kansas and that the number in the United States is several millions, it will be realized that the proposition to bleed them for 50 cents to \$1 apiece is not a small one.

The Kansas Farmer has no knowledge of how many people in this State have been fleeced by this and other kindred schemes, but it sounds this note of warning against placing money in either small or large amounts in the hands of promoters whose purposes and abilities are not fully known to the investors. Don't buy gold bricks.

STOCK-BREEDERS' ANNUAL FOR 1904.

During March, the Kansas Improved Stock-breeders' Association will issue the Stock-breeders' Annual for 1904. It will contain a complete report of the fourteenth annual meeting held at Topeka in January, the greatest meeting of its kind ever held in the United States, so far as attendance, interest, and valuable live-stock literature is concerned.

The Annual will also contain the Kansas Breeders' Directory, alphabetically classified. The membership has now increased to nearly one thouhand and the Annual this year will be the finest one ever gotten out by the association. In view of the World's Fair this year it is the desire of the association to get out something that will be creditable to the fine-stock breeders' interests of the State, and place Kansas in the front rank where she rightly belongs in the estimation of the World.

More orders for extra copies have been received than ever before. Single copies will be mailed postpaid for 10 cents each, or in quantities at the rate of \$5 per hundred. The Kansas Commission to the World's Fair will distribute several thousand copies from the Kansas Building at the World's Fair, St. Louis. Consequently, every one wishing one or more copies of the Annual should get their orders in early. Two-cent postage stamps will be acceptable for small orders. Address, H. A. Heath, Secretary, Topeka, Kans.

THE RUSSIAN FLEET IN 1863.

EDITOR KANSAS FARMER:—Will you please inform me where Russia ever interceded in behalf of the United States and told England to keep her hands off? I fail to know of it if it is so.

W. J. MERCER.

On this point Henry Clews of New-York has recently published the following statement:

"An effort was being made by Napoleon III., then Emperor of France, to get England to join him in the recognition of the Southern Confederacy, which Mr. Lincoln and his cabinet were thoroughly aware of, and the South, it was understood, was to give a strong justification for taking that position. Hence their plan was to make a descent on Washington, capture the Capital and the archives of the Government, and, that being done, foreign recognition would be in order. "The rebel army had gathered

around Washington in great force, and it looked to be a very critical period. At this moment Mr. Seward, Secretary of State, obtained information that a Russian fleet was in South American waters, and he conceived the idea that if the fleet could be induced to come to New York it would give the impression to both France and England that an alliance had been affected between Russian and this country and it would postpone action on their part leading to a recognition of the Confederacy, which at that time would have been potential in serious consequences.

"He sent a cordial invitation to the officer in command and his associates to bring the fleet on a visit to New York, which was accepted, and the fleet appeared, producing the effect intended."

Mr. Clews thinks the fleet did not come under sealed orders as has been generally stated. This is not a very important point, however. The writer has never understood that Russia told England to keep her hands off or did other than to intimate her strong friendship for the United States by sending her war vessels on a friendly visit at an opportune time.

This act of friendship has not blinded the people of the United States to the fact that Russia is in the wrong in her aggressions in the far East. That country seems to be a good deal exercised on account of the positions of our officials in regard to the equities of that controversy.

A NEW BOOK.

"Agriculture for Beginners" is the title of a book prepared by Chas. William Burkett, Professor of Agriculture, Frank Lincoln Stevens, Professor of Biology, and Daniel Harvey Hill, Professor of English in North Carolina College of Agriculture and Mechanic arts. The authors have prepared this book in the belief that there is no line of separation between the science of agriculture and the practical art of agriculture, and that the subject is eminently teachable.

The work is planned for use in grammar-school classes, yet there is much that will be instructive to children of a larger growth. There are chapters on plant-diseases and destructive insects, with preventive treatment new and practical; there is a chapter on fruit-trees, teaching by illustration and text the different methods of grafting, budding, pruning, etc.; also chapters on dairying, on domestic animals, including bees and poultry.

The clear and interesting text, illuminated by 218 excellent illustrations, add to the practical value of the book. Altogether, the introduction of this book into the grammar-school grades would go far toward solving the problem of how to keep the boy on the farm.

The Appendix, devoted to spraying mixtures and fertilizer formulas; the Glossary, in which are explained unusual and technical words; and the complete index are important. In mechanical execution the book is easily superior to any other elementary work on agriculture.

Ginn & Co., Chicago, publishers. Price, 75 cents.

DEFECTIVE TITLE.

EDITOR KANSAS FARMER:—My neighbor died and his heirs want to sell the farm; but about twenty-five or thirty years ago when he bought the farm, a mistake was made in the deed, as it does not say whether that man was single or married. Now if the matter is published and put through the court, will be deed be perfect so that nobody can claim anything afterwards?

Riley County. A SUBSCRIBER.

Publication will do no good. If the affidavit of one or two persons who have personal knowledge of the facts can be obtained and made a part of the record, the defect will be minimized. If this can not be done the parties may as well rest content with what they have.

BLOCKS OF TWO.

The regular subscription price for the Kansas Farmer is one dollar ayear. That it is worth the money is

attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year with one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, Kansas Farmer Company, Topeka, Kans.

Special to Our Old Subscribers Only.

Any of our old subscribers who will send us two NEW SUBSCRIPTIONS at the introductory rate of fifty cents each, during February, 1904, will receive for their trouble one of the following publications for one year as the old subscribers may choose, viz., "Woman's Magazine," "Western Swine Breeder," "Vicks' Family Magazine," "Blooded Stock," "Poultry Gazette," "Dairy and Creamery, or "Woof Mar-

Miscellany.

kets and Sheep."

A Remedy for "Those Depressed Prices."

EDITOR KANSAS FARMER:—On page 2 of the FARMER of January 2, I find an article from A. D. Nelson, under head-line, "Those Depressed Prices." Mr. Nelson would like to hear from others on the subject of his article.

I heartily agree with Mr. Nelson, and I wish to add, from my experience in our efforts at cooperation as grangers and alliance cooperators, with our failures, I came to the conclusion—and still hold—that so long as the other fellows hold and control the purse, so long will the farmer be at the mercy and dictation of the managers of the money, and cooperation by farmers will prove a failure.

Organize savings banks as "farmers' and laborers' banks," in every county and town of sufficient importance in the State; and secure the patronage of every producer and laborer within reach of the places of business.

The farmers and laborers produce the wealth and could control the money, which controls all business.

P. B. M.

Movements and Prices of Farm Staples.

The annual summary of domestic trade movements for 1903, as reported by the Department of Commerce and Labor through its Bureau of Statistics, indicates that the distinctive feature of the live-stock trade at interior markets was the lowering trend of prices compared with those of 1902. At the end of 1902 hogs averaged \$6.28 per hundred pounds at Chicago, compared with \$4.50 in 1903, in spite of a reduction in annual supply at five markets, from 18,763,104 head in 1901, to 15,-614,139 head in 1902, and 15,014,811 head in 1903. Beef-cattle prices fell from \$6.75, the annual average of 1902, to \$4.90 in 1903, with recepts at four markets increasing from 7,244,467 head in 1901 to 7,710,559 head in 1902, and 8,326,088 head in 1903. The grand total of live stock received at the five markets-Chicago, Kansas City, Omaha, St. Louis, and St. Joseph-was 32,-601 head in 1903, in contrast with 32,673,286 head in 1902, and 34,143,776 head in 1901. Provision stocks of cut meats on December 31, 1903, were 147,-028,951 pounds against 178,616,100 pounds a year before at five markets reporting.

Important among staple movements at interior centers are wheat receipts at eight markets. For the crop year to January 1, 1904, a total of 157,551,285 bushels was reported, compared with 174,786,255 bushels in 1902, and 161,393,479 bushels in 1901. Most marked gains were made at Kansas City, where 27,131,766 bushels arrived in the last six months of 1903, in contrast with 19,684,300 bushels in 1902, and 15,656,954 bushels in 1901, indicating how rapidly southwestern wheat-growing areas have expanded. During the year, Minneapolis milling



Handy Farm Wagons make the work easier for both the man and team The tires being wide they do not cut into the ground the labor of loading is reduced many times, because of the short lift. They are equipped with our fam ous Electric Steel Wheels, either straight or stag ger spokes. Wheels any height from 24 to 60 inches White hickory axies, steel hounds. Guaranteed to carry 4000 ibs. Why not get started right by putting in one of these wagons. We make our steel wheel to fit any wagon. Write for the catalog. It is free ELECTRIC WHEEL CO., BOX 44, QUINCY, ILL.

drew heavily on this area's output, giving a north-and-south current to the domestic wheat-trade and competing with the gulf and lake ports for control of traffic.

Trunk lines to the seaboard carried 82,029,000 bushels of grain from Chicago and Chicago points alone in 1903, averaging 1,548,000 bushels per week, against 75,945,000 bushels, averaging 1,433,000 bushels per week in 1902, and 106,852,000 bushels, or 2,016,000 bushels per week in 1901. Flour shipments showed a tendency to diminishing volume, 4,675,268 barrels, 88,213 per week, having been sent in 1902, compared with 4,898,599 barrels, 92,426 weekly, in 1902, and 7,140,230 barrels, 134,721 weekly, in 1901. While the grain movement is most variable, and flour shipments have decreased, provision tonnage made gradual gains. The average weekly shipment of provisions was 27,106 tons in 1903, 26,110 tons in 1902, and 25,594 tons in 1901, or a total of 1,436,631 tons, 1,383,851 tons, and 1,-356,503 tons for the respective years.

Shipments of grain by the Eric Canal from Buffalo during the season of 1903 reached the total of 17,499,117 bushels, of which 4,683,610 bushels were wheat, 6,566,297 bushels corn, 3,815,759 bushels oats, 2,003,900 bushels barley, and 429,551 bushels rye. Shipments in 1902 were 16,182,634 bushels, and in 1901, 18,028,660 bushels were shipped.

The average freight on wheat by way of Eric Canal from Buffalo to New York is reported at slightly less than 4 cents per bushel.

At five points on the North Atlantic seaboard 259,350,233 bushels of grain were received during 1903. Of this amount Portland received 11,979,461 bushels, of which 3,477,925 bushels came from American and 8,501,536 bushels from Canadian sources; Boston, 32,814,664 bushels; New York, 125,069,551 bushels; Philadelphia, 37,798,078 bushels; and Balitmore, 51,688,479 bushels. These ports received 240,725,183 bushels in 1902.

The average freight-rate on wheat from Chicago to Buffalo was 1,41 cents per bushel, compared with 1.51 cents in 1902, and 1.42 cents in 1901.

Grain receipts at New Orleans were 28,675,669 bushels (eleven months). Shipments at Galveston were 23,124,-160 bushels for the year.

On the Pacific coast grain receipts at San Francisco for 1903 included 6,471,978 bushels of wheat, compared with 15,118,735 bushels in 1902. Portland, Tacoma and Seattle together handled 1,495,018 barrels of flour for oriental shipment in the last six months of 1903, compared with 843,787 barrels in 1902.

Shawnee County Horticultural Society will hold their next monthly meeting at the State House, Topeka, March 4. The topics to be presented are the following: Spraying, by F. L. Peacock; Vineyards, by J. M. Buckman; Strawberries—From Planting to Market, by G. W. Van Orsdal; Home Decoration, by Mrs. H. W. Roby.

The Arkansas Valley Beekeepers' Association will hold their convention at Hutchinson, Kans., in the courthouse on March 5 at 10 a.m., also at 7.30 p.m. A cordial invitation is extended to every one interested throughout the State and elsewhere. J. J. Measer, secretary, Hutchinson, Kans.

Sheep used as beasts of burden in North India carry twenty pounds weight apiece.

THE KANSAS STATE DAIRY ASSOCIATION

The Seventeenth Annual Session, Topeka, Kansas, Jan. 26-28, 1904

On Tuesday, January 26, at Topeka, was held the seventeenth annual meeting of the Kansas State Dairy Association. This was one of the largest and most enthusiastic meetings that this association has ever held. The program was divided so as to accommodate different classes of people interested in the dairy and creamery business, by giving each particular interest a session to itself. The meeting was also unique in that it was held at the time of the Kansas Midwinter Exposition, with the exhibition of dairy and creamery apparatus as a part of its permanent exhibit. The meetings were held in the council chamber in the forenoon of each day and at no session were there any va-



PRESIDENT ELMER FORNEY, ABILENE, KANS.

cant seats. The afternoon of each day was devoted by the members to visiting the Mid-winter Exposition, and a careful study of the cream-separators and other dairy and creamery appliances on exhibition, or to a visit to the great Continental Creamery headquarers whence a single contract was filed last season by which 400,000 pounds of butter was furnished the United States Government in specially inspected and sealed tins for the United States Navy. Most of the large creamery companies, many of the large separator companies, and a goodly number of private dairymen and dairy farmers were represented at the meetings and the discussions ere deeply interesting. The Kansas State Dairy Association now represents an industry which produced for er citizens a cash income of over 9,000,000 per year. Kansas dairy products take rank among the highest n quality of any manufactured on this ide of the Atlantic, and it was a mater of very considerable interest to the embers in attendance to know what rovision could be made for this great aterest in the World's Fair at St.

Resolutions upon this subject were dopted and placed in the hands of he Governor and of the Kansas Vorld's Fair Commissioners.

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Seventeen years ago when this asociation was founded, the milch-cow d her products were almost unknown Kansas in a commercial way and e few men and women who gathered gether in the Copeland Hotel for the irpose of organizing the State Dairy ssociation were actuated by a genal rather than a personal interest. ost of them kept milch-cows and me of them sold milk on a dairy ute. Following the organization of e association within a few years me the factories with their cumbere methods of gathered milk and thered cream. The influence of this ociation, coupled with the continuefforts of the agricultural press with the results obtained at the periment stations, has educated the ople along the lines of proper eeding and feeding for milk-producn, the careful handling of milk and

its products and the use of the farm hand-separator, with the result that Kansas now takes rank among the first of the dairy States of the Union where a few years since she was unknown.

The creamerymen's session occupied the forenoon of Tuesday, January 26, in a general discussion pertaining to present-day creamery practice—hand-separator, cream-grading, improvement in quality of cream, etc. The discussion was led by W. F. Jensen, general manager of the Continental Creamery Company, whose paper follows:

Discussion on the Subject, "Modern Creamery Operation."

W. F. JENSEN, TOPEKA, KANS.

In opening this discussion, I wish to say that I will not make my speech very long; I will merely try to touch on a few important points so as to get the discussion started.

I think this is a very important subject. To the old-time creamerymen present, modern creamery operation presents many changes and many new features. The real object of the successful creamery to-day seems to be more to promote the sale of hand-separators than the actual making and selling of fine butter. The creameryman of to-day has to be not alone a good creamery-operator, buttermaker, and butter-salesman, but he also has to be something of a banker in order to handle the big volume of notes he receives in settlement for his handseparators.

I presume I am expected to criticise present methods and I wish above all to criticise the present methods of accepting poor cream from patrons. There can be no stability, no permanent progress in the creamery business of Kansas if we, as creamery-men, lose sight of the all-important point of keeping our butter up to the highest standard. No doubt during the past year we have imposed upon the reputation established by us in former years. I have recently returned from a trip through the East and there found an enormous quantity of butter, a drag on the market, mostly on account of its poor quality. We can count on an increased consumption of any article of food when it is good, but we can not count on an increase in consumption if food articles are poor and of undesirable flavors. I have no doubt, if the butter output of the United States last summer had been up to former standards, there would to-day not be such an enormous quantity of butter held in cold storage awaiting consumption, and I think the butter market to-day would be at least four to five cents per pound higher.

We notice this year there is a splendid consumption of eggs. The production of eggs has been very large and yet it has not been equal to the demand. I account for this condition largely through the splendid modern cold-storage houses that have been erected in late years, where fine spring eggs are carried for six to eight months in perfect condition.

We are not doing our patrons nor ourselves any good by continuing to accept second-grade cream and paying the same price we pay for first-grade cream. If we continue this system, the outcome will be very disastrous. We can no more expect the consumers to pay a high price and consume large quantities of butter that is not firstclass than the California fruit-raiser could expect the public to consume California fruit in damaged condition. In my opinion, butter that is not firstclass is in damaged condition. While this in no way effects the food-value of butter, yet it effects the the keen relish and appreciation we all have of fine butter.

Another point I wish to bring out is the slack method in selling and settling for hand-separators, long-trial periods, etc. This does not do any-

HOW WE DID IT WHY WE LEAD

Our record for the past year is another evidence that the centralized creamery operated on the individual shipper's plan is the best.

In 1902 the average price in New York for Extra Creamery
Butter was 24.76c
Our Average Price for Butter Fat was 23c.

In 1903 the average price in New York for Extra Creamery
Butter was

23.48c.
Our Average Price for Butter Fat was

22c.

In 1902 we paid within 1 3-4c of New York.

In 1903 with our increased business we paid within 1 1-2c of New York. We were able to make this wonderful record because of the large volume of businesss and the economical manner in which it was handled.

We fully expect to double our business within the next year and the cost of handling the product will be correspondingly less, hence we will be able to pay a higher price in 1904 in comparison with the butter market than ever before.

Our motto: Correct weight, honest test, and the highest possible price.

Write us for particulars concerning the shipment of cream direct to us, thus avoiding the expense of receiving station.

Our Present Price for Butter Fat is 25 cents.

Blue Valley Creamery Co.,

St. Joseph, Missouri.

body any good. It in no way helps the farmer who wishes to buy a machine and pay for the same promptly. There is a waste in loose methods and too severe competition in this respect does not do anybody any good.

does not do anybody any good.

Concluding, I wish to say that my
company has adopted a grading system on which we pay for cream, and
as I understand, Mr. Gray will explain this fully.

Mr. C. E. Gray, chemist of the Continental Creamery Company, gave a demonstration of a practical system of station cream-grading which he had perfected.

A Practical System of Station Cream Grading.

C. E. GRAY, CONTINENTAL CREAMERY CO., TOPEKA.

As has just been stated, I am to give you a demonstration of a system of station cream-grading; a method by which the station operator may grade hand-separator cream when delivered by the different patrons.

Those who have handled milk and cream are aware of the many flavors and odors found in same and especially in cream from the hand separator. There are many flavors that to our present knowledge can be detected in no other way than by the taste; the sense of taste must be relied upon to a certain extent. However, the sourness may be detected by other means and with greater accuracy than by the taste; it is this line that I wish to take up, i. e., grading cream according to the per cent of acid present in the cream.

Let us first consider whether or not this method of grading would be practicable; would it be fair to those selling cream, and would it give satisfactory results to those manufacturing the cream into the finished product? We all know that the souring of milk and cream is due to bacteria changing the lactose or milk sugar into acid; which is largely lactic acid. Since large numbers of bacteria get into the milk through lack of cleanliness at the time

of milking and careless handling of the milk and cream after milking, under ordinary circumstances an acid test will show which patrons use care in the handling of the product, also those who use unclean separators, dirty cans, and are careless in general. It is said that under most circumstances this may be determined quite as accurately by an acid test. However, during the winter weather, conditions are usually such that large numbers of germs not producing acid, but of a putrefactive species, find their way into the milk. Again, during cold weather it is an easy matter to keep tue cream at low temperatures. Below 50° F. the acid-producing germs are almost inactive while the putrefactive species continue their action at this low temperature, producing bitter flavors and bad odors, with which all are familiar who handle cream at this time of the year. Since under these conditions very little souring takes place, but other bacterial action is going on, grading by an acid test would not be entirely satisfactory. Very fortunately this is true only during the cold weather.

It is useless to spend time discussing whether or not the creameryman wants sweet cream. With our knowledge in the creamery business, he must have it in order to manufacture a good product. In the first place, when sour cream is heated as in pasteurization, more or less of the casein is rendered insoluble and is separated. The amount of separation of the casein varies somewhat with the per cent of acid present and is also affected by other conditions. When such cream is churned, we find in the butter very fine particles of this insoluble casein. When tasting the butter, it is quite readily detected by the rough sensation produced. Just how objectionable this is I am not at the present time prepared to state, but certainly such butter is not a first-class article. What I consider much worse than results produced by pasteurization of sour cream is that the opportunity of producing a fine flavor by ripening with a starter or pure culture of desirable bacteria, is lost when cream is delivered sour. Even if the acid development has not reached its limit, the starter is of little value as compared with results produced by similar starter in perfectly sweet cream.

Previous to 1890, no general methods for determining the acidity of milk and cream other than by the taste had been used in this country. At this time Dr. Mann, of Illinois, published results of his investigation determining the acidity of milk and cream by means of N-10 alkaline solution, using phenolphtalein as in indicator, the per cent of lactic acid being calculated from the amount of alkaline solution required to produce a pink color in a known amount of milk or cream. Hence we have the "Mann's acid test." In 1894, Professor Farrington introduced into this country the alkaline tablet, a definite amount of alkali and the same indicator as used in the Mann's test, being made into tablet form. It is by means of a tablet of this kind that I wish to demonstrate to you a simple and accurate method of grad-

ing cream according to the acidity.

We must first decide how the grading shall be done, what will be the requirements for first-grade cream and what will be second, and so on, if we

a 50 cubic centimeter sample when the acidity of the cream is .27 per cent. If we take a 17.6 cubic centimeter pipette which will deliver 17.5 cubic centimeter sample, our sample as compared with the 50 cubic centimeter sample will be 17.5-50, or .35. From this we may see that an acidity of .27 per cent would require 5.2 cubic centimeters of N-10 alkali when a 17.6 cubic centimeter pipette is used for taking the sample. We must then make a tablet having a neutralizing strength equivalent to 5.2 cubic centimeters of N-10 alkali. Having a tablet of this strength we may then proceed with the test.

Place in a perfectly clean one-half pint sample jar one perfect tablet and with a milk pipette measure into the jar 7.6 cubic centimeters of pure water, temperature between 40 and 120° F. Close the lid on the jar and allow the tablet to completely disappear in solution. When entirely dissolved, with the exception of a few particles of inert material that may be seen, the solution is ready for use. Measure out in a pipette from the cream to be tested exactly 17.6 cubic centimeters and run it into the tablet solution. Rinse all cream from the pipette by drawing the mixture already in the sample jar into the pipette and allowing the mixture to again flow into the jar. If, af-

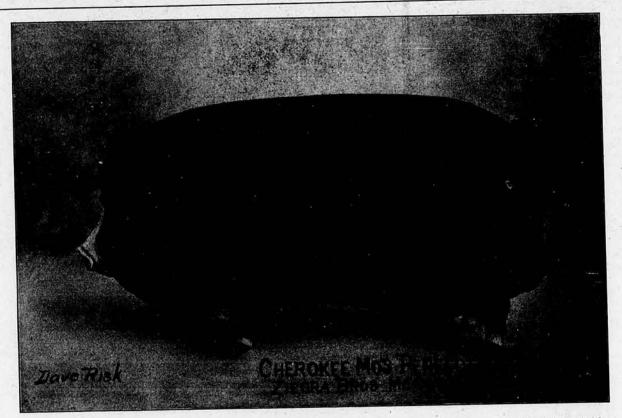
The water for dissolving the tablets should be as pure as it is possible to

Endeavor to secure enough condensed steam for this water supply. If water from condensed steam can not be had, then use clean rain or ice water. Should it be necessary to use water from a well or spring, the water should in every instance be boiled. The water supply for use in this test should be kept in a clean, tightly corked bottle or sealed glass fruit-jar. Do not use water from a jug having contained at any time sulfuric acid or

As has been stated, the ordinary 17.6 cubic centimeter milk pipette is used for measuring the sample of cream for the test, also for measuring the water in which the tablets are dissolved. The pipette, as the sample jar, should be clean and free from any acid, lye, or sal sods.

The tablets should be kept dry and in a tightly covered box, away from any excessive moisture, and out of direct sunlight. Use for the test only perfect tablets. Use no broken tablets. Pay no attention to the color of the tablets, other than that they give a cherry-red color when dissolved in 17.6 cubic centimeters of water.

The operator on arriving at the sta-



A Noted Poland-China Sire in Evidence at the Public Sale of Bred Sows at Parsons, on March 31, 1904.

make more than two grades. In this demonstration we will consider only the first and second grades. Since no cream is absolutely free from acid, we must determine what per cent of acidity will be allowable for first grade, then all cream up to and including this per cent of acidity so far as sourness is concerned, will be graded first, and all above this per cent will be second. An investigation along this line has shown that cream containing not over .27 per cent of acid may be handled so that it will produce very good butter; also that the average patron by using ordinary care in handling his cream may deliver it before it reaches this per cont of acidity. However, this dividing line between first and second may be varied, but in this demonstration we will assume that the .27 per cent is correct. According to the Mann's test, such cream would require 15 cubic centimeters of N-10 alkaline solution to neutralize the acid in a 50 cubic centimeter sample. Next, let us determine the size of the sample of cream to be used in making the test. The 17.6 cubic centimeter pipette is found wherever the Babcock test is used and is much more common than the 50 cubic centimeter pipette. Another advantage is that it does not require so much cream. For these reasons we will use the 17.6 cubic centimeter pipette for measuring out the sample. As has already been stated, 15 cubic centimeters of N-10 alkali are required to neutralize the acid in

ter mixing, the color remains pink the cream is sweet enough to grade No. 1, but should the pink color disappear and the mixture become the color of cream, the cream sample is sour and grades No. 2.

Should any trouble be experienced in determining whether or not any color is present in the test (this will occur only when the acidity of the cream is very near the line between sweet and sour), it is advisable to take another sample jar, place in it 17.6 cubic centimeters of cream, the same as is being tested, with 17.6 cubic centimeters of water but no tablet. Place the two jars side by side on a piece of plain white paper. Compare the two by looking down through the mouths of the sample jars toward the white paper underneath. By this method any pink color, if present in the sample containing the tablet, may be seen.

In no instance try to examine the color of a sample by looking through the side but always through the mouth of the jar. Examine tests in good, bright light but not in direct sunlight.

The operator should be provided with as many sample jars as daily tests are required. The jars should be thoroughly washed and rinsed before using, and great precaution taken in keeping them free from acid, lye, or sal soda. The lids should be closed while the tablet is in the solution before using, thus preventing any material from falling into the jars.

tion, or as soon after as possible in the morning, should take as many sample jars as tests as will be required during the day, place in each one tablet and 17.6 cubic centimeters of water, close the cover. This will require only a short time and the tablets will be dissolving and will be ready for making the test when the cream arrives. Proceed with the tests according to instructions already given. Should more tablets be dissolved than are needed, throw away the solution. Do not attempt to keep the solution for use the next day.

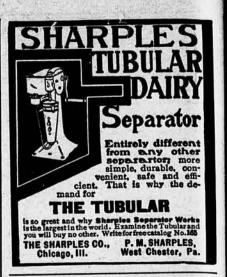
SUMMARY.

For each test dissolve one perfect tablet in 17.6 cubic centimeters of pure water.

Take 17.6 cubic centimeter sample of cream to be tested. If, when the cream is mixed with the tablet solution, the pink color remains, the cream is sweet enough to grade No. 1. If the color disappears the cream is sour and grades No. 2.

Keep everything in connection with the test free from acid, lye, or sal soda. Keep the tablets in a dry place.

Operators using this method of grading should not hesitate in making their patrons familiar with it so that they may recognize the accurateness and fairness of the test. . With careful grading each day, just a little more painstaking and intelligent effort on the part of the dairy farmer, the product from the hand-separator may be on







the whole greatly improved and n doubt made equal to the best.

Present Day Creamery Practice.

J. A. WALKER, ST. JOSEPH, MO. It is with much surprise to me that! am asked to preside over the first session of your meeting. Being from Missouri, it is somewhat embarrassing to appear in this capacity before a Kansas convention, but as you have "shown me" that the train bearing your honored and worthy president, Mr. Littlefield, has been delayed, take great pleasure in attempting to the best of my ability to act as your chairman this morning, and wish to thank you indeed for the honor-as it is, to my judgment, a great honor to participate. I believe it is a duty of every one to in any way assist in the development of this wonderful indus try. It is more and more becoming conviction with every one connected in any way with agriculture that diversifying is a necessity upon the farm and every dairyman and creameryman should be especially interested in the spreading of dairy knowledge.

We should lend all efforts possible to assisting and helping and interest ing farmers in this business. know it is the most profitable branch of farming, and the best efforts of you association should be directed alous lines that will to a greater extent in terest the individual farmer in this work.

I have lived in Kansas for over twenty years and most of this time have been in the creamery business and it is with pleasure that I have witnessed the growth of this great and profitable industry, and I believe the time is at hand when with a united effort your association can make Kan sas the most wonderful and prosper

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DE LAVAL Cream Separators

THE DE LAVAL was the original Cream Separator and has always kept a big lead. It has always been in a class by itself. Its sales have spread all over the world and doubled nearly every year. For 25 years other makes of separators have come and gone and the merit of each has always been measured by comparison with the DE LAVAL.

And so it is in 1904—the De Laval superiority is greater than ever before. Protecting patents and 25 years of experience helps to make and keep it so. For the same cost De Laval machines offer at least double value in efficiency and durability over all possible competition.

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121 Youville Square,

75 and 77 York Street, TORONTO.

248 McDermot Avenue, WINNIPEG.

ous dairy State in the Union. I again thank you.

These papers were discussed at length by J. A. Walker, of the Blue Valley Creamery Company; L. G. Humbarger, St. Joseph, Mo.; C. F. Daggett, Belleville, Kans.; W. H. Mc-Kinstry, Abilene; C. A. Grant, Hutchinson; F. L. Benjamin, Salina; A. W. Musgrave, White City; and Prof. O. Erf, of the State Agricultural College. The concensus of opinion seemed to be that the system of cream-grading devised by Mr. Gray was by far the most practical and was the only one that would be recommended for general adoption. The large creamery companies are arranging to make their purchases entirely upon the basis provided for by this system. This will insure the producer the top-market price for his cream when delivered at the station in good condition, with a lower rate of payment for inferior cream or that received in bad condition. It is generally conceded that this is one of the most important moves that has been taken by this association for many years, as it will result in exact justice to the producer. The man who produces good cream will receive a good price, while he who produces inferior cream will receive a lower price.

During this first session, in the absence of President Littlefield, Mr. J. A. Walker, of the Blue Valley Creamery Company, St. Joseph, Mo., was made temporary chairman and he appointed a special committee to draft resolutions in regard to a dairy exhibit at the St. Louis World's Fair.

Mr. E. Sudendorf, 3812 Windsor Ave., St. Louis, superintendent of the World's Fair Model Dairy, was introduced and explained the plan for the World's Fair dairy exhibits in detail. Among other things he stated that there was but one refrigerating space remaining unoccupied and that he hoped that Kansas dairy- and creamerymen would at once secure it for their exhibit.

Wednesday, January 27, was station-operators' session. In the absence of the president, Mr. A. E. Jones, of Topeka, was elected temporary chairman. Although the hour set for the meeting was 9 a. m. there was a large crowd in attendance and great enthusiasm was manifested in the discussions. Mr. F. L. Benjamin, of Salina, presented the first paper on "Station Operation, Repairs and Maintenance—the Handling of Patrons."

Station Operation, Repairs and Maintenance, and Handling of Patrons.

F. L. BENJAMIN, SUPERINTENDENT SALINA SYSTEM.

In the few remarks that I shall make on this subject, I have decided that perhaps it is better to divide it into

We shall give our first attention to Station Operation Repairs and Maintenance. It is not our intention to take the subject up and discuss it at length, but it is our idea that in order to get the most good from this topic, we arrange a list of questions and in this way get each other's ideas. The exchange of thought can not be other than beneficial to those interested. With this idea in mind, I have a few questions prepaired which bear on this subject, and these questions may suggest others as we proceed with our

discussion.

I believe that I have before me a number of station operators; I wish that there were more. Not that what the speaker may have to say will be of any great benefit to you, but we shall hope that there will be thoughts and ideas exchanged that will be a benefit to all of us.

You may be interested to know a little of my own experience in station operation. Several years ago I was employed as bookkeeper for a then prominent creamery company, located in central Kansas. Not being entirely satisfied with this kind of work, and wishing to get more actively into the "real thing," I made application for a position with a still more prominent creamery company in the same locality. A few days later I received a wire from the manager offering me a

skimmin-station, not on salary, but on a commission basis. Well, I accepted and took charge in February, and right there is where my troubles began. I had had but very little or no experience in this kind of work; it was very cold weather; I had a No. 2 Alpha separator, and I had never seen one before; it was badly out of balance. The operator whom I succeeded, left the station badly run-down in every way. It is always so; in my experience as a superintendent I have never yet sent an operator to take the place of another, but that he found the station "all run-down," just as I found this one. There is a man in this audience that succeeded me at this station I am telling you about, and I will guarantee that if you ask him privately he will tell you that he found that station in "mighty bad shape." Well, to make what might be a long story short, I was thrown onto my own resources, for it was more than two months before any one from the office came to see me. By that time I had the thing pretty well figured out and was getting along very well. Did I write to my superintendent? Well, I guess I did! I told him my troubles, both imaginary and real; he did not have time to come. Did your superintendent ever tell you that? I am sure he has. Well, if he has, and you made up your mind that you had to depend upon your own efforts, then I make no mistake, I am sure, when I say that you are the better operator for having had to keep up the repairs and maintenance of your own station. In my opinion, the station operator should be able to keep his engine in good working order, do all of the pipe-fitting, pump repairs, and other odd jobs that become necessary to keeping the starepair. I would add here, however, that the company for which he works should furnish him with proper tools for the work, and thus reduce the cost of repairs and maintenance to a minimum.

I do not suppose that there is a station operator here this morning who has not been accused of juggling the test or beating some patron on his weights. But is there an operator here who has failed to convince those patrons that they were mistaken, and that he was absolutely right? If so, he has failed in one of the most important points in operating a station. As a rule, the patron is a reasonable person and a frank, open, personal statement of your side of the controversy will invariably convince the most skeptical. It is my experience that the more our patrons know of the way we handle our business the better they are satisfied. There are no secrets' about our business, therefore there should be no feeling of strife between operator and patron or patron and creamery company with which he does business. We should be able to judge something of human nature. We should study the peculiarities of our individual patrons, then humor their whims as far as consistent with the rules of our company, and as far as good business methods will permit.

I do not think it necessary to have iron-clad rules and to undertake to enforce them to the letter in dealing with patrons. It is my experience that the patron who is your friend (and it is your business to see to it that there is a feeling of friendship existing between your patrons and yourself as possible), will try to get in on time and not keep you waiting. If reminded that the skim-milk has been running short, he will take a little less than before. If taken into your confidence and the test thoroughly explained, he will never complain of his test. If he is delivering handseparator cream and understands that in order to get the top price he must get it to you sweet and free from taint, he will certainly make an effort to deliver you first-grade cream.

In summing up these few remarks on this part of our subject, we will say that there can be no set rules for handling patrons. The operator who will be open and above board, a "hale fellow well met," and withall a man of good business judgment, will find the proper way to get along with his patrons. It may not be my way or



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TUBULAR—the only one!

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KANSAS CITY, MO. DENVER, COLO.

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25 CENTS A POUND FOR BUTTER=FAT.

We began paying a high price. We are still at it.

Ship us your product.

We will take good care of you by sending you during the year more money for your cream than any other market in the country.

WE SELL THE EMPIRE SEPARATOR, THE BEST MACHINE MADE.

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ST. JOSEPH, MISSOURI.

Ploneers of the system that pays a high price.

your way, but he gets there and makes a success of the business.

QUESTIONS FOR OPERATORS' CLASS.

How often would you clean your boiler if running six days in the week?
 How often would you clean the flues of your upright boiler and how

do you do it?
3. What would you do with a leaky globe valve, one that is not broken, but will not hold steam or water?

4. How would you repair a leaky boiler flue so that you could finish

your day's run?
5. State five of what you consider the most essential points in the opera-

tion of a skimming station.
6. Should a man be an all-around mechanic to make a successful station operator?

7. How much repair work do you think the station-operator should be expected to do?

8. How much courtesy is due the patron from the operator?

9. Do you think that the operator should help the farmer improve the dairy conditions on his farm? How should this be done?

10. What would be your method of convincing a patron that he is in the wrong when he claims to have made six pounds of butter from 100 pounds of milk that you tested at 4 per cent?

11. What is your method of convincing cream patrons that they should deliver their cream more than once or twice a week?

Following this paper Mr. Benjamin presented a list of questions as a means of opening the discussion. The first of these was "How Often Would You Clean Your Boiler if Running Six Days in the Week?"

Mr. Musgrave: The number of times that a boiler must be cleaned depends very largely on the kind and

amount of the water supply. Where the water is fairly pure and not impregnated with minerals I think one cleaning per week would be sufficient.

Mr. Huxtable: In my territory the Continental Creamery Company has boilers that have been used continuously for eight years without needing repairs. There are also other boilers in different sections where the water is bad that have to be replaced with new ones about once every five months.

Mr. Perkins: I would like to ask a question here. Will the accumulation of sediment in a boiler cause the flues to burn out quicker?

Mr. Huxtable: Yes, certainly. The avoidance of sediment in our boilers is a great problem confronting engineers in many sections of the State.

Question No. 2.—How often would you clean the flues of your upright boilers and how do you do it?

Mr. Hall: I think flues should be cleaned every morning, at least not less frequently than every other morning. I would use dry steam wherever possible, or when necessary would use the brush.

Mr. Scholton: We clean the flues each morning by passing a ¾-inch steam-hose into the flues at the firebox and find it fairly successful, although difficult to operate. Later on we arranged a rig to raise the smoke stack so we could reach the flues from the top. This works much better. We use black oil in the water to loosen the scale on the boiler.

Mr. Huxtable: We find it advisable to use black oil for this purpose in some kinds of water. In others we use slag but have never found any one who could control alkali water or that which is impregnated with magnesia. There are many preparations on the market recommended for the removal of scale but we find that anything that

is strong enough to effectively remove the scale will corrode the flues and weaken the boiler.

Mr. McManus: In our flues we have always used a specially prepared scraper followed by blowing out with steam. Mr. Perkins stated that he had used steam only and found it satisfactory, while Mr. Ross had been in the habit of blowing out with steam and then using a link scraper. Later on, however, he put a hinge joint in his smoke-stack to enable him to more readily reach the flues. Mr. Musgrave had also adopted the plan of hinging his smoke-stack so that he could swing a six-foot section of it to one side and gain access to the flues without having to lift the entire stack. This was found to be a good plan where the building would allow sufficient room under the roof.

Question No. 3.—What would you do with a leaking globe valve, one that is not broken but will not hold steam

or water?

Mr. Musgrave: I take out the packing, then make a paste of emery flour and oil and grind it down to fit. This was adopted as the best suggestion by the operators present.

Question No. 4.—State five of what you consider the most essential points in the operation of a skimming-station. It is not expected that any one present will name five points, but from a concensus of opinion we should like to bring together five points.

Mr. Ross: I think that one of the most important points is that the operator must be a good machinist. He must thoroughly understand the machinery of his station and know how to care for and operate it. If he fails in this point, of course he is a failure. as a station-operator. This is so obvious to all that it needs only to be mentioned. Another important point I would make is that the operator must stand well with the patrons, no matter how skillful he may be, if he is not held in esteem by the patrons he will have no use for his machinery.

Mr. Elder: I think one of the most important points is that a station-operator should be a good rustler. He must understand how to deal with patrons and not only secure their custom but increase it. Another very important point is that of cleanliness. It is useless to try to educate patrons to produce and deliver clean, pure cream, unless the operator himself sets them an example.

Mr. Spencer: For some time past I have been connected with the transportation department of the Santa Fe Railway. I want to suggest that one of the most important points to be considered here is how the operator can best educate the patrons to produce good, clean, wholesome milk and deliver first quality of cream at the station without giving offense. The sentiment expressed by Mr. Spencer met with the hearty approval of all present.

Question No. 5.-Should a man be an all-around mechanic in order to make a successful station-operator?

Mr. Huxtable: He ought to be at least enough of an all-around mechanic to properly care for his station.

Mr. Turner: In addition to what Mr. Huxtable has said, I think he ought to be able to see that he is getting all the fat from the milk and keep his machinery in thorough repair and the station in good order.

Mr. Benjamin: Mr. Chairman, I have a number of other questions on my list that have more to do with relation of the operator to the patron, but as the time is getting short and as I know we shall all be glad to hear from Professor Webster, I will not present the other questions for discussion at this time.

Prof. E. H. Webster, dairy expert, United States Department of Agriculture, gave a lecture on "Sampling and Testing, Care of Cream, Improvement in Quality." In order to open the discussion of these questions, Professor Webster asked the operators present to state some of the difficulties they encountered from time to time.

Mr. Ross: Professor, I would like to ask how best to test frozen milk and cream.

Mr. Scholton: In testing I find that in some samples the cream comes up white or muddy in the neck of the bottle. What is the cause?

Mr. Holm: Sometimes we find that certain samples of cream get green on top in the summer season.

Mr. Wallace: We find that sometimes milk and cream comes in from the patron's can in a lumpy condition in the winter season. How can we sample that?

Mr. Gray: Sometimes we find an operator that buys more butter-fat than he sells.

Professor Webster: I will try to answer all these questions in a general way so that each particular point may be touched upon. In order to properly sample cream it is necessary to get a representative sample before testing. To do this, the milk or cream must be homogenous. In the case of either frozen cream or that which is lumpy it is best to raise the temperature at least enough to thaw out that which is frozen and then thoroughly mix before taking a sample. Cream ought never to be delivered in a lumpy condition. The farmer who brings his cream in that shape needs educating, and the operator should determine the cause and give him proper instruction. If the cream comes in in that shape, however, it is best to break up the lumps by forcing through a fine sieve, then warm and thoroughly mix before taking a sample. If the lumpy condition is not removed, any sampling that may be done is likely to result in loss to the factory and gain to the patron. Should the farmer find that his cream is lumpy he can prevent the next batch from doing so by occasional stirring so as to prevent its drying on the surface. This is the most frequent cause of lumpiness in cream, and may occur after the cream has left the farm and before it reaches the station if the drive is a long one and the cream is not protected. While it is best to heat cream to 180 degrees in pasteurizing, it must be cooled at once. It is not advisable to heat to a greater degree and is not necessary to heat so much where handling frozen cream or that which is lumpy, but wherever cream has been heated

for any purpose it must be thoroughly cooled and at once. If the farmer depends on well- or spring-water to cool his cream, it is necessary that it should be stirred at short intervals during the cooling process, otherwise the body of cream nearest the can will cool while that nearest the center will remain comparatively warm for several hours. By frequent stirring the cream may be reduced in temperature very evenly and rapidly. Cream that is properly cooled will keep sweet very much longer than that which has been improperly handled.

In regard to the green color on top of the milk in summer season, I need only to say that it is due to the presence of a mold and that its presence may be prevented by proper care of the cans and other dairy utensils. If the cans are thoroughly cleansed and the milk is handled with proper care, there need to be no trouble along this

Now a point in regard to keeping samples. We find that the corrosive sublimate tablets are frequently too hard to dissovle. When this is the case we find that a small portion of the cream immediately surrounding the tablet is thoroughly saturated by the dissolved tablet while other portions of it have not been effected. By keeping the sample warm, shaking it thoroughly, and then dissolving the tablet we find our difficulties are removed generally. If this does not serve to prevent the accumulation of green mold, it will be necessary to use stronger tablets or more of them. Above all avoid putting the samplerack in the window where the sun will shine upon it.

The next point I desire to urge is to get the right amount of the sample in the test-bottle. Some operators use a nine cubic centimeters pipette, others mix with water and use a 17 6-10 cubic centimeters pipette without correction tables. Some, of course, use correction tables while others use the scales to weigh into the test-bottle. I earnestly advocate the use of the scales, and believe that this is the only true test; ordinary tests will

GOING RAPIDLY

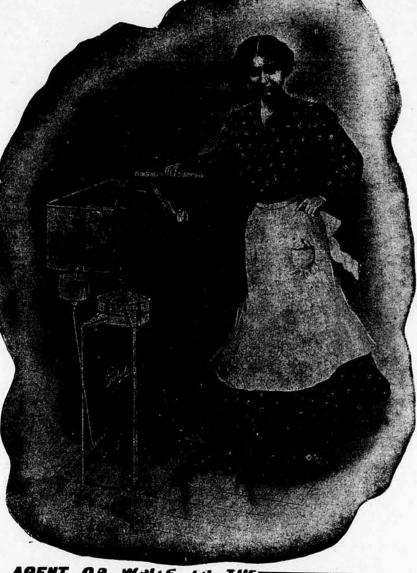
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hn Deere Plow Co. KANSAS CITY, MO.

vary from 12 per cent to 65 per cent. Our greatest difficulty in testing in summer season is when the cream is several days old and begins to ferment and gets foamy from the presence of gas generated in it. Again, the pouring of cream from one can to another incorporates with it particles of air. In either case, the gas or the air will be found to measure up, but does not weigh on the scales. In determining the difference in overrun between the scales and the pipette, it is necessary to remember that if the test is too small the overrun will be greater. Tests made at the Continental Creamery and at other creameries seem to show that the tests are too high when read from extreme top to extreme bottom in the tube. Experiments at the Continental Creamery show that the most accurate reading is that which includes the extreme bottom of the cream up to and including 1-5 of the meniscus, or little bowlshaped depression at the top of the column. It must be remembered here that the depth of the meniscus varies with the width of the bottle neck. Without going further into this subject I desire to say that the Department of Agriculture, at Washington, has now in preparation a bulletin covering this field in preparation which will be is sued from the press very shortly.

Review of a Proposed Bulletin on the Quality of Cream from Hand-separators.

BY ED. H. WERSTER.

Ed. H. Webster, Dairy Expert for the United States Department of Agriculture, has spent most of the past year in studying the dairy conditions of Kansas and Nebraska. The following are a few notes taken from the bulletin which will be published in the near future by the Department of Ag-

This review is given mainly to interest those who are in the dairy business in the work that has been done in their behalf by the Department with the hope that they will send in the request for a copy of the work as soon as it has been published. The introduction deals very briefly with the history of the development of the dairy business in the West. The subject is treated from the hand-separator standpoint entirely. Following the introduction is a chapter on the "Advantages of the Farm-separator to the Dairymen." Under this heading are treated the subjects of cost of milk-hauling as compared with that of cream-hauling; the farm-separator skimmed milk as compared with creamery-skimmed milk; the effect of the farm separator on the increase in butter-fat, produced by each farmer, its effect on the the increased number of cows that the farmer will milk, its placing the owner in independent condition as regards the sale of his cream, its effect in increasing the price of butter-fat to the farmer and its general effect upon his part of the business. These subjects are treated from the standpoint of the actual conditions which exist west of the Missouri River.

Under the subject the care and management of the farm-separator, is taken up its mechanical operation, showing the necessity of thorough care and good judgment in this part of the work. The sanitary condition, one of the most important factors, is discussed in detail, showing the necessity of thorough work on the part of the farmer in this respect.

A chapter devoted to the separation of milk covers such points as speed of machine, amount of milk flowing through the bole, the temperature of the milk, and the adjustment of the cream screw, in their relation to the work of the machine as regards closeness of skimming, lasting qualities of the machine, and the securing of a uniform cream at all times.

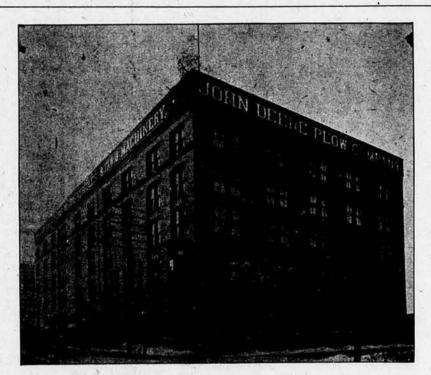
The management of the cream on the farm is taken up and discussed in detail from the milking of the cow, separation of the milk, cooling and holding the cream on the farm, its delivery to the factory or station, the frequency of delivery, and their effect on quality of cream. This work is supplemented by data gathered from investigations made at Colby, Kans.,

during the months of July and August,

This data gives much that is of interest to the farmer and creameryman. Tests were made there of farmer's cream as it arrived at the station, and deductions drawn which will be a help to any farmer who is interested in making the most from his business.

The creamery's part in the production of pure cream is discussed quite fully in the latter part of the bulletin, his relation to his patrons and the sanitary conditions of his premises and operations are discussed at some length. The different systems of gathering cream in force in the Western country are discussed and criticisms given so far as these have influence on the quality of cream. Considerable work was done at the Colby station in the shipping of pasand insert one. The clear or white appearance of the fat column in the testing-bottle referred to by Mr. Schotton may be due to the water or to the acid, but more likely it is due to borax, soda, or some other preservative which has been added to the milk on the farm, or it may be abnormal milk. In making the tests, the best practice is to use equal parts of cream and water, then add the acid.

The next discussion was upon "Station Operators as Businessmen," by C. H. Smalley, who began by saying that the old-time operators were much like the old-time preachers, in that they took up the business because they had failed at everything else. The present status of the creamery industry and its future prospects are such that every young man with energy and ability is urged to take hold of it in



A New Departure in the Cream Separator Business.

The great John Deere Plow Company never does things by halves. Seeing that other companies were failing to place cream separators in the hands of the farmers where they are most needed as rapidly as they should do for the good of the farmers and the general development of the dairy industry, and seeing that this failure on the part of these companies was due either to the poor quality of the machines offered or to their methods of handling them, they adopted a new and aggressive policy. To begin with, their experts spent six months of time in examining the good and bad qualities of all the known hand cream separators, with the result that they finally selected the Sharpless Tubular as the one which best met all their requirements, and they now have adopted the policy of placing these separators in the hands of implement dealers all over the country. They found the Sharpless Tubular was the cleanest skimmer, the simplest and easiest cleaned, the most durable, and the easiest turner of any hand cream separator that they examined. They also found it to be the only separator with a low-down supply can, an automatic oiling device, and a simple three-part bowl. Having satisfied themselves as to the separator they wanted to handle, they immediately purchased eight thousand Sharpless Tubulars outright and are now placing them in the dairy districts tributary to their ten great wholesale houses. The Kansas City house, a picture of which is given herewith, has two-thousand of these separators assigned as its share, and in the short time during which they have been handling them, there has been an enormous demand for these machines. It may be interesting to note that the John Deere Plow Company was established in 1839 and that the Kansas City house is but one of the many large houses which now constitute one of the greatest implement businesses in the United States. The building shown in the picture, has two hundred and twenty-five thousand square feet of flour space, every inch of which is occupied by cream separators, g

teurized and unpasteurized cream, the data of which is given in full.

The subject of cream grading and buying on the basis of grade, and illustrations given showing the work done by some of the Western creameries in this report is taken up at some length. It is hoped that this bulletin will be found profitable to both the dairymen and the creamerymen, and that when it is issued from the Departmen at Washington that there will be a generous call from all parties interested in this business.

In regard to the temperature at which the test should be read, I would say that the experiments made at the Wisconsin Experiment Station, as well as those made by myself, show 120 degrees as the best temperature. Right here, I want to urge that where a steam-tester is used it is necessary to keep the lid open a little in order to keep the temperature down. If the lid remains closed, the temperature is likely to rise too high. It is always advisable to use a thermometer. If the tester is not provided with one, it is an easy matter to drill a hole

selecting a career for himself in preference to the nice, soft positions which are supposed to exist in the bank and the store. The dairy industry is yet in its infancy and the success attained by the creameryman is limited only by his ability. But a few years ago Kansas was practically unknown as a dairy State. Now her record is one to be proud of. With the discovery of new methods in handling cattle for milk-production; in caring for the milk when produced and in its manufacture into a choice product for a fastidious market, the young man of to-day has ample scope for all of his abilities. The first thing for a station-operator to consider is his duty to his employer. He must have absolute faith in the integrity and business ability of the company for whom he works, and then he must work for its best interests, at the same time being absolutely fair to the patrons. Put enthusiasm into your work and be ready at all times to uphold the methods and policy of your company. If the company is such that you can not do this, or if you lack the confidence in it which will enable you to do it with enthusiasm, get out

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Gentlemen:—I have been using your remedies for about twenty-five years with success. I seep your Spavin Cure all the time. I have never known of a light fallus is the property of the property

rice, \$1; six for \$5. As a liniment for family it has no equal. Ask your druggist for Ken-l's Spavin cure, also "A Treatise on the Horse," book free, or address.

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Secondly, to use the language of the politician, the operator should be a good mixer. By that I mean that he should be one who can become acquainted with his patrons and neighbors easily and can gain their confidence and esteem. I once asked an operator who had been stationed in a certain town to identify me at the bank so that I could make a draft for expense- money, and to my astonishment he said that, in spite of the fact that he had been there more than a year, he had no acquaintance with the bank officials.

Thirdly, work for butter-fat, covet it, dream about it, pray for it, and then care for it when you get it. Line up the farmers of your community and show them that dairying pays. Not only do this, but convince them that it pays better than anything else. When you have succeeded in getting something of this idea into their heads it will mean better live stock, better methods of feeding and caring for that stock, better methods of caring for the milk produced, and a higher price received for it. Show him that good cream pays. It is that on which he builds his reputation and cleanliness is necessary in order to have good cream. Incidental to success I would put the proper care of the station.

Lastly, see to your records and reports. Know what you are doing and be able to show it to your company. The great creamery companies are hampered by the necessity of sending to the operators numerous and voluminous blanks in order to get the information from them which is absolutely necessary in order to conduct the business at all. Be definite in your reports. If the blank asks how much coal there is on hand, give the amount in figures. If the number of tablets in required, state exactly how many are on hand. Use figures where figures are needed, and never deal in generalities in your report.

The man who gets results at his station and can show them to the company is the man who stands highest in the esteem of both the company and the community. In closing, I desire to repeat and to emphasize my former remark that there is no field of usefulness open to the young man of today where he can use all the powers with which he is endowed to so good an advantage, and where the prospects for growth and promotion are so good as may be found in the station-operator's position.

The next subject under discussion was the "Kansas Cheese Industry," led by Henry Van Leeuwen.

The Kansas Cheese Industry. HENRY VAN LEEUWEN, SALINA.

As cheese-making in Kansas is still in its infancy, much can not be said about its past. Twenty-five years ago there were not more than four or five cheese-factories in the State, and a small quantity of cheese made on the farms in private dairies. Among the oldest cheese-makers of the State. I might mention the names of Messrs. John Bull, W. A. Bowles, Rutledge, and Holbrook. The cheese factories at this time were all on a small scale, and the run of milk was light. The apparatus consisted of weigh-can, scales, self-heating vat, curd-knives, and a few upright presses and hoop. Most of the owners of these factories made their own cheese, and, in the early history of cheese-making in the Eastern States, milked a few cows on their own farms and also received the milk of their neighbors.

This cheese was made on the old granular system, which consists simply of adding the rennet to the milk in whatever condition it might happen to be at the time all the milk was delivered; cutting and cooking the curd, and drawing the whey when the curd was cooked, and, with anywhere from one-eighth inch to one inch or more of acid, salting at once and putting to press. No attention was paid to cheedering or developing dry acid. This cheese was usually sold very new.

There is still considerable cheese

made by this system, with slight changes and modifications in some cases, and I will admit there is a demand for this porous, soft, green cheese. It pleases a great many people, and they insist upon having just such a cheese. We had in those days, as we have to-day, a class of trade that desired a better-made and better-cured cheese, but there was only a limited amount of cheese being made and there was no necessity for attempting to supply this trade. The new soft cheese meant better yields and quicker returns, and this appealed to the factory men. But the question was raised by the class of trade that desired a well-cured cheddar cheese as to the cause of the poor quality of the Kansas-made cheese, and they attributed various reasons—the climate, the feed, the water, etc. We have all heard the questions asked, "What is the matter with Kansas cheese?" and "Why can't you make such a cheese as they do back East?" Some would say, "They are too new," and individuals who desired the well-cured would purchase one or two cheeses and would keep them one or two months, but they would then be disappointed, as they would lack that meaty, mellow body and nutty flavor of the Eastern cheddar cheese. Then the natural conclusion was, "They can not make a good cheese in Kansas."

Another reason for this opinion that existed and still exists to some extent, was the fact that a number of Easterners who did attempt cheese-making in Kansas made failures, or at least partial failures, and naturally enough would lay the blame on the State, instead of where it rightly belonged. But there was a good demand for this new. granular cheese, and even to-day this demand is not oversupplied; so there was no special reason ten or fifteen years ago to worry if confronted by an occasional man who declared we could not make cheese in Kansas fit to eat, and unless he could get something that suited him he would buy Eastern cheese. I did not like the idea of admitting that we could not make as good cheese in Kansas as any place on earth, for I am interested in Kansas and have been interested in the Kansas cheese-industry for the past fifteen years, learning the business at Nortonville, under one of the most successful cheese-makers in the State, Mr. Merry, who had learned the granular system, and all our cheese was made on that system. This cheese gave good satisfaction and we found a ready mar-

Several years after leaving Nortonville I opened up a cheese factory at Effingham, Kans., and, while I had good success and found a ready market for my product, I realized that it was not made on the best up-to-date methods, and, as there was no one in Kansas who understood the cheddar system, I notified my customers that my factory would be closed during the winter of 1896-7, and went to Madison, Wis., and took work under Professors Decker and Bear, and also heard D. M. McPherson, of Canada, discuss an outline of the system and methods employed in the manufacture of cheese in his sixty or more cheese factories. In the spring of 1897 I adopted the cheddar system, and I think this was the first cheese made on this system in Kansas. I had good Eastern judges pronounce it as good as the cheddars, and also placed some of this cheese on the Chicago cheese market in July, when there was a surplus stock, and received New York topprices. All the first premiums won in Kansas since the introduction of the cheddar system have been on cheddarmade cheese. Mr. Roser and Parkhurst & Davis, of Topeka, pronounced some white cheddars made by Mr. J. McFerren, of Williamsburg, which he had at the Kansas Midwinter Exposition, of as fine quality as Eastern-made goods, and they certainly were fine.

Some one, now, I am sure, is asking the question, Why don't you make such cheese all the time? The answer is this: We have a good demand for a mild new cheese, made up in the "long-horn" style, for which we receive fully as good prices as we get for our slow, well-cured cheddar cheese. This long-

FIGURE IT OUT YOURSELF-Don't Say the Cow's a Nulsance

We can show you a way to lessen the labor and double the profits that come from the cow—and the way will add to your comfort and pleasure in life, as well as fatten your pocket book. The

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does it. Thousands and thousands of farmers—good hard-headed men—say that the Empire is all right. It has made them more money than they ever made before, and has given them an easy time with their cows. We'd like to

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REMEMBER No other Separator will do for you what the Empire will do.



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HERE is money in the Cow. Her products are better appreciated new than ever before. The Cow pays better than any other crop. You have a market for all her produce at home. We want your Cream and will pay the highest price for it. The time is right, and if you have no cows, get some and get into line. If you need a Hand Separator, call on us and we will supply you the best. Remember, there is money in cream and that the cow will furnish you a steady, sure and profitable income. Write to us for our money making proposition.

THE QUEEN CITY CREAMERY CO.

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from your milk. A complete separation is made in 60 to 90 minutes by cold water circulating through a specially constructed Center Water Column and Outer Water Jacket. The

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gives surer results with less trouble and expense than any other method. It does not mix water with milk. It is simple, practical and 40,000 farmers have proved it one of the best investments they ever made.

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We give a Binding Guarantee with the Superior Cream Separator that it will do all we claim or we will cheerfully refund your money. You take absolutely no risk Read this Letter. "Good as a \$100.00 Machine."

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Gentlemen:—I have received my Separator and have given it a fair trial; and it is as good as a \$75 or \$100 machine. It does the work as recommended, and I am perfectly satisfied with it. I consider your Superior Cream Separator as the best on the market, and I have seen them oil. Will self-seman.

Yours truly JONE C STARES

Write us to-day for full particulars. We can save you money'

Superior Fence Machine Company

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Detroit, Mich.

horn cheese is a Kansas style, originated by Mr. Frank Trauger.

Kansas now has between forty and fifty cheese factories, receiving from 1,000 to 14,000 pounds of milk each daily. Over three-fourths of this number have good workrooms and up-todate machinery. About one-half have fair upper curing-rooms, and there are six or eight good basement or cellar curing-rooms. In these factories, over one-half of the entire output of Kansas cheese is made on the cheddar system, and the quality of these goods is such that the local jobbers and the jobbers of the South and Southwest are willing to pay Eastern prices for them. It is a fact that to-day, in Kansas, there is being made, in nearly every case, a quick-cured, short-lived cheese; but we have a good demand for these goods, and for only a short time in the summer are we making a surplus stock; these are stored for winter use, with very good success. Only a few years ago Kansas cheese was considered a failure for storage, due principally to the fact that they were made on the granular system, and a granular cheese does not properly mellow and cure in storage.

I find the majority of the cheesemakers of the State taking an interest in the business and making it a careful study; they are willing to learn how to improve the quality of their product and are doing everything in their power to arouse interest among their patrons in the production and care of the milk. Quite a number of our makers have taken a dairy course, and over one-half of the makers in the State are keeping a careful record of each day's make of cheese, and thus are able to note results. One of our greatest difficulties is to get patrons sufficiently interested in milk-production and care of the milk. We can not produce a first-class article without first-class milk. We explain that we must have clean, sweet milk, free of gas, taint, and off odors, for which we will pay top prices; but too many of our patrons seem to think if they succeed in only keeping their milk in good enough condition for acceptance they have done their part. Our operators do not return unsatisfactory milk, as they should. Even the patrons of the cooperative factory, although expenses are deducted from value of cheese in making out the dividends, fail to take the interest one would expect of them. Of course, it matters not what the system is, the value of the cheese must be taken into consideration in determining the price to be paid

We must use more care in the selection of our milk and our main difficulty lies in the fact that our farmers say, "The creamerymen will take the milk if you fellows are so particular." Now, I am sure that it would be a benefit to our creamery business and a direct benefit to the farmers in the way of an advanced price, if we all insisted upon having better milk.

Let us, as butter- and cheese-makers of Kansas, keep continually talking better milk. It will improve the quality of our butter as well as cheese.

Let us have clean, neat factories and stations and it will not be so difficult to get better milk, but it is impossible to get any results when standing in a dirty weighing-room or factory, talking clean milk.

The general opinion of our factory operators is that of lack of interest on the part of their patrons. Mr. Trauger says: "I have been making cheese for two years in Michigan, and find that same indifference among the patrons here, and lack of interest in dairy work, poor management of cows, careless handling of milk, as in Kansas."

Mr. Merry, who operates a cooperative factory at Nortonville, Kans., says: "The same thing is true of our patrons—keep the milk only good enough so it will pass the weigh-room door."

Mr. McFerren, of Williamsburg, Kans., says: "I find it impossible to arouse scarcely any interest among our patrons in care of milk.'

The style of cheese made in Kansas to-day is principally the longhorn, and the demand seems to be growing steadily. We are also making some Y. A.'s,

daisies and small flats. The amount of cheese being made in Kansas is on the increase. In 1870, the first year we have an official report, the amount made was 226,607 pounds; in 1901, 1,456,093 pounds; and in 1902, 3,025,655 pounds. Our factories are not very large; still we have some that are doing quite a business. The cheese factory at Richland, Kans., receives from 10,000 to 12,000 pounds of milk daily. Mr. Merry, of Nortonville, reports as follows: "The first cheese was made in the factory here April 20, 1888. The total value of cheese made here in the past fifteen years is \$196,863. My experience in Kansas has been quite satisfactory. Some disadvantages in the continued hot weather." I think this is the largest business done by any single factory in the State. The business of the Continental Creamery Company, of Topeka, last year amounted to 22,257 boxes of forty-five pounds each, or 1,271,565 pounds.

The future of the Kansas cheese business is in the hands of the cheesemakers and the patrons. At the present time we are supplying a good share of the local demand, but there is a large South, West, and Southwestern trade that we should have. True, we are at present getting a share of this trade, but there is a vast field open The granular-made cheese, as a to us. usual thing, does not suit this trade. They want a nice, mild, slow-cured cheese. This requires skill on the part of the cheese-maker and the delivery of first-class milk on the part of the patron; hence, I say, the future of the Kansas cheese industry depends on the makers and patrons.

If our farmers would only look at this as they should, they can readily see that it is to their interests to deliver good milk to our factories. Then, let our makers put forth their best efforts and our future is bright. If this is not done, we certainly will have an overproduction of low-grade cheese and low prices and discouraged patrons. Mr. McFerren says: "The future of Kansas cheese depends, first, upon the maker; second, upon the interest of patrons. The milk should be so sweet and clean that it would not be necessary to rush work. Kansas can make good cheese if our patrons will furnish good milk. Our makers are well posted on the ordinary Kansas difficulties and understand how to overcome them. The udders of the cows should be brushed and wiped with a damp cloth; milk should be cooled and aired, if we would secure a bright future for Kansas cheese." Mr. Merry says: "As to the future, strict attention to every detail on part of all interested is necessary to success." Mr. Trauger says: "The future is bright if our operators and patrons will study the business and act according to the knowledge gained. The Agricultural College, with its practical lessons, should benefit us."

Recently I met an Eastern cheese salesman in one of our Kansas jobbinghouses, and he said: "Well, you fellows out here are beginning to cut off our Kansas cheese trade. We feel it, and I guess you can and do make some good cheese. A few years ago you did not interfere with our trade, as our cheese were all cheddars, and you made none of this kind."

Let us not only make ourselves felt throughout Kansas but throughout the South, West, and Southwest. It is true we have difficulties to overcome in the manufacture of a first-class article of cheese such as they do not have to contend with East; but we can, we must, we will overcome them and build up a business that will be a credit to our great State.

The forenoon of January 28, was Dairy Farmer Session. Prof. E. H. Webster led in the general discussion on the topic, "Points to Be Observed in Profitable Dairying," laying special stress upon sanitary measures. Among these, he urged that absolute cleanliness of the hand-separator is one of the most important points leading to success. Heretofore, country butter has been of a very low grade, as a rule, and this has been due to a lack of a proper knowledge on the part of the farmer as to how he should care

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The season of 1904 is about upon you. There are possibilities of money making in your cows this year which you will never see again. The season is right. Prices are right. Our market is at your door.

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If you have no cows, get some. They pay better than any crops. Returns are sure and quick. We furnish the market and pay the highest price for cream of any concern in the country and we pay it the year round. We quote our prices one week in advance. You ship us direct or deliver to our stations. We do the rest.

A Separator Will Help

Let us sell you a separator and let it pay for itself in cream. This will give you a chance to get the best separator on earth, with all that it means to an up-todate farmer, without inconvenience. Write us for our booklet or see our agents.

THE CONTINENTAL CREAMERY COMPANY

TOPEKA, KANSAS.

failure to do it costs the farmer money.

for the milk. Milk is one of the very best media for the growth of germs and fresh milk is in the best condition for the development of bacteria. Hence it is necessary that great care should be exercised from milking-time until the milk is sold in order that good butter or cheese may be made by the factory and a good reputation by the farmer. It is especially necessary that no "barn flavor" be found in the milk and cleaning the udder is never a waste of time. Always strain the milk directly into the separator-can and never use a cloth strainer. Nine men out of ten will fail to keep a cloth strainer in proper condition. It will be improperly washed and hung up to dry with the germs still remaining in it, only waiting for the next straining to go into the milk and develop there. The hand-separator, as now manufactured, will remove the dirt and deliver the cream practically free if there is no barn flavor in it. In regard to washing a cream separator be sure to wash the separator after every separation. Carelessness in this particular is largely due to the fact that dairying is only a kind of a side-issue on many farms. After separating the cream, be sure to cool it immediately, even though the calves must wait. Cool it down to the temperature of your well-water, stirring at frequent intervale so that the cream may be cooled alike. Milk will cool much more rapidly than cream, hence the added necessity of stirring the cream every few minutes until it is properly cooled. Always use a thermometer. These little instruments are all too scarce on the farm but are just as necessary as is the handle on the separator. If you fail to cool the cream properly, or if you allow it to become warmed up again, you at once make the right conditions necessary for the development of bacteria.

Another thing, in hauling cream to the station it is almost never protected from the sun. The cans should be protected by being covered by wet blankets or gunnysacks. The evaporation from these will enable you to deliver your cream at the station in the best possible condition. This is probably not done one time in 500 and the

My own experiments at a large station in western Kansas show that summer cream can be delivered in good sweet condition at the station when two days old. If this is true for this locality, it should be true for others; and if it is true that cream can be delivered sweet when two days old, it is probably true that it can be delivered sweet when three days old. The Continental Creamery Company is now buying its cream on an acid test, devised by its chemist, Mr. Gray. This has been found to be eminently practicable and more just to the producer than any other system yet discovered. Where the farmer is selling his cream by this test he should keep his fresh cream in one can and that which is older in a different one. Small cans insure sweeter cream. At the large station in western Kansas, referred to, only about 30 per cent of the cream was delivered sweet but about 50 per cent of it could have been just as well as not. Where the graded system is used I believe that fully 75 per cent of the cream can be delivered in a sweet condition. The prices will vary with the quality of the cream brought to the station, and as before stated this insures the top price to the man who delivers the cream in good condition while those who fail to do this get less returns.

Cream should always be cooled before it is mixed with that which is already cooled. Milk-cans should never be used for cream, and vice versa. There has been great difficulty experienced in securing the return of cans to individual shippers. Secretary Borman stated that as most of the business of the Continental Creamery is done with stations, and as the difficulties are so great, they had practically abandoned all efforts to return the same cans to the shipping stations. But in the case of individual shippers, every effort is made to see that each individual gets his own cans.

Mr. F. E. Uhl: Professor, I should like to ask, what is the best cleansing material to use so as not to destroy the tin of the can or injure the separator?

Professor Webster: Sal soda and a number of the different washing-powders and the so-called washing-teas have all proven satisfactory. It is not good to use concentrated lye.

Mr. Littlefield: We find that many of the soap-powders and soaps are as bad as the concentrated lye. And when changing from one to another we always make a test of the new one by making up a solution of it and leaving it in a tin can or pail over night. If the tin shows evidence of corrosion or has a blackened appearance, we know that it will injure the milk-cans and so do not use it.

Some Reasons Why Dairy Practice Must Change.

O. ERF, PROFESSOR DAIRY HUSBANDRY, KANSAS AGRICULTURAL COLLEGE.

The introduction of the centrifugal separator, the Babcock test, and the more definite knowledge that has been gained in regard to the various fermentations that so greatly influence milk and the manufacture of dairy products has brought dairying to a science which is not small to comprehend. It is frequently said that the modern improvements in the dairy practice are extravagant and by no means indicate a marked improvement in the quality of the butter that is made to-day over that which was made ten or twenty years ago. Under some conditions this is probably true with farm dairy butter, but let us analyze the situation and see why this condition of affairs exists. I believe that I am correct when I say that the most of the butter that is manufactured in the old way has a limited market if any at all. Saying nothing about the uneconomic principles that are involved in that way of manufacturing butter, it is, however, a fact that the average dairy conditions were more sanitary formerly than they are now. Although the people knew little of the laws of sanitation yet nature had provided cleaner and more sanitary surroundings. The cows roamed over a large expanse of territory, through the forests and over the plains where the air was pure and the food wholesome, thus living in a more sanitary manner than men could ever hope to provide for such an animal at a profit. They were milked in the open air on some grassy spot where germ life did not exist, or at any rate it was very limited. Such surroundings were far more sanitary than any of the stables that are built to-day and which man cleans or attempts to The utensils were kept outside clean. where the sun could shine upon them and were thereby partially sterilized.

How can we ever hope to improve on these old conditions in the way of sanitation and at the same time lessen the cost of production except by more machinery and better perfected methods? The old methods of producing milk and making butter, though sanitary, were wasteful. Population became more dense and economic forces began to work toward concentrating the methods. It was necessary to seek narrower quarters on account of the enhanced value of land and for this reason the cows could not roam over large territories. The soil was cultivated, and to make dairying equally as profitable as the production of crops on the land, cows had to be owded together and more had kept in order to make the production of butter cheaper. When the cows were stabled and were kept in close quarters, unsanitary methods began to prevail, and on account of negligence to furnish the extra labor that it required to keep them and their surroundings clean, fermentations set in which tainted the milk. The cows became more delicate and were more susceptible to disease, all of which tended to modify methods of dairying. This brings us to the reason why we need to be more cautious in keeping things clean and in the regular milking and butter-making operations and leads us to use more complicated apparatus to attain the same results that were accomplished before these machines were introduced.

The question is often asked, Does it pay to buy a cream-separator, and Where are direct benefits that can be

gained from its use? To speak frankly, the most direct results come from recovering at least 10 per cent more of butter-fat by the use of one of these macnines than by the old gravity method. This amount of gain increases the profits in proportion to the quantity of milk separated. That is to say, a cream-separator is more profitable where large quantities of milk are manufactured into butter. Twentyfive or thirty pounds of milk to be separated per day is the minimum limit of profitableness of a cream-separator on a dairy-farm. Besides the economy of the cream-separator in saving butter-fat, it is also economical of labor and room and leaves the skim-milk in a sweet, wholesome, and palatable condition which can be immediately fed to farm animals. It is also much easier to control fermentation and ship or ripen the cream from one of these machines.

On account of the numerous infections by bacteria that come from the unsanitary conditions of our dairies, the souring of cream, or more properly called the ripening of cream, is frequently impaired.

Since this is the chief source of fine flavors and aroma in butter, it is quite necessary that great pains be taken in this step of the operation. To see that all of the milk has been milked neatly, that all of the utensils have been washed thoroughly and sterilized in order to secure the clean sour fermentation are matters which are necessary for a fine flavor in butter and these precautions enhance the price for dairy products.

Prof. Oscar Erf, of the animal husbandry department at the Kansas Agricultural College, scored the butter on exhibition and lectured to the buttermakers present, using the butter on exhibition in his demonstration. The Professor invited questions and a general discussion and stated that he had never seen a lot of butter that was so even in quality and so uniformly good as that now on exhibition. He then read the following scores which he had previously awarded:

SCORING FOR BUTTER. C. Tannehill, Topeka, Kans. 963, Larson, Topeka, Kans. 964, Mayer, Topeka, Kans. 96 O. Nally, Topeka, Kans. 95 Morning, Parsons, Kans. 941, Mansfield, Topeka, Kans. 931, S. Brandt, Dwight, Kans. 921, ern Hurd. 9114 D. Morning, Parsons, Kans. 944/ C. Mansfield, Topeka, Kans. 934/ D. S. Brandt, Dwight, Kans. 924/ Kern Hurd. 914/ U. H. Hammond, Great Bend, Kans. 894/2

I find that the chief difficulty with some of the butter here is that it has "winter flavor." This is probably due to the fact that the milk or the cream was too old, or that it had been held under unsanitary conditions.

A member: I should like to ask the Professor, if the feeding of silage or allowing cattle to run on winter rye pasture will effect the quality of the but-

Professor Erf: If the silage is good and the milk is properly handled, it only adds to the flavor of the butter. Rye will effect butter injuriously, that is, it injures the flavor.

Business Meeting.

There being no further papers on the program the association devoted the remainder of the time at its disposal to the transaction of business.

The nominating committee consisting of Prof. E. H. Webster, C. E. Llewellen, and C. F. Armstrong, brought in the following report: For president, Elmer Forney, Abilene; vice-president, D. S. Brandt, Dwight; Secretary, T. A. Borman, Topeka; treasurer, I. D. Graham, Topeka. This report was adopted and the officers declared elected.

The committee on resolutions on World's Fair exhibit, consisting of T. A. Borman, Geo. H. Littlefield, and I. D. Graham, presented the following resolutions which were adopted:

Australians seem to like the sort of helpful agricultural literature emanating from the Kansas Board of Agriculture, as suggested by the following editorial which appeared in a recent issue of "The Capricornian," a big 20page paper, and one of the leading farm journals of Australia, published at Rockhampton:

"'Modern Dairying' is the attractive title of the report of the Kansas State

Board of Agriculture for the quarter ending September 20, 1903. It is devoted to the advancement and further development of the Kansas dairy interests, advocating the importance of clean milk and improved product; together with a presentation of the bestknown methods and pertinent suggestions towards the attainments of such results. The report fully sustains the excellent reputation gained by its precursors in Australia, and illustrates the talents for discrimination, compilation, and selection displayed by the secretary, Mr. F. D. Coburn. In a brief introductory note he tells us: ty years ago Kansas had but 471,548 milch-cows, and scarcely a creamery worthy the name, and their product was unsought. Ten years ago Kansas had 567,353 milch-cows; creameries of a better class were being slowly established, but their output begged a market. To-day Kansas has 802,738 milchcows, or more than at any previous time, and many-high-grade creameries and cheese factories, including the largest creamery in the world; hundreds of contributory, receiving, and skimming-stations, and their product is not only favorably known in all the principal markets but sought beyond the supply.' Improvement of the cows is called for, and Mr. Coburn quaintly remarks, 'If the man behind the cow in Kansas would do his part, no unprofitable animal would masquerade under the fictitious appellation of a milch-cow, and she would either go to the butcher's block or be made to return a profit by more intelligent care and management.' Dairy conditions on the whole are nearly perfect in Kansas, and the industry is recognized as a great factor in the agriculture of the State."

In the first part of the report are presented estimates, experiences, counsel and conclusions of those who have been prominently identified with the Kansas dairy industry, its advancement and development; either as practical dairymen, instructors, managers, proprietors, or creamerymen. Dairying in the East, in the West, in the Southwest, at the State Agricultural College is discussed and described at great length. With the view of collecting information, a series of questions were sent out to farmers, and the answers to these are very instructive. From these we learn that the average income from cows ranged from \$4.90 to \$30 per month for ten months in the year. There are excellent practical articles flavored with American humor. One concludes thus: "There are three chief factors in successful dairyingnamely, the man, the cow, the feed. The man is by far the most important." The second part of the report relates to dairy improvement, and discusses methods and sanitary precautions necessarily observed and practiced in dairying to insure the highest standard of production. All through the report are pictures of famous cows and information respecting their performances. There are also numerous other interesting illustrations. Holstein-Friesian and Guernseys appear to be the most popular dairy-cows.

Whereas, The Kansas Board of Agriculture has been one of the most potent factors in building up the agricultural interests of the State generally, and especially in promoting the great and growing industry this association represents, and

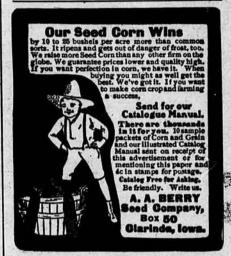
Whereas, The above-mentioned board recently issued a most helpful publication replete with practical information and suggestions and beneficial counsel from highest authorities. and devoted exclusively to discussions of timely and pertinent topics concerning the business in which the members of this association, as well as many others, are engaged, therefore be it

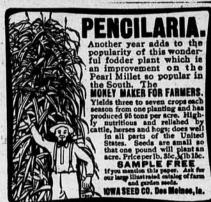
Resolved, That we give expression in this preamble and resolution to our appreciation of this later effort in behalf of the dairy interests of Kansas and return our most hearty thanks to the board for its splendid publication entitled "Modern Dairying," which can not fail but awaken those who are not already acquainted with the State's wonderful possibilities in that direction to a realization of the opportunities open to them, and assist the many



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who are in the business to a larger prosperity and more certain successes. Adopted.

The secretary then read the report on the station operators' cream-grading contest as follows:

The secretary stated that some of the samples submitted for this contest had been thrown out because the percentage of cream was too high; the present requirements being from 25 to 40 per cent. It was moved by Prof. E. W. Curtis that hereafter the scale on cream-grading be from 30 to 50 per cent instead of from 25 to 40 per cent as at present. Motion carried. The secretary then read report of the patrons' cream contest, as follows:

The report of the cheese-makers' contest was read by the secretary as follows:

SCORING FOR CHEESE.
John Compton, Carlton, Kans. 90
G. B. Merry, Nortonville, Kans. 88½
F. C. Exline, Kipp, Kans. 88
M. D. Strahan, Melvern, Kans. 88
S, L. McNay, Buckeyes, Kans. 94½
Mark Compton, Potter, Kans. 82½

Treasurer I. D. Graham introduced the following resolution, which was unanimously adopted:

Whereas, The appropriation now provided by the general Government for the support and maintenance of the Kansas Experiment Station amounts to only \$15,000 per year, and whereas, this fund is of necessity divided among all the different departments of research in agricultural science, thereby affording but a small annual sum for the prosecution of this legitimate work, therefore be it

Resolved, By the Kansas State Dairy Asociation in its seventeenth annual session that we urge upon the members of the Legislature the necessity of giving State support to the experiment station in addition to that given now by the general Government.

The following resolution was introduced by the committee on resolutions and was adopted:

Whereas, The dairy interests of Kansas represent an annual income to her citizens of more than nine million dollars, and as these interests are growing at a very rapid rate and should be recognized by those in official capacity as they are already recognized by the citizens of the State; and

Whereas, The dairy products of this State take rank among the highest in quality of any produced on this side of the Atlantic, and as the appropriation of \$175,000, made by the Legislature for the purpose of exhibiting the resources of the State at the St. Louis World's Fair is sufficient, if rightly used, to show to the world something of the position Kansas really occupies among her sister States, and to give just recognition to the dairy interests thereof; and

Whereas, The proposal of the Kansas World's Fair Commissioners to appropriate \$900 out of a total of \$175,000 for the making of a dairy exhibit at the World's Fair is evidence that they fail to comprehend the magnitude and value of this great industry to our State; therefore, be it

Resolved, By the Kansas State Dairy Association in seventeenth annual session assembled, that the Kansas World's Fair Commissioners be earnestly requested to set aside not less than \$5,000 to be used in making an exhibit of the dairy resources of Kansas in some measure commensurate with the facts as they exist.

Resolved, That the secretary of the Kansas State Dairy Association be instructed to hand a copy of these resolutions to Governor W. J. Bailey, and to the Kansas World's Fair Commissioners, now in session at St. Louis.

Agricultural Matters.

English Blue-grass

I am interested in knowing more about English blue-grass than the bulletins give. I want to know how many 1,000-pound steers (ordinary seasons) could be pastured on an acre, not pasturing during August, September, and part of October, for six weeks from October 15, and would cattle gain on it at that time of year without other feed as fast as on our native grasses?

Would it be advisable to try to get a stand by sowing a very foul piece of land this spring and mowing it off when the weeds get high enough for the mower to cut? I am anxious to get it seeded as soon as possible.

Can you tell me of some one in this part of the State that has been using it for pasture for considerable time?

R. A. GALBRAITH.

Morris County. At this station we have not found the English blue-grass to be so good a pasture-grass as Bromus inermis. The English blue-grass is not so thrifty and does not produce so well during the summer although it does grow late in the fall. I think it advisable, however, to sow a mixture of six pounds of Bromus inermis, eight pounds of English blue-grass, ten pounds of orchardgrass with one or two pounds of red clover. Such pasture, after two and one-half months rest ought to furnish abundance of strong pasture the latter part of October and during November. Probably you should figure about one head to the acre when pastured in this way. I do not expect that cattle would gain so fast on the domestic grasses as upon the buffalo-grass of the West, and doubtless you would find it very profitable to feed the cattle grain while on pasture if the purpose were to fatten them.

It will not be advisable to seed a foul piece of ground to grass. Of course by frequent clippings you may keep the weeds down, but if the season is at all unfavorable, you are likely to get a poor catch of grass or no catch at all. If you have no clean piece of land ready, I think perhaps it may be safest for you to cultivate the ground which you intended to sow in the spring and thus clear it of weeds and seed to grass next fall, about the first of September. I can not refer you to any one in Morris County who has tried the English blue-grass for pasture, but at this station we have found it less hardy and not so productive as the Bromus iner-A. M. TENEYCK.

Yield of Cow-peas per Acre.—Emmer.

I would like to find out through the Kansas Farmer how much seed cowpeas will yield to the acre? Will they yield as much as soy-beans? Have you ever tried them as a cover-crop and then sowed wheat or rye? I think it would be an excellent way to list cow-peas in wheat- or oat-stubble and give level cultivation and sow to wheat without removing cow-peas.

Would like to know if speltz or emmer would be a better crop for feeding-purposes than oats and how much will it produce to the acre?

FRED ZURBUCHEN. Wabaunsee County.

The best yield of cow-peas secured at this station last season was given by the variety known as New Era, viz: 11.7 bushels per acre. The Whip-poorwill variety, which is a common one grown in this State yielded 7.74 bushels per acre. Other varieties yielded 8 and 9 bushels per acre, and some as low as 2 or 3 bushels per acre.

The best-producing soy-bean yielded as high as 15.7 bushels per acre. Six or eight varieties yielded more than 13 bushels per acre. The best-yielding varieties were the Early Yellow and Ito San. The Early Yellow is more generally grown in this State. For the production of seed the soy-bean is preferable to cow-peas, but for the production of fodder and as a cover-crop and green-manure crop, I prefer the cow-pea. As a cover-crop the cow-pea makes a quicker and ranker growth and furnishes more material to plow under for green manure when used for this purpose. Both of these crops were

tried in this way at this station last season with the result that the cowpeas were superior in the manner I have mentioned. No experiment has been made at this station in sowing wheat or rye in the cover-crop. Your plan of listing cow-peas in the grain stubble and cultivating, with the plan of seeding wheat in the fall without removing the cow-pea crop would hardly work with cow-peas in a season of favorable growth. The cow-peas would doubtless make too much growth and offer great hindrance in the seeding of the wheat. The rotation with cow-peas together with the cultivation will doubtless give increased yields of wheat but it will usually be more practicable to take off the cow-pea crop before drilling in the wheat. If you intend to carry out this plan you will be able to decide before the date for sowing the wheat comes whether the cowpeas should be removed or not.

Such experiments as have been made in feeding emmer indicate that this grain does not have the feedingvalue of oats. As a rule, emmer is not relished by stock nearly so well as oats, especially if the emmer is fed whole. Also when the grain is fed alone it has not given so good results in making flesh as barley or oats. The proper way to feed emmer is to grind it and mix it with other grains. At this station last season emmer produced 44 pounds per acre more than oats, and 129 pounds more than barley, and the season was not especially favorable to the emmer. In North and South Dakota, emmer has proved to be a better yielder than oats or barley. The crop is especially adapted to dry climate and will do well in light soil, and it is also hardy in resisting unfavorable moisture conditions, as is shown by the experiments at this station last season.

We are preparing a crop report giving the results of last season's experiments. This report will contain some discussion on cow-peas and emmer. If your name is on the bulletin list you will receive this report.

A. M. TENEYOK.

Good Tame Grass.

Have you made any experiments with tame and wild grasses? I would like to know what tame grass seeds are good for this State. I want to put in grass and see what it will do. Give me the name of the seed that will do best here.

JOSEPH HEIBER.

Harvey County.

I think it best for you to try the Bromus inermis. This grass is well adapted to the dryer climates and light soils and I believe will do well in Harvey County. You might also seed a little of the Western rye-grass (Agropyron tenerum), mixing this in with a part of the Bromus inermis. If you have not already tried alfalfa you should procure seed and try it next spring. Alfalfa and Bromus inermis do well together as a pasture. Any of these grasses may be sown early next spring, as soon as the ground is in fit condition. Carefully prepare the seedbed and seed the grasses at the following rates per acre: Bromus inermis, 16 to 20 pounds; Western ryegrass, 25 pounds; alfalfa 20 pounds. If combinations of two or three of these grasses are made, sow one-half The seed-bed should be carefully prepared, it would have been better to have the ground plowed last fall. In case you have a pieec of cultivated land or land which grew a crop that was cultivated last year, I would recommend to disk it rather than to plow it. Harrow the soil down fine and sow seed broadcast, harrowing once lightly after seeding. In case you are obliged to plow in the spring, plow as early as possible and work the land several times before seeding so as to get it settled and the seed-bed in good condition.

If your land does not blow, it is better to seed without a nurse-crop. In case there is danger of the soil drifting with the wind, seed about a bushel of oats per acre, just before seeding to grass, cut these oats early for hay soon after they come into head. As a rule, however, I would prefer not to

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We challenge the world to produce a more prolifo, early, big eared core public, early public, early, big eared core, public, early possess, Secatalog.

Here are some of the yields our customers and of this sort in 1800?

By John Fired, Persore.

By O. E. Michael, Mont. Co., O.

By Hichard Spach, Lake Co., Ind.

By J. By H. By H. Persore.

By Lawrence Scheistel, Ogemay Oc., Mich.

By J. See Du. per acre.

By Lawrence Scheistel, Ogemay Oc., Mich.

By J. Wassey, Crockett Co.,

Ten., Wassey, Crockett Co.,

Ten. So Un. per acre.

Ray Stearns, Ransmo Co., N. D.

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have any nurse-crop and keep the weeds clipped with the mower.

A. M. TENEYOK.

Spring Wheat or Barley for Washington County.

I would like for some of the readers of the Kansas Farmer to let me know through the KANSAS FARMER: First, how does spring wheat do in this part of Kansas and how much seed per acre will give the best results? Second, has any one tried to raise barley. and if so, how much does it yield and what kind gives the best results?

I came from Iowa and there the beardless barley paid better than either wheat or oats. A SUBSCRIBER.

Washington County.

I can not answer your inquiry so well as could many of the older farmers in Washington County, but I believe that I can safely say that spring wheat will not prove a successful crop in that part of the State. We have grown spring wheat at this station for several years but without producing profitable crops.

I think barley is much more likely to be a profitable crop for you to grow. Barley proved to be a successful crop at this station last season. In a trial of twelve varieties the best-yielding sorts were as follows:

Name. Yield per acre
Common six-rowed. 33.9 bushels
Bonanza six-rowed. 32.0 bushels
Mandschuri, six-rowed. 32.0 bushels
Success beardless, six-rowed. 31.0 bushels
Mansury. 29.5 bushels
Mandscheuri, two-rowed. 28.0 bushels

You will observe from these results that the beardless variety of barley stands well as a yielder but it is not so good as the best six-rowed bearded varieties. The grain of the beardless variety also weighs three to four pounds less per bushel than the other sorts. Usually the Mandscheuri or Mansury barleys are recommended as the best general varieties to grow. I notice from looking up the crop reports that Washington County produces very little barley; evidently, however, the crop has not been tried and I have no doubt but you will find barley will grow successfully. The grain should be seeded early in the spring and given similar culture to that required by A. M. TENEYCK.

Bermuda Grass.

Enclosed find specimen of grass which I very much desire to know the name of and its nature. I secured the original stem along with some shrubbery in southern Texas last winter. From the single spear it has spread and formed a sod half a rod square. They call it Bermuda grass but I feared it might be something I did not want. At least it grows to perfection in this climate. E. A. FORTNEY.

Cloud County.

The sample of grass which you sent in is the Bermuda grass (Cynodon dactylon) as you supposed. This grass is a native of the tropical regions of the East and was introduced into the United States at an early date. It has since spread over the region from Maryland to Missouri and Texas and is well known throughout the Southern States. The grass is a creeping perennial, which spreads extensively by creeping stems. At intervals of an inch or two, roots are produced on the stems and a leafy stem is thrown up to the height of a few inches. Where it obtains a foothold, Bermuda grass spreads with rapidity, and in exposed situations tends to drive out other vegetation. It will endure great extremes of heat and drouth and adapts itself to a great variety of soils.

Bermuda grass is considered the most valuable of all pasture-grasses of the South. It will stand trampling of stock, is very nutritious and thrives on soil too poor for the successful cultivation of other crops. On account of its creeping habits of growth it is an excellent grass to prevent the washing of soil on the side of hills, and also to prevent the drifting of soil by the Bermuda grass is the best known lawn-grass of the South. Its only fault in this particular is that it turns brown at the appearance of winter and is rather late in becoming green in the spring. It is, however, a

good turf-former and has a good color and fine texture.

"The very qualities which render Bermuda grass so valuable as a pasture-grass serve to make it an aggressive and pestiferous weed. On account of its tendency to spread and insinuate itself into land where it is not wanted, and to persist in fields which are to be used for other purposes, it has, in many cases, not been utilized to the extent that its good qualities would indicate. However, it can be eradicated from a field with comparative ease by proper cultivation. Since it will not thrive in the shade, it is only necessary to smother it out by some quick-growing crop. A method recommended by Southern agriculturists, and which may be modified to suit conditions, is to plow the land after the last crop of hay is cut, if the field is a meadow, or about this season if it is a pasture. Sow the field to oats, wheat, or any other thick-growing When this crop is harvested, plow the land immediately and plant to cow-peas. It is probably best to plant these in drills and cultivate them until the vines meet, after which they will shade the ground and prevent the growth of Bermuda. Usually this treatment is sufficient to completely destroy the Bermuda; but if not, the process can be repeated."

The above quotation is from Circular No. 31, of the Division of Agrostology, U. S. Department of Agriculture, and part of the description is also taken from the same publication, by Prof. A. S. Hitchcock.

I think there is little danger of Bermuda grass becoming an obnoxious weed in Cloud County, in fact I think you will find it difficult to keep it from winter-killing. Bermuda grass has been tried at this station but was not hardy enough to withstand the win-A. M. TENEYOK.

Good Forage Crops.

I have twelve head of cows and am sending the milk to a creamery. Now as I have no hay-land I want to sow two crops of some kind for roughness next winter. What two would be best for me to sow this spring to give best results? I was thinking of sowing as one crop Kafir-corn. I notice in Kan-SAS FARMER that Kafir-corn was better than cane, but I am at a loss to know what else to sow. C. L. FAULKNER.

Leavenworth County.

Kafir-corn sown broadcast or in close drills at the rate of fifty or sixty pounds of good seed per acre will make a large amount of excellent winter forage. Last season a yield of six and one-half tons of good Kafir-hay per acre was secured at this station from a field which was seeded about June 24. Perhaps earlier seeding would be better in the average season, but last season the crop was ready to cut September 25 and cured in good condition to stack by the first of December. A field of sowed cane was grown adjacent to the field of Kafir-corn which was seeded and handled in much the same manner as the Kafir-corn. This crop yielded seven and three-fourths tons per acre, and had cured well and was in excellent condition in December when stacked.

If you wish to plant crops for forage in rows and cultivate, I believe that corn and cow-peas planted together is one of the best crops to grow. Mix the peas and corn together in equal parts by weight and plant with the grain-drill in a well-prepared seedbed in drill-rows 3 to 31/2 feet apart by stopping up the intervening seedcups. Set the drill to sow about two and a half or three bushels of oats per acre, or plant the seed at such a thickness that the kernels of corn will average 12 to 18 inches apart and the peas 3 to 4 inches apart in the drillrow. Give about the same cultivation as is required by corn. The cornstalks will furnish support for the peavines and the crop may be readily cut with the binder and shocked in the field the same as corn. Corn if selfsowed in close drills or planted in rows and cultivated makes one of the best forage-crops. If the purpose is the production of forage I would recommend planting more thickly in the

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drill-rows than is the usual practice in planting corn with the lister.

Cow-peas seeded broadcast or planted in close drills make a good forageerop or the peas may be planted in drill-rows and cultivated the same as corn. If grown in this way it will be necessary to harvest the crop with a bean-harvester, while if the peas are sown broadcast or in close drills they may be cut with a mower and handled much the same as alfalfa. I think that from these four crops you can select two from which you may get sufficient roughness of the best quality to carry your cows through the win-A. M. TENEYCK.

Permanent Pasture.

Will you please tell me through the KANSAS FARMER, what kind of grass to sow to make a permanent pasture for horses and cattle? I have ten acres to sow which was plowed just after harvest. Could oats be sowed with the grass and then mowed off for hay, or would it injure the stand of grass? Please tell me how to prepare the ground, how much to sow per acre, and the best time to sow.

Barton County. J. G. SMITH.

In the Kansas Farmer of December 24 you will find an answer to a question in regard to grass to sow for permanent pasture which was given to a farmer in Wyandotte County. I think that if you will read this article over you will get some suggestions which will be applicable to seeding in your locality. I have little hesitancy in recommending Bromus inermis as being the best pasture-grass in your part of the State for horses and cattle. The piece of ground which was plowed soon after harvest ought to make an excellent seed-bed next spring. Prepare the ground by disking it lightly, or better, by using the Acme harrow. Make the seed-bed fine but not too loose. Bromus inermis should be seeded broadcast at the rate of about 16 to 20 pounds per acre, harfow once lightly after seeding. Sow very early in the spring, as soon as the ground is in fit condition.

It is sometimes recommended to sow oats as a nurse-crop for Bromus inermis when there is a tendency for the soil to drift by the wind. It is usual to seed about a bushel of oats per acre. The oats may be sown with a drill just before the Bromus seed is sown. There is danger of leaving the oats too long. The crop should usually be cut for hay in the early milk stage or even soon after heading in case there is a tendency toward drouth. It is usually not considered so safe to seed Bromus inermis with a nurse-crop in this way and the practice is recommended only when the oats will serve to keep the land from blowing? A. M. TENEYCK.

Cow-peas.

I would like to have a bulletin or whatever information you can give on the raising of cow-peas, when to sow, how much to sow, what kind of land? What do you think of them as a winter feed for sheep? I would also like very much to have your crop reports. R. T. SPENCE.

Jackson County, Mo.

We have published no bulletin giving the information which you desire. I will briefly outline our method of seeding and growing this crop. The seed-bed is plowed rather early in the spring and the ground is cultivated several times before seeding. Often we use the subsurface packer in order to firm the subsurface and draw the moisture up into the mellow soil. The peas are sown with the ordinary grain-drill by stopping up part of the seed-cups, in rows 32 inches apart. The drill is set to sow about seven or eight pecks of wheat per acre, which, according to our calculation from last season's work, plants the peas at the rate of about two pecks per acre. Cowpeas should not be planted until the ground is warm and all danger of frost is past, usually about the first part of June at this station. The crop is cultivated much the same as a corncrop. We prefer, however, to use cultivator with smaller shovels than are used in the cultivation of corn. Un-

less the land is quite free from weeds the crop may need hoeing in order to kill out the weeds in the row. Usually, however, little hoeing is necessary.

Cow-peas are perhaps best adapted to growing on light, warm soils but any good corn-land will grow cow-peas. The crop is harvested by the use of the bean-harvester, several makes of which are sold on the market. These harvesters are made to cut two rows at a time which are thrown together in a sort of windrow behind the machine. The harvesting is somewhat disagreeable. If the weather is unfavorable and the soil wet, it is difficult to harvest the peas properly. If the purpose of the crop is the production of seed, the peas are allowed to cure in the windrow for a day or two and then piled in small bunches and left in the field until they are well dried. when they may be thrashed with the ordinary separator by taking out the concaves and a part of the cylinder teeth; or better, a bean-thrasher may be used, as the ordinary separator is apt to split many of the peas.

If the purpose of the crop is the production of fodder, the method of growing described above may be practiced or the peas may be sown broadcast or in close drills and given no cultivation after planting. When planted in this way it is possible to cut the crop with the mower and handle it much as alfalfa is handled. At this station last season we were able to produce about two and one-half tons of dry fodder per acre by this method.

Regarding the feeding-value of cowpeas. I have referred your letter to Professor Erf, of the animal husbandry department. A. M. TENEYCK.

In reply to the inquiry pertaining to the feeding of cow-peas to sheep, I will say that both in the breeding and fattening of sheep, cow-peas, if ground, are an excellent feed. If fed to breeding animals, a little corn-meal and oats should be fed in connection with it, while in fattening, corn-meal alone is a better accompanying feed with the cow-peas, especially if clover hay or alfalfa be used as roughage.

O. ERF.

Cow-peas and Corn.

Will you please tell me how to plant cow-peas with corn, so as to enrich the ground, and will the peas injure the corn very much if the weather is

Is red-top a good pasture? Will it do as well as blue-grass? PETER ROCK. Anderson County.

Cow-peas may be planted in the corn at the last cultivation by using the ordinary one-horse grain-drill. If the season is not too dry, after the corn is laid by, the peas may make considerable growth and furnish fall pasture as well as green manure, or the peas may serve as a cover-crop during the winter. Usually, however, if the fall is at all dry, the peas will make little growth and it is likely that they will tend to injure the corn to such an extent and exhaust the soilmoisture. At this station, however, last season we found that in a good stand of corn, the corn shaded the peas so much and dried out the soil to such an extent that the peas made very little growth. This method is used farther south and in regions of greater rainfall with greater success than we can expect to secure by practicing the method here.

I believe that on the whole it will be more practicable to use cow-peas as a rotation crop, giving them a whole season for growth, rather than attempt to grow both a crop of cow-peas and corn in one season. A more practicable plan than planting with corn, if you do not desire to take a whole year for the corn, is to rotate corn with grain, as barley, oats, or wheat. The cow-peas may be disked into the stubble soon after harvesting the grain and unless the season is quite

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unfavorable the peas will make a rank growth, and furnish a good crop of green manure, which may be plowed under in the fall and the land planted to corn next season; or the peas may be left as a cover-crop during the winter and either plowed under in the spring, or if the amount of material on the ground is not too great, the corn may be put in with the lister without plowing. An experiment was made at this station in seeding the cow-peas after the grain in this way last season with very good results. When the peas were plowed under about September 15 they had made a good growth, standing twelve inches high and fully covering the ground.

Red-top is adapted to growing on low lands and wet soil. It will doubtless not furnish as much pasture as blue-grass except under the favorable conditions in which it grows best.

A. M. TENEYCK.

English Blue-grass.

I sowed a few acres to alfalfa last fall but did not get any stand at all. Will it be all right to sow English blue-grass on the same ground this spring without plowing the ground? It is clear from weeds and the ground was in fine shape last fall. I plowed it last spring for millet and after millet was cut I disked it and harrowed S. S. MORINE.

McPherson County.

The field described may be seeded to English blue-grass without plowing. In fact, I believe that you will be able to prepare a more suitable seed-bed by simply disking and harrowing than you will by plowing. The ideal seedbed for grasses should have a mellow surface but be rather firm and compact below. This gives the best conditions for germinating the seed and starting the young plants. The mellow surface allows the entrance of air and heat from above and the firm subsurface readily conveys the capillary water in the soil upward to the seed. Thus the seed is supplied with moisture, heat, and air, the three essential factors in seed-germination.

A. M. TENEYCK.

A Three-horse Cultivator.

Can you give me in Kansas Farmer a plan for hitching three horses to a riding cultivator? W. S. DREW. Labette County.

It is impracticable to attempt to arrange any system of eveners which will work nicely by which you may work three horses on a two-horse cultivator. If the work is too hard for two horses such as you have, you had better sell the three and buy two good horses averaging fourteen hundred pounds in weight. Such a team will pull an ordinary riding cultivator all day and do it easily. In fact, I have never observed that cultivating corn was hard work on horses, provided the corn was cultivated when it ought to have been cultivated and not deeper than it ought to have been cultivated, say three or four inches deep.

It is possible to hitch three horses on a two-horse riding cultivator and it has been done. A cross-bar may be fastened between the vertical bars to which the horses are ordinarily attached when two horses are used. This cross-bar should be attached highest on the left-hand side (as you stand behind the cultivator). three-horse evener may be attached to this cross-bar a little to the left of the tongue, or about one-third the distance between the two ends of the cross-bar. This hitch will tend to cause side-draft of the cultivator and throw the tongue towards the right, but by raising the left end of the crossbar to the proper height, the side-draft may be overcome to a great extent. Another method is to fasten the crossbar horizontally and hitch the threehorse evener to the right of the tongue and run a chain back from the hitch and fasten it to the axle of the cultivator a little to the left of the rear end of the tongue. Such arrangements, however, are cumbersome and unsatisfactory and it is much more convenient to use two good horses on a two-horse riding cultivator.

A. M. TENEYCK.

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Rules and Regulations Governing the Distribution of Awards on Exhibits of Dent Corn Competing for Prizes at the Louisiana

Purchase Exposition. Each exhibit shall consist of ten ears of corn grown by the exhibitor in 1903. Each exhibit shall be entered under some of the following classes:

Yellow dent corn, white dent corn, red dent corn, calico dent corn.

Awards shall be made in each class and shall be in the case of each award accompanied by a diploma stating in what class the award was made.

The awards in each class shall be first, grand prize; second, gold medal; third, silver medal; fourth, bronze medal; fifth, diploma. The kind of award given to an exhibit shall depend upon the number of points which the exhib it shall score when judged in accordance with the score-card and regulations hereinafter provided.

Awards shall be made in accordance with the following scores: Grand prize, 90 points or over; gold medal, 87 to 89.9 points inclusive; silver medal, 83 to 86.9 points inclusive; bronze med-al, 80 to 82.9 points inclusive; diploma. 77 to 79.9 points inclusive.

All exhibits shall be judged in accordance with the following scale of points: Uniformity of exhibit, 10 points; conformity of ears to type, 5 points; shape of ears, 5 points; color of ears and cobs, 10 points; market condition, 10 points; tips of ears, 10 points; butts of ears, 5 points; uniformity of kernels, 10 points; shape of kernels, 10 points; space between rows of kernels, 5 points; space between kernels at the cob, 10 points; proportion of corn on ear, 10 points; total, 100 points.

The score-card shall be used in accordance with the following rules:

Uniformity of Exhibit.—All of the ears in an exhibit should be uniform in size, shape, color, and indentation.

Conformity of Ears to Type.-The ears should conform to the type of the variety or kind of corn that they represent.

Shape of Ears.—The ears should be cylindrical or nearly so. The ears should have one of the following proportions:

Length 12 inches or more, corresponing circumference 8.5 inches or over; length 11 to 12 inches, 8 to 8.5 inches or over; length 10 to 11 inches, 7.5 to 8 inches or over; length 9 to 10 inches, 7 to 7.5 inches or over; length 8 to 9 inches, 6.5 to 7 inches or over; length 7 to 8 inches, 6 to 6.5 inches or over; length 6 to 7 inches, 5 to 6 inches or over.

Color.—The color of the kernels should show no indication of mixing of varieties. The cobs should be uniformly red or white.

Market Condition.—The ears should be well matured, firm and sound.

Tips of Ears.—The tips of the ears should not be too tapering, and should be well filled with regular, uniform kernels

Butts of Ears.—The rows of kernels should be even and swell out evenly beyond the end of the cob.

Uniformity of Kernels.—The kernels should possess like characteristics, and represent a definite type.

Shape of kernels.—The kernels should be so shaped that their edges are parallel from tip to crown.

Space Between Rows.—The rows of ernels should not be over one-thirtysecond of an inch apart at any part of the row.

Space Between Kernels on the Cob. The kernels should be close together on all four sides of the kernels where they join the cob.

Proportion of Corn to Ear.—The proportion of corn to ear shoud not be less than 86 per cent as determined by shelling the kernels from at least onehalf the ears in the exhibit, and weighing the shelled corn and the cobs. For every per cent below 86, cut one point.

Farm Notes.

N. J. SHEPHERD, ELDON, MO. Water before feeding but not while the horse is hot.

Let the horse's litter be dry and clean underneath as well as on top.

Where inexperienced help is necessary, the steady, quiet teams should be found.

So far as can be managed, the brood sows and the stock should be fed separately.

Care should be taken to feed hogs according to age and condition and time of marketing.

Manure is the most important ad-

junct of successful farming yet it is most frequently wasted.

Planting a few trees every fall or

spring as may be convenient, provides against the inevitable, and keeps up the supply of fruit.

In breeding hogs the sanitary condition of both male and female has much to do with the progeny.

Kerosene will soften boots and shoes that have been hardered by water and render them as pliable as new.

An uneven flock of good sheep is more valuable than an even flock of poor sheep.

Keeping the teams busy is one of the best arguments for growing a large variety of crops.

Judgment is the outcome of experience and yet a man may have a wide experience and lack in judgment.

In every case for the greatest benefit to the farmer the pig's birthright should be a strong constitution.

It is a fact that beauty of form and stylish appearance have a strong hold in the minds of the breeders at the present time.

With a damp, cold bed and exposure to rains hogs easily receive injuries that they will not recover from during the winter.

To a very considerable extent farming to be highly successful must be of a mixed quality of stock-raising and grain-growing combined.

In the dairy be regular in the hours of feeding. Cows are good judges of time and it does not pay to keep them waiting for their meals.

While a hog may quench his thirst by drinking slop, he should not be com-pelled to do it. Give him a supply of fresh water daily.

Chemical analysis does not always indicate the feeding-value of foods. This is determined by the assimilating process of the animals to which it is fed and this varies greatly.

Inbreeding is used to propagate and fix qualities found in a herd. The danger is that the weak points are likely to crop out more plainly than the strong ones.

In the dairy it is well to bear in mind that the weight of a cow does not always correspond with the amount of feed required to receive the best results from her.

Hog-cholera.

Hog-worms is often the starting of hog-cholera. Keep the hogs clear of worms and they will not be so liable to take disease. The Snoddy Remedy is no doubt the greatest worm remedy for hogs there is on the market. After a few doses of this remedy is fed you will see piles of worms lying around in your hog-lots. It destroys the kidney, liver, and lung worms, the same as it does the stomach and bowel worms.

When fed to sows with young pigs this remedy cures the scours and all germ diseases in the young pigs and causes them to grow off strong and

It is the only thing that will save hogs after they get sick.

N. R. Yost, Meyerstown, Pa.; O. D. Hill, Kendalia, W. V.; Jas. Bennett, Bowling Green, Mo.; Bible & Workman, Emporia, Kans.; J. E. Gibbons, Purcell, I. T.; I. P. Roy, Watika, Okla.; and thousands of others have cured their hogs of cholera with this remedy and say it certainly does the work when properly used.

It is cheap and easy to use. Any practical farmer can clear his herd of either worms or cholera and put them into perfect condition with it in a few days. It is saving millions of dollars annually for the hog-raiser.

Shoddy's free book on Hog-cholera fully explains this treatment and will be sent free of charge, by return mail, to any hog-raiser who will send his name and address to the Snoddy Remedy Co., Department W., Alton, Ill. Evhog-raiser should improve this golden opportunity and write at once for this free information.

HAS BE FOUND IT?

Dr. MacFarland of Topeka Tells a Strange Story.

Prairie Dog Exterminator Turned Into Consumption Cure.

RIVAL OF DR. KOCH

Experiments on People With Bronchial Trouble.

Says the Deadly Gas Will Cure People.

Topeka has a rival of Dr. Koch, who claims to have discovered a cure for constitution to have discovered a cure for constitution to have discovered a cure for constitution to the same appearatus and some of the identical chemicals which he used a year ago in exterminating prairie-dogs at the rate of a ten-acre town in an hour, Dr. Frederick McFarland, of Sil Branner Street, this city, is dispensing a reminished that the property of the same and pronchial troubles which if not pand bronchial troubles which if not pand bronchial troubles which if not pand bronchial troubles which if not pand troubles which if not pand troubles which if not pand to the doctor's testimony. He has been the doctor's testimony and the doctor's testimony and the work of the work of the doctor's testimony. He has been the work of the doctor's testimony. He has been the two hundred or more persons who have gathered every evening at his home; have inhaled the fumes of a gas that impresses the organ of small as containing a large discovery of the manufacture of the doctor of the

MOFARLAND CHEMICAL CO.

435 Kansas Ave., Up-stairs, TOPEKA, KANSAS.

The Stock Interest.

THOROUGHBRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

February 28, 1904—Kirkpatrick & Bollin, Leavenworth, Poland-Chinas.
February 28, 1904—Duroc-Jerseys, C. G. Johnson, Oscola, Neb.
March 1, 1904—L. M. Monsees & Bons, Smithton Mo., Jacks, saddle and roadster horses.
March 2 1904—L. K. & S. C. Haseltine, Springfield, Mo., Red Polled cattle.
March 64, 1904—Combination Hereford and Shorthorn sale at Caldwell, Kans. Chas. M. Johnson, Sec. March 6, 1904—F. M. Gifford, Manhattan, Kans., 8horthorns.

March 9, 1804—Herefords at Ottawa, Kans., James March 9, 1804—Herefords at Ottawa, Kans., James A. Funkhouser and Wm. Ackley.

March 15 and 16—Aberdeen-Angus Combination Sale, South Omaba, Chas. Escher Jr., Manager.

M rch 23-24, 1904—Combination Hereford sale at Kansas City, Benton Gabbert, Dearborn, Mo., and others.

March 23 and 24, 1904—Benton Gabbert and others,
March 23 and 24, 1904—Benton Gabbert and others,
Merch 31, 1904—Zeigra Bros., Poland-Chinas sale at
Parsons. Kans.
April 6 and 7, 1904—Scott & March, Belton, Mo.,
Herefords.

Herefords.

April 7, 1904—Central Missouri Shorthorn Breeders' Association, Moberly, Mo., E. H. Hurt, Sec.

April 24 and 25—Aberdeen-Angus Combination
Sale, Des Moines, Iowa, Chas. Escher Jr., Manager.

May 24 and 25—Aberdeen-Angus Combination
Sale, South Omaha, Chas. Escher Jr., Manager.

November 1, 1904—W. B. Van Horn & Son, Poland-Chinas at Overbrook, Kans.

Cane-seed for Hogs.

EDITOR KANSAS FARMER:-In your last week's paper is an inquiry about feeding cane-seed to hogs. I would say in reply that we fed cane-seed to our hogs all last spring and summer until corn was ready to feed, and we never had hogs do better on any other feed. But the cane-seed must be soaked in water at least twenty-four hours before being fed. I had two fifteen-gallon kegs that I kept filled with seed, one was soaking while I used out of the other. The slops from the house were put into the seed. I fed it to the chickens that were old enough to eat it and they did well on it. But cane-seed will be too expensive a feed this year.

MRS. ELLA STUART. Coffee County.

The Ottawa Shorthorn Sale.

The Cottawa Shorthorn Sale.

The combination sale of Shorthorn cattle, held at Ottawa, Kans., in the new sale pavilion, on Wednesday, February 10, was considered a success under the circumstances. The animals offered were from the herds of E. S. Kirkpatrick & Son, Wellsville, Kans.; N. Manrose, Ottawa; C. S. Nevius, Chiles; and C. F. Wolf & Son, Otawa. They were a fairly representative lot of cattle of these herds though not the choice of them by any means. Some of them were quite thin in flash and a few were short-pedigreed animals so that the average of the sale was not high, though we believe the contributors were fairly well pleased and the buyers delighted with the snaps picked up at this sale. Some of the great bulls represented in the sale to which a number of the cows had been bred were Scotland's Charm, who claims the richest combination of Scotch blood in America; Tillycairn, sired by Spicy Monarch, and who won third in class at the American Royal; Victor of Wildwood, chief of the Glenwood herd, a 2,250-pound bull whose sire was Golden Victor and whose dam was Orange Blossom of Windsor; and Giltspur Knight by Golden Knight of Enterprise out of Victoria Giltspur 2d at the head of the Manrose herd. A total of fifty head brought \$4,192.50, an average of \$82.85. The top of the cow sale was brought by Glendale Flora, sired by Scotland's Charm, bred by Dustin and out of Lady Glendale, bred by D. K. Kellerman & Son, who went to the herd of B. W. Gowdy, Garnett, Kans., for \$290. The following is a detailed report of the sale:

COWS.

Glen Dale Flora 3d, B. W. Gowdy,

Gennett Kans.

COWS. Kans. 10.00 C. Parks, Ottawa, Kans. 20.00 C. Parks, Ottawa, Kans. 20.00 Lais, B. C. Parks, Ottawa, Kans. 20.00 Lais, D. C. Parks. 20.00 Lais, D. C. Parks. 20.00 Balins Daisy, E. M. Williams. 20.00 Balins Daisy, E. M. Williams. 20.00

THE KANSAS FARMER.

Pride of Clover Nook, E. M. Williams...

Rural Daisy, C. G. Kehler, Burlingame, Kans...

Princeton Bell 10th, O. O. Wolf, Ottawa, Kans...

Olive June 2d, Dietrich & Spaulding Mucie June 2d, Dietrich & Spaulding 75.00

Jeanette, C. S. Nevius...

Gwynnivere 6th, Fred Anthony, Ottawa, Kans...

Etta Vae 2d, J. L. Atkinson, Ottawa, Kans...

Dora, Dietrich & Spaulding...

Etta Vae 2d, J. L. Atkinson, Ottawa, Kans...

Dora, Dietrich & Spaulding...

50.00

Bulanch 2d, Fred Ainstead...

Majorie, W. E. Parks...

BullLS.

Charm's Reformer, Fred Ainstead...

Charm's Reformer, Fred Ainstead...

260.00 Pride of Clover Nook, E. M. Wil-Bruce 212563, Frank Woll, Ly.
Kans.
Ponto 212767, Frank Wolf.
David 212564, Gates Smith, Ottawa,

Axline's Poland-China Sale.

Axline's Poland-China Sale.

On Tuesday, February 17, at the homefarm at Oak Grove, Mo., was held E. E. Axline's annual sale of Poland-China bred sows. The attendance was large and the bidding snappy at times with a good sale and a good average. All these things were to be expected in a sale held by E. E. Axline. It will also be noticed that a large proportion of the offering was taken by Kansas breeders. The top of the sale was Lady Corrected by Corrected out of Black Chief's Lady, a daughter of Missouri's Black Chief. She brought \$112.50. It is to be noted in this sale that the wonderfully even price was an index of the even quality of the hogs offered although it was not in any way remarkable for high prices on individuals. The sale was a good one and while it was fairly satisfactory to the seller it was exceptionally so to the buyer because it gave them an exceptionally good opportunity to buy of the best without having to pay extortionate prices. There was a total of sixty head of bred sows and glits offered which brought \$2,205, which was an average of \$37.41. In giving the following details we call especial attention to the number of Kansas buyers and the quality of animals they bought. The sales in detail were as follows:

Sunshine Perfection, F. A. Dawley, Miss Elsipse, C. B. Wells, Sedalla, Mo.

W. O.'s Girl 2d, M. L. Lanty, Atherton. Mo
Miss Chief I Know, J. B. Palleto, Oak Grove, Mo.
Rose I Know, Ed. C. Weeks, Eldon-Mo.
Idealla, A. E. Schooley, Austin, Mo.
W. O.'s Girl, Fred Boland, Powers-ville, Mo.
Hilaria, U. S. Ison, Butler, Mo....
U. S. Sunshine 2d, R. S. Williams, Liberty, Mo.
Choice Girl, John Belcher, Reynolds, Mo.
Sunshine Perfection 2d, W. R. Sharrach, Centerview, Mo.
Lady Ideal, J. B. Pellett, Oak Grove, Mo.
U. S. Sunshine, A. C. Fitch, Columubus, Mo.
Missouri Girl, Thompson Bros., Maryville, Kans.
Miss Perfection, Chriss. Connor, Oak Grove, Mo.
Sunshine Bessie, S. McKelvey, Fairbury, Neb.
Black Chief's Lady 2d, Lentz Bros., Atherton, Mo.
Stylish Model, E. S. Stewart, Sturgeon, Mo.
Perfect Eclipse, E. A. Hafstatten, Maryville, Mo.
Model I Am, A. T. Midditon, Oak Grove, Mo.
Queen Correct, Sam Hess, Marshall, Mo.
Miss Lall, Flemming Bros., Pleasant Hill, Mo. 52.00 31.00 Queen Correct, Sam Hess, Marshall,
Mo...
Miss Lail, Flemming Bros., Pleasant Hill, Mo.
Gate's Cholce 3d, A. C. Potts, Columbus, Mo.
Ada Lail, A. T. Grimes, Greenwood,
Mo.
Black Starr, J. B. Pellett...
Wayman's Model 2d, Leon Calhoun,
Potter, Kans...
U. S. I. Know, F. A. Dawley...
Royal Rose, A. Young, Knobnoster,
Mo.
Sunshine Duchess, Riley Bros., 29.00 24.00 32.00

U. S. Sunshine 4th, A. E. Schooley. 25.00 U. S. Choice 2d, W. C. Shultz, Concordia, Mo. 34.00 Lady Wayman 2d, C. R. Lentz. 26.00 Choice Girl 2d, W. W. Harris, Oak Grove, Mo. 21.00
W. O.'s Girl 4th, W. H. Holderman,
Girard, Kans. 30.00
Choice Tecumseh, A. T. Grimes. 50.00

The Centerville, Kansas, Poland-China Sale.

Sale.

On Thursday, February 18, 1904, at Centerville, Kans., was held a combination sale of Poland-China swine by C. O. Hoag, Mound City; Emmett McGrew, Kossuth; and Frank Zimmerman, Centerville. The offering consisted of forty-four sows and glits and five boars, all of which were in good condition and most of them excellent individuals of rich breeding. The sale-day was a disagreeable one, the ground being covered with ice, which prevented a general attendance of farmers, though quite a number of breeders from eastern Kansas and from Missouri were present. Considering the weather conditions, the sale was very satisfactory, although the quality of the hogs warranted higher prices in some cases. We are glad to note that Prof. D. H. Otis, formerly of the animal husbandry department of the agricultural college and now manager of the Deming Ranch at Oswego, was a liberal buyer. Frank Zimmerman's thirty-three sows averaged \$33.12 and his five boars \$15.80. C. O. Hoag's seven sows averaged \$29.57, and Emmett McGrew's four sows averaged \$4.25. Included in these averages were a number of open spring glits and a few August pigs. The sales in detail were as follows:

ZIMMERMAN'S CONSIGNMENT.

Daisy Gold Dron, J. W. Gorrel, Center-

ZIMMERMAN'S CONSIGNMENT. Daisy Gold Drop, J. W. Gorrel, Center-Moran. 42
Alice Shortstop, G. P. Jones, Centerville. 51
Cholce's White Ham, W. R. Crother, Golden City, Mo. 50
Silky Perfection 2d, Ed. McDaniels, Parsons. 90
Silky Perfection 3d, D. H. Otis, Oswers EMMETT McGREW'S CONSIGNMENT. C. H. HOAG'S CONSIGNMENT.
 Concordia, Mo.
 35

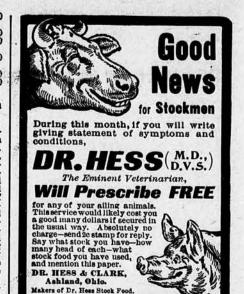
 Greenwood Model 2d, O. J. Mitchell.
 29

 Daisy Perfection, J. W. Gorrel.
 19

 Daisy Greenwood, D. H. Otis.
 24

S. A. Spriggs' Third Annual Sale.

The third annual sale of S. A. Spriggs, was held at the home barn in Westphalia, Kans., on Saturday, February 20. The weather on the sale-day was about as bad as it could be in Kansas. It had been Mr. Spriggs' expectation to hold the sale in the open as he did last year so that the horses and jacks could be shown to a better advantage but the miserable weather rendered this impossible. There was a large crowd present, however, repto a better advantage but the miserable weather rendered this impossible. There was a large crowd present, however, representing many parts of Kansas and Oklahoma. One thing which detracted from the sale and which cost Mr. Spriggs money was the fact that there were a great many boys and young men in attendance who were there out of curiosity only. They persistently got in the way of the buyers and by their continued talking interfered with the proper work of the auctioneers. A public sale of good stock is an important event and should not be interfered with by unthinking persons whose actions cost the seller good money. The sale was preceded by a parade in the streets of the town of all of the jacks and horses to be offered in the sale, and it is sufficient to say that it made the most imposing spectacle ever offered to the citizens of that place. The sale was in charge of Cols. Jas W. Sparks, Marshall, Mo.; and Lafe Burger, Wellington, Kans., assisted by Col. J. A. Marshall, Gardner, Kans. We have seen Colonel Sparks and Burger in the sale ring many times but have never seen them do bet-



ter work than on this occasion. The jacks and jennets offered in this sale were undoubtedly the best lot that was ever sold in Kansas and, while the prices realized were not high, it was probably due to the condition of the weather, which prevented more buyers from attending. It may be mentioned in passing that just prior to the sale Mr. Spriggs sold the jack, King Giant 2d, to Mr. C. F. Bates, Jr., Richmond, Mo., the very heart of the jack and mule country, for \$700 cash. This sale was characterized by the fact that nearly all of the buyers were from outside the county in which the horses were sold. There was a strong attendance from Oklahoma, and our subscriber, J. C. Marshall, was successful in carrying away one each of the best of the Percheron stallions, the Mammoth Black Jacks and the Mammoth Black Jennets. In opening the sale, Colonel Sparks remarked that he was a great admirer of pedigreed stock of all kinds but more especially of pedigreed men. He then proceeded to give a bit of the history of Mr. Spriggs and his well-earned reputation for honesty and square dealing which was much appreciated by all who know the man. The sales in detail were as follows:

PERCHERON STALLIONS.
Beldemeer Jr., C. E. Chrisman, Hall's

PERCHERON STALLIONS. Beldemeer Jr., C. E. Chrisman, Hall's Summit, Kans. K'ng Veno, J. C. Marshall, Welda,

MAMMOTH BLACK JACKS. Black Prince 324, J. C. Marshall, Welda, Kans.
Black Satin, W. C. Foster, Hume, Mo. Cip-Top, C. Merrifield, Cromwell,

MAMMOTH BLACK JENNETS. Mammoth Mandy, J. C. Marshall..... 120 Brown May, Daniel Zieber...... 460 SUMMARY.

SUMMARY.

Ten stallions sold for \$2,285; average \$228.50
Two mares sold for. 890; average 445.00
Eight jacks sold for. 180; average 435.00
Two jennets sold for. 180; average 90.00
Twenty-two head.... 6,835; average \$10.68
While it is true that the majority of the horses sold were not registered, they were a good, useful lot, and were cheap at the prices paid. The crowd in attendance, however, seemed to be after jacks more than horses and the prices paid corresponded more with their expressed desire. The sale was a good one and Mr. Spriggs has added to his already good reputation.

The Swiercinsky Poland-China Sale.

The Swiercinsky Poland-China Sale. The way the western Kansas farmers are making progress as breeders of purebred stock is a matter of satisfaction and pride to every Kansan. Mr. F. C. Swiercinsky, Belleville, Kans., has won a reputation for breeding good Poland-Chinas, but his real worth as a breeder was not appreciated by his neighbors until he held a public sale at his farm on February 15. Doubtless all will remember that the day was exceedingly cold and disagreeable and it is probable that this fact kept many away from the sale who would otherwise have been present. There was a fair crowd present and some of the prices realized were very good. The top yearling gilt, No. 16 of the catalogue, went to O. B. Smith, Cuba, Kans., for \$37. Best Maid, No. 4, sold to J. J. Ward, Belleville, for \$35. No. 30, a spring gilt, went to Geo. E. Smith, Cuba, at \$25; No. 26, to J. A. Brewer, Concordia, at \$19; while F. Krohlow, Kensington,

NO MONEY TILL CURED. 25 YEARS ESTABLISHED.
We send FREE and postpaid a 200 page treatise on Piles, Fistula and Diseases of the
Rectam; also 100 page illus, treatise on Diseases of Women. Of the thousands cured
by our mild method, none paid a cent till cured—we furnish their names on application.

DRS. THORNTON & MINOR, 1007 Oak 81., Kansas City, Me-

secured Nos. 15, 17, and 38 for \$61.50. The eighteen head of sows and yearling gilts averaged \$25.10. The spring and June gilts averaged \$15. While Belleville is not in western Kansas, it is in the edge of the great wheat-belt where the average farmer is reputed to be afreid of a hog because he does not live in the cornbeit, yet the sales that have been held in this section of the State this spring and the prices realized indicate that they are waking up to the true value of the "mortgage lifter." Mr. Swiercinsky states that he is well pleased with the results of his first annual sale and with the volume of business that the Kansas Farmer has brought him.

Missouri Angus Cattle at Kansas City.

Missouri Angus Cattle at Kansas City.

The first sale of Aberdeen-Angus cattle of the year in the West was held at the fine-stock pavilion at Kansas City on February I7, in the midst of as disagreeable a bunch of weather as has struck this vicinity thus far during this season. These cattle were furnished by a number of the oldest breeders of Angus cattle of both Missouri and the West, and while not in the highest show-condition, they were one of the smoothest and evenest lots of cattle that have lately passed through the Kansas City sale-pavilion. The conditions surrounding this sale were nearly as bad as could be so far as the weather was concerned, as there was a constant down-pour of sleet, which rendered the pavings and walks almost impassible, and which doubtless served to keep very many buyers at home because of the attention required by their stock in such weather. The cattle were good ones, however, but the crowd was small and they practically had bought all they needed before half the animals had been disposed of. The happy employment of Cols. J. W. Sparks, of Marshall, Mo.; J. N. Harshberger, Lawrence, Kans.; and R. L. Harriman, Bunceton, Mo., served to greatly relieve the situation and secure an average much higher than was anticipated from the smallness of the crowd and the excessively disagreeable weather conditions. Mr. Berry Lucas, Hamilton, Mo., who managed the sale, was also a contributor of good cattle and proved his ability as a sale-manager. The sale was well handled and the results attained were very good considering the situation. The sale in detail is as follows:

COWS.

Leah W, 54281, Halbleib Bros., Brown-

Harting Brownell 95
Williamsdale Short Ear 40719, G. W.
Sweltzer, Harrisonville, Mo. 100
Moss Creek Princess 4th 63281, Hal-Moss Creek Princess 4th 63281, Halbelb Bros. 120
Addie M. 6th 59499, J. B. Withers, Missouri City, Mo. 85
Moss Creek Bell 47796, Geo. Sweitzer. 85
Maple Leaf Black Plume 49133, Chas. 145
Grapewood Vesta, Chas. Sweitzer. 70
Adelaide S. 22982, J. W. Van Orsdal, Bicklin, Mo. 81
Bluegrass Ridge Mabel 63029, Halbleid Bros. 11 Bros. 11
Mascot of Williamsdale 62087, B. Huber, Belton, Mo. 75
Maple Leaf Fairy Queen 42234, Chas. Sey, Edwards, MO. 100
Cordie of Williamsdale 62085, Chas.
Sweitzer. 70
Moss Creek Duchess 34129, Halblelb
Bros. 60

Bros. 100 Black Pride of Maplewood 53540, H. C. Carls, Carbondale, Kans. 100 Jumbo 2d 62599, A. J. Lane, Rich Hill, Arthur Boy Vo. 13, D. B. Williams. 65
Lexington Boy Vol. 13, D. B. Willllams. 55

A Combination Berkshire Brood-sow Sale.

Breeders of Berkshires and farmers who are admirers of that breed because of their great vitality and prolificacy will be glad to know of the announcement of a combination sale of thirty-three head of Berkshire brood sows to be held at Tampa, Kans., on Monday, February 29. This sale is remarkable in several respects. In the first place it occurs on February 29, in the second and more important place it is the only large sale of Berkshire bred sows that is announced for Kansas in the near future and it will this magnificant bred to secure new farmers to get started with a breed that will make them money. The sale will be held by J. M. Rhodes & Son and Will H. Rhodes, the latter of whom is manager. Kansas State Agricultural College, where acquired the training which has enleid him to build up one of the best

herds of Berkshire swine in the West, and where he partially acquired that integrity of character which makes his statements on any subject absolutely reliable. This sale will be held in connection with a farm stock sale which will inclue eight head of farm horses, one of which is a pure-bred Percheron colt. It will also include 100 head of high-grade Galloway cattle and three registered head of Galloway bulls of choice breeding. There will be six head of registered Hereford bulls, one of which is an Armour importation. The farm implements will also be sold. The terms of the sale will be cash without discount on all sums under \$10. On sums of \$10 or over, twelve months' credit will be given on bankable paper at 10 per cent, with a reduction of 7 per cent if the notes are paid when due, or a 3 per cent discount for cash. The catalogue shows the finest lines of breeding, including several litters out of Elma Lady 4th 4468, for which Mr. Rhodes paid the highest price ever paid in the Kansas City fine stock pavillon for a Berkshire hog. Some of her pigs won the State prize at the American Royal in 1902 and several of the litter mates of these prize-winners will be included in this sale. In addition to this great muscular power and activity, Berkshire sows are careful nurses and good sucklers, hence their pigs are always strong and when matured the flesh is of the highest quality containing a larger portion of marbled lean and fat than any other breed. Write Will H. Rhodes, Tampa, the Col. J. N. Burton, Tampa, or to I. D. Graham, of the Kansas Farmer.

The Wheat-belt Combination Sale.

The Wheat-beit Combination Sale.

The Impreved Stock-breeders Association of the Wheat Beit, with headquarters at Caldwell, Sumner County, Kansas, will hold a combination sale on March 3 and 4, 1994, that will include Shorthorn, Hereford, and Galloway cattle, Percheron horses, and Poland-China and Duroc-Jersey hogs. The secretary of the association is Mr. Chas, M. Johnston (Route 3), Caldwell, Kans., and catalogues may be had by addressing him. The Kansas Farmer office is now decorated with a large sale bill of true sunflower color announcing this great sale, and we take pleasure in calling attention to it because it is the first annual sale of an association that is built just right. The animals offered are of the best breeding and each contributor has promised to have them in good condition for the sale. The breeding lines included in the Hereford offering embrace The Grove 3d, Beau Brummel, Cherry. Boy, Corrector, Hesiod, Printer, Horace, Lord Wilton, Beau Real, Archibald, Stone Mason, and others of like quality.

There are but two Percheron stallions offered, both of which are Brilliants bred by C. Spohr.

The Galloways are offered by S. M. Croft & Sons, Bluff City, Kans., who are

by C. Spohr.

The Galloways are offered by S. M. Croft & Sons, Bluff City, Kans, who are destined to be the biggest Galloway men in the West if they maintain their present gait, All of their offerings are sired by Kilroy and are good enough to go in any company. Three of them are bulls and three cows. This offering will doubtless attract great attention from buyers. In the Shorithorn offerings will be found the blood of Lord Mayor, Kirklevington Duke, Duke of Airdrie, Golden Knight, Royal Gloster, Gallant Knight, Scott Junior, Lord Lieutenant, and others.

Scott Junior, Lord Lieutenant, and others.

The Poland-Chinas in the offering are consigned by Mr. J. R. Roberts, Deer Creek, Okla., and include Tecumseh, Wilkes, Hadley's Model, Proud Perfection, Chief I Know, and like blood lines.

The Durocs will be represented by but two animals, one by Victor Hugo and the other by Geronimo. This sale will be the first attempt made by this association and a personal acquaintance with many of the breeders gives assurance that while their herds are not large as yet their offerings will be of good quality and extra fine breeding lines because they have begun right.

Annual Meeting American Berkshire Association.

At the annual meeting of the American Berkshire Association, for 1904, held at Springfield, Ill., members were present from Illinois, Indiana, Iowa, Missouri, and North Carolina.

The reports of the officers show the past year to have been the most prosperous in the history of the organization.

The financial report of the secretary

was as follows:
RECEIPTS.
Cash on hand January, 1903 (last
Entry fees received for the year
Transfer feers received for the
year 1903
Sale of blank forms for pedigrees,
etc 480.00
Sale of herd-books 136.00
Sundry Items
Sales of stock 475.00
Total\$10,697.47

Total	910 607 47
DISBURSEMENTS.	\$10,091.41
Purchase of stock	1,531.00 62.00
Printing volumes of record	167.50
Expenses of directors' annual	1,171.05
meeting	172.05
Publishing transfers	25.00
POSIGLES.	125.23
Stationary and supplies	77.45
Miscellaneous printing	359.42
Office furniture and fixtures	222.95
Express and sundries	96.75
Blank books for sale	62.40
Insurance	13.12
Expenses of directors' meeting	50.60
Chicago.	17 95
Cash in treasury December 21, 1903,	2,509.50
Total	10,697.47

As compared with last year's report, the receipts for entry fees was mearly 33 per cent greater. There was also a considerable increase in the amount received for transfer fees and blank books. Volumes 20 and 21 were printed during the year. Volume 22 containing 5,009 pedigrees, will close early in February. Work on the printing of this volume is now well under way.

The following new members were received during the year: Henry W. Blanke, St. Louis, Mo.; F. D. Crane, Mt. Sterling, Ill.; E. H. Dancer, Lamoni, Ia.; H. C. Davidson, Elbridge, Tenn.; Wm. Edwards, Plymouth. Fla.; Filston Farm, Glencoe, Md.; B. Harris, Pendleton, S. C.; W. R. Holt, Falls City, Neb.; J. K. Honeywell, Lincoln, Neb.; C. J. Huson, Penn Yan, N. Y.; W. I, Johns, Baldock, S. C.; J. L. Letterle, Harrods Creek, Ky.; W. F. Lillard, Lawrenceburg, Ky.; Wyman N. Lovejoy, Roscoe, Ill.; J. W. Martin, Richland City, Wis.; Māssouri Fruit Co., Pomona, Mo.; John Mulrhead, Pawnee City, Neb.; C. E. Nims & Son, Humboldt, Neb.; J. M. Overton, Nashville, Tenn.; H. T. Pancoast, Purcelville, Va.; James Qurello, Independence, Mo.; Riggs Bros., Middletown, Ind.; Washington Agricultural College, Pullman, Wash.; J. W. Weljs, Bentonville, Ark.; George F. Weston, Bitmore, N. C.; Wisconsin Experiment Station, Madison, Wisl.; and The Yampa Live Stock & Land Co., Hadyele, Colo, Two thousand dollars was appropriated for special premiums at the Universal Exposition, to be divided as follows:

First—Boar, 2 years old or over, \$40, \$25, \$30, \$25, \$30, \$20, \$15, \$15.

Fourth—Boar, 12 and under 12 months, \$40, \$35, \$30, \$25, \$30, \$20, \$30, \$15, \$15.

Fifth—Boar, under 6 months, \$40, \$35, \$30, \$25, \$30, \$20, \$30, \$35, \$15.

Fifth—Boar, under 6 months, \$40, \$35, \$30, \$25, \$30, \$20, \$30, \$35, \$30, \$25, \$30, \$20, \$30, \$35, \$30, \$25, \$30, \$20, \$30, \$35,

A Thousand Jacks.

A Thousand Jacks.

John L. Jones, Columbia, Tenn., one of the most prominent breeders of jacks in the South, and owner of the well-known Dalsy Stock Farm, has been awarded a contract with the United States Government to inspect and purchase for the Government a cargo of blooded jacks, for use in the new island possessions. The number to be purchased will the something like one thousand. Mr. Jones is the sole judge of fitness, quality and value of the animals. He has already begun purchasing, and has quite a number of jacks at Dalsy Stock Farm, Hear Columbia, fitting them for passage across the ocean.

Owing to the hardships that are suffered by stock in making long voyages on the water, a peculiar system has been inaugurated by Mr. Jones for the purpose of hardening the flesh and muscles of the animals, so that they will suffer as little as possible the hardships of transportation. The system is that of jack-racing. Every day the jacks are given a thorough run at the farm, and it is proving to be a fine developing system.

The Government paid Mr. Jones the compliment of giving him carte-blanc in purchasing the animals, all of which will be paid for with vouchers on the Government signed by himself, which will be final, without any endorsement or investigation. Mr. Jones is making every purchase with critical exactness, and his collection, when completed, will brobably be the finest lot of jacks ever seen on the continent.

The Leavenworth Poland-China Sale.

The Leavenworth Poland-China Sale.

On Friday, February 26, at Wilson & Baker's barn, Leavenworth, Kabs., will be held a combination sale of Poland-China swine by H. M. Kirkpatrick, Wolcott, Kans.; John Bollin, Route \$ Leavenworth; Leon Calhoun, Potter; and M. S. Babcock, Nortonville. All of the consignors to this sale are well known as breeders of the best that is known to the Poland-China herd book. Mr. Kirkpatrick's herd is headed by Perfection. Now, who is a candidate for the championship at St. Louis, and by Harmonizer, the great Ideal Sunshine boar which helped to make Joe Young's herd famous. John Bollin's herd is headed by Black Perfection, a standson of Missouri's Black Chief and by Slick Perfection, a grandson of Perfect Perfection, Leon Calhoun's herd is headed by Perfection's Fancy Chief, a grandson of L's Perfection and Chief Tecumseh 3d. M. S. Babcock's consignment is headed by the herd boar, Frank 31261 by L's Perfection 2d. The cows offered are bred to these boars and to Corwin Improver, which

gives an offering of about the best that can be brought together. A recent visit to the herd of Mr. Kirkpatrick showed us that his offering is the best that he has ever made in a public sale, and this is saying a good deal. His sale stuff is in good condition, growthy, and mellow, and are bred in the purple. Last year Mr. Kirkpatrick was so occupied with public duties as to interfere with his personal attention to his herd. This year they have had the care of the master's hand and it is the hand of a master in the art of breeding. Every consignor to this sale is so well known that the guarantee offered in the catalogue of the sale will be taken at once as absolutely good; hence when they guarantee that if any animal sold in the sale proves not to be a breeder, the price paid will be refunded if the animal is returned to the seller in good condition, we know that it will be done. The sale will be under cover and buyers will be entertained free at the National Hotel, which is the best one in Leavenworth. The terms of the sale are cash for amounts of \$25 and under. Bankable paper at 7 per cent, payable in six months, or 2 per cent discount for cash, will be taken for sums over \$25. Leavenworth is easily reached by any one of nine railroads or by the trolley line from Kansas City. Mall bids may be sent to the auctioneers, Cols. J. W. Sparks, J. N. Harshberger, and John Daum, or to I. D. Graham, of the Kansas Farmer, in care of John Bollin, Leavenworth.

Gossip About Stock.

Messrs. Dietrich & Spaulding, Richmond, Kans., have recently sripped a fine sow to C. R. Vithum, Independence, Mo.; a fine boar to Golden Bros., Gavland, Kans., and a very fine boar to head the herd of Woodford Bros., Burlington, Kans.

S. C. Bartlett, Wellington, Kans., writes that he has sold out of Chester White hogs and Bronze turkeys for the present, but that he has left a few young Red Polled bulls and heifers to sell. Sales generally have been quite satisfactory.

The greatest importation of Galloway cattle during recent years was made by O. H. Swigart, of Champaign, Ill., whose importation arrived early in January this year. He informs us that he has a catalogue about ready for distribution which will be sent to those interested who request it.

E. P. Sherman, Wilder, Kans., reports that his herd of Poland-Chinas is in splendid condition for breeding purposes



SEED CORN

SEED OATS.—They are trip town of all Farm and Garden seeds mailed descriptive catalog of all Farm and Garden seeds mailed Fire Iryou mention this paper.

RATEKINS, SEED HOUSE.—SHPINNOGAH 10004

RATEKIŃS' SEED HOUSE, - SHENANDOAH, IOWA.

NO MORE BLIND HORSES.
For Specific Opthalmia, Moon Blindness, and other ry Co., Iowa City, Ia. have a sure



HEWTON'S Heave, Cough, Distance and Indigestion Cure.
A veterinary specific for wind, throat and atomach troubles.
Strong recommends. 11.00 per cn. Dealers. Mailor Rx. paid.
The Newton Remedy Co.,
Toledo, Ohio.

DIETRICH & POLAND-CHINA SPAULDING BREEDERS-

OF RICHMOND, FRANKLIN CO., KAS. OF RICHMOND, FRANKLIN CO.. KAS.
Have for sale 5 very choice glits safe in pig to U. C.
Perfection and D's Ideal Sunshine Boars; one last
April Keep On boar with large bone, deep body,
mellow feliow—a herd-header; one by Ideal Perfection, the \$450 son of Ideal Sunshine; he is an extra
good one; one by Mo.'s Black Perfection, the \$2,500
boar of P. & G., Pekin, Ill.: and this fellow
is out of dam by Chief Perfection 2d; look
after him, for he is a herd-header. A sure good
July boar by U. C. Perfection and out of
Dietrich's Choice, the \$145 daughter of Mo.'s
Black Perfection; a splendid lot of iai boars, with
large bone and good finish. Do not wait, but write
before the other fellow gets them.

DON'T BUY GASOLINE ENGINES Until you have invest tigated "THE MASAt we-cylinder gasoline engine, superior to all one-cylinder engines. Costs less to buy and less to run. Quicker and easier started; has a wider sphere of usefulness, of the started on any light wason as a portable. Weights less than half of one-cylinder engines. Give size of engine required. Especially catalogue. THE TEMPLE PUMP CO., Mergher and 18th Streets, CHICAGO, ILL.

and he now has twenty-five bred sows and gilts due to farrow between now and May 1. Having been bred to five good herd-headers, he thinks he can offer some very choice bargains to intending pur-

A. G. Dorr, breeder of Duroc-Jehsey swine and S. C. Brown Leghorn poultry announces that he is entirely sold out of spring boars and bred sows and gilts and has now for sale only choice fall pigs and fifteen Single Comb Brown Leghorn cockerels. He also states that he has had splendid sales as a result of his card in the Kansas Farmer.

An unusual opportunity to secure a splendid herd of Herefords is now offered by T. F. Ziegler, La Harpe, Kans., who owing to press of other business, will dispose of his entire herd of Hereford cattle consisting of fifteen breeding cows, two herd bulls, and about twenty-five young bulls and heifers. These cattle will be priced very low if buyers will go and see the cattle. The best blood of the breed is represented in the herd.

E. A. Daughterty, Garden City, spent a few days in Topeka recently and white here bought a car of pure-bred stock, including the black Percheron stallion, Favorite, and the standard-bred stallion, Diamond Dick, of C. B. Samson. Also a number of Galloway cattle from Geo. M. Kellam, Richland, and a few Poland-Chinas from H. W. Cheney, North Topeka. The class of pure-bred stock purchased are of the kind that will add to the improved stock interests of Finney County.

The eighth annual sale of horses, cattle, and swine, held on the 16th and 17th inst., by W. H. Cottingham & Sons, Mc-Pherson, Kans., was a successful event notwithstanding the prevailing bad weather. The forty-four head of horses, twenty-four of which were unbroken, sold for an average of \$100. Eight Shorthorn cows made an average of \$33.25. Thirteen Poland-China sows sold for an average of \$25, top price being \$40. Fiften gilts average \$15.46, or a general average of \$20 for the Poland-Chinas. The total amount realized at the annual sale was \$5,750.

Recently we had a report of the results of the dispersion herd of Galloway cattle by J. S. Goodrich, Goodrich, Kans., who on account of declining years concluded to retire from business and in his announcement he said: "Having been a breeder for twenty years I feel I amparting with tried friends. I can truthfully say that during each of these twenty years Galloway cattle have made money." The principal buyers of this herd were the following Kansans: H. R. Callen, Leoti; J. A. Manley, Mound City: Robert Lockwood, Wall Street; W. C. Proctor, Garnett: C. Burnett, Goodrich; Wm. Howell, Wichita: Mrs. A. Marston, Leoti; P. A. McRae, Farlinville.

Manwaring Bros., proprietors of the Ridgeway Farm of Berkshires, Lawrence, Kans., seem to be doing a continuous performance in the selling of Berkshires, and writes as follows: "Mr. Sheerer, of Cawker City, paid us a visit last week and purchased for A. Clingman, of Cawker City, a fine boar of last July farrow. We also shipped a bred gilt to Don A. Peaslee, Glen Elder. Also two bred gilts to C. Blackler, of North Topeka. We have less hogs on hand than we have had at any time for three years. Stock are all healthy and doing well and we anticipate a brisk trade on pigs of spring farrow and are looking for some very fine pigs from our new herd boar, Forest King."

The twentieth annual sale of pure-bred Shorthorns from the Elmwood herd owned by F. M. Gifford, Milford, Kans., will be held at Manhattan, Kans., March 8, 1904. This offering consists of thirty-five head of choicely bred Shorthorns, which includes nineteen cows and helf-ers, all bred or with calves at foot by the Cruickshank bull, Red Gauntlet 3d 149507. The bull offering consists of four-teen young bulls of serviceable age, all reds and big, strong, lusty fellows, choicely bred several of which are unquestioned herd-headers. Every Shorthorn breeder is cordially invited to be present at this twentieth anniversary sale and the offering Mr. Gifford thinks will be creditable from a breeder's standpoint. For catalogue address, F. M. Gifford, Milford, Kans.

T. K. Tomson & Sons, Dover, Kans., report as follows on Elder Lawn Shorthorns: "We have been making an inventory of stock on hand and summing up the working condition of the herd. We find our herd was rever in better condition and never harder at work. We have fifty calves under 12 months of age, all dropped on the farm and all but one by American Royal prize-winning bulls, and the one exception is cut of a heifer that won at the Royal. We think this a pretty good showing for one crop of calves. As a lot they are by far the best crop we have ever had. The bulls, of which there are twenty-two, are all out of good cows, and among them are several that are very promising. Trade has been very good and the prosent demand is strong. We have several very good bulls of serviceable age yet for sale and would also like to sell some bred cows, some of them having calves at foot. The price at which this stuff is offered is very low, quality and breeding considered. We would be pleased to have Kansas Farmer readers who are desiring to purchase anything in our line correspond with us, or better still, come and see us.

Referring to the advertisement of the joint sale of horses, cattle, and swine by J. M. Rhodes and Will H. Rhodes, to be held at Tampa, Kans., on Monday next, February 29, Mr. Rhodes has the following to say regarding the Berkshires: "The tried brood sows and glits are great producers of large, uniform litters and the breeding is the best to be had. In this sale there will be four daughters and two sons of Imp. Elma Lady 4th, the highest-priced sow sold in the combination sale at Kansas City. Also one daughter and two sons of Imp. B. of Biltmore, one of the very best sows of the breed in the State. Thees two herds were started with ten sows that cost \$735 and only the best herd boars have been in use, such as Lord Premier 5th 55577, Rutger Judge 2d 61106, Elma King 66056,

THE KANSAS FARMER.



Dealer's PROFIT is Your LO

Thirty Days Free Trial.

You are to be the judge, If you are not perfectly satisfied you can return the fence to us at our expense and your money will be refunded. No conditions attached except that you give the fence a fair trial.

woven, having no cut wires to become unfastened. This method of weaving with all continuous wires furnishes the greatest possible amount of strength from the wire used. Write today for our Free Fence Book, illustrating and describing 23 styles of fence Also telling all about the fairest offer ever made. WE PAY FREIGHT on 40 rods or more. Your name and address on a postal card will bring our fence book with Wholesale Prices.

Advance Fence Company, 3723 Old St., Peoria, III.

and King Biltmore. The sows will be sold in good breeding condition, in proper form to make money for their new owners. Sows are all safely bred to one of the foregoing named sows. The sale will take place at Clear Spring Stock Farm, five miles northwest of Tampa. For catalogue address, Will H. Rhodes, Tampa, Kans.

Please notice change in Dietrich & Spaulding's advertisement on page 213 of this issue. This firm, so well known among the breeders of the West, always mean just what they say in their advertisements and we wish to have you notice that they are advertising some choice glits bred to those two noted herd boars they have at head of their herd. U. C. Perfection is by the great Perfect Perfection and from a strong bred Perfection dam, making him a "re bred Perfection. He is a State fair winner, so necessarily a grand individual. D's Ideal Sunshine is another line-bred boar of the Black U. S. family, his sire being Ideal Sunshine and his dam Harmony by Frazie's U. S. The boars they advertise are good enough to head extra good herds and their breeding is unsurpassed. Write them at once. them at once.

One of the most prominent winners at the great Eastern horse shows last fall and winter was got by the famous sire, Perfection, the old French Coach premier which has stood so long at the head of the French Coach stud at Oaklawn Farm, Wayne, Ill. This prize-winning saddle horse was got by Perfection out of a mare by Mambrino King and much is expected of him this coming season. Another colt begotten by Perfection from a Mambrino King mare was sold at a long price to the Mikado of Japan and is now doing service in the Imperial Stud in the Island Empire, where he was placed to do his share toward improving the horse-stock of the Islands. Messrs. Dunham, Fletcher & Coleman, have at Oaklawn Farm, Wayne, Ill., just at present a line of imported and home-bred French Coach stallions that can not fall to do much toward increasing the supply of the elegant carriage horses so eagerly sought for yet so hard to obtain. The get of Perfection champion of two continents and his matchless son, Paladin, and of many of the foremost sires of France are offered for sale. Percherons, too, of course of the highest class, and Belgians of colossal scale are in offer by this firm. Get its catalogue for the asking.

Our representative made a recent visit to the Poland-China herd of 350 animals of Ziegra Bros., three miles south of McCune in Cherokee County, Kansas, who have for herd-boars those royal chiefs of the most purple blood, Ideal Perfection 30680, which combine the best strains of Perfection, Ideal, Sunshine, Black U. S., and Climax blood, tracing direct with but one or two generations to those great sires, Chief Tecumseh 2d and Missouri Black U. S.; with such royal dams in their herd as Sultana 74890, sired by Chief Perfection from Perfect I Know, first at Kansas City as a yearling, and topped the sale at \$255; Dude's Lady 181956, first at Iowa State Fair and Kansas City Royal in 1892; Young's Perfection 67337 bp Perfection L., son of Chief Perfection, out of dam by Chief I Know, and many others as good which I have not space to mention. While their herd does not show extra fat animals, they show swine in their natural state, running loose in large yards, in good condition and perfect health, and all the highdoes not show extra lat animals, they show swine in their natural state, running loose in large yards, in good condition and perfect health, and all the highest and purest purple blood of the Poland-China that the writer has ever seen. On March 31 they will sell at Parsons, Kans., about sixty head of gilts, sows, and young boars of this herd, and breeders wishing to infuse fresh blood of the most royal strains of Poland-Chinas into their herds should attend and make their selections at this sale.

We call attention to the new advertisement of the double-standard Polled Durham and Poland-China herds of D. C. Van Nice, of Richland, Shawnee County, Kans., whose herd was visited by a Kansas Farmer representative last week, and we feel that intending purchasers in his line will be pleased with the high quality of stock he is offering. He now has for sale one double-standard Polled Durham bull, 14 months old, weighing from 900 to 1,000 pounds, sired by Duke of Rose Pomona, third dam, Carmen, sired by Commander, grandam Dorothy, all true double-standard Polled Durhams. This bull is a grand one, deep red in color, straight back of great breadth through back loin, flank, heart, and lungs, equal in blocky type to the 8-months bull that sold for \$260 at the Shorthorn sale at Ottawa, February 10, and a better bull to head a herd because of greater age. His dam, Carmen, has a 2-weeks-old calf by

her side, strong and lusty, but her milksupply is so great that she gives a surplus over what the calf takes of one and
one-half gallons at each milking, and the
grandam is also famous as a milker.
Any one wishing to breed for both beef
and milk could not do better than to put
this bull at the head of their herd. His
Poland-China herd is of the same type
as his cattle herd. The best of the royal-purple Poland-China blood-lines with
broad backs, good length, short, broad
noses, wide, deep chests, square shoulders, wide and deep hams, all on short,
firm legs of good-sized feet and bones.
Of these he has a few sows and gilts
bred to Prince Henry 66955 for sale at
private treaty. Write him.

Americans in Canada.

Americans in Canada.

During the past year about 50,000 Americans went from the United States to Canada. Most of these settled upon farm lands, and the writer is informed by agents of the Canadian Government that the greatest success has followed the efforts of nearly all. To their friends on this side of the boundary line the fullest assurance is given of the prosperity that is in store for them. There will always be a splendid market for all the grain, cattle, and other produce that can be raised in western Canada, and with the advantages offered of a free homestead of 150 acres of land, and other lands which may be bought cheaply, an excellent climate, splendid school system, educational advantages of the best, what more is required? The husbandman gets more return for money than in any other country in the world.

On the occasion of Sir Wilfrid Laurier's visit to the Corn Exchange, London, Eng., Colonel Montgomery, V. D., made several important statements. "The function (he said) which you have just been assisting in connection with a kindred association has doubtless shown you the importance of the provision trade of Liverpool, in its relationship with the Dominion, and the enormous possibilities of the future development of that trade. Well, the grain trade of Liverpool has interests with Canada no less important than those of the provision trade. When it is borne in mind that 80 per cent of the breadstuffs of this great country has to be brought from abroad, you will readily appreciate with what great satisfaction we view the large and steadily increasing supplies of grain which are annually available for export from Canada, and I challenge contradiction when I say that of the wheats we import from Russia, India, the Pacific, and the length and breadth of the United States, none gives more general satisfaction, none is more generally appreciated than that raised in the Province of Manitoba. We can not get enough of it, and it is no exaggeration to say that there are before us now dozens of millers who hu

Salzer's Home-builder Corn.

Salzer's Home-builder Corn.

So named because 50 acres produced so heavily that its proceeds built a lovely home. See Salzer's catalogue. Yielded in 1903 in Indiana 157 bushels, Ohio 160 bushels, Tennessee 98 bushels, and in Michigan 220 bushels per acre. You can beat this record in 1904.

What do you think of these yields?—120 bushels Beardless Barley per acre; 310 bushels Salzer's New National Oats per acre; 80 bushels Salzer's Speltz and Macaroni Wheat per acre; 1,000 bushels Pedigreed Potatoes per acre; 14 tons of rich Billion Dollar Grass Hay per acre; 60,000 pounds Victoria Rape per acre; 160,000 pounds Teosinte, the fodder wonder, per acre; 54,000 pounds Salzer's Superior Fodder Corn per acre.

Now, such yields you can have, Mr. Farmer, in 1904, if you will plant Salzer's seeds. Just send this notice and 10 cents in stamps to John A. Salzer Seed Co., LaCrosse, Wis., and receive their great catalogue and lots of farm seed samples.

Those of our readers who desire to buy goods direct by mail should not fail to see the advertisement of Voorhees & Garretson, 13 School St., Boston, who are giving away a free pin to those who buy goods through the mails. Look up their advertisement and write them for particulars.

ALL FRUITS Always Your Ask us what a dollar will bring you in all varleties Apples, Pearle, Peaches, Plums, Cherries, Grapes and All Kinds of Small Fruits.

Some Special Collection Offers, all prices low. Our rigorous climate and rich soil development for any region. Hardy, strong rooted healthy. Freight paid on 510 orders. Catalogue and due bill good for 250 Free. Ask for them. FAIRBURY NURSERIES, BOX L, FAIRBURY, NEB.

Shorthorn Cattle FOR SALE.

100 to 125—your choice of 170, very low if taken soon. All well-bred and pure-bred. Fifty registered and eligible. Particulars on application.

Sycamore Springs, Butler Co., Kans.

FOR SALE Registered Hereford Cattle

OWING to press of other business, I will disperse my entire herd of Herefords, consisting of about 15 breeding cows, 2 herd bulls, and about 25 fine young bulls and heifers. These cattle will be priced where they will move, if you will only come and look at them. The best blood of the breed represented in this herd. Write me your wants. T. F. ZIEGLER, La Harpe, Kas.

PUBLIC SALE

21-Grade Percherons and Driving Horses-21



Also five good registered Scotch-topped Shorthorn bulls. Sale will be held at Perry, Kans., on Saturday, February 27, 1904. The horses are good, 3-year-old, grade Percherons and the drivers are well broken and ready for business. This will also afford an opportunity to secure some good Scotch-topped Shorthorns.

J. F. TRUE & SON, Newman, Ks

RED POLLED CATTLESALE

Desiring to establish annual a tion sales of our thoroughbred stock, we with hold the first sale consisting of

20-HEAD-20 REGISTERED RED POLLS

Both bulls and heifers, 8 to 16 months old, at SPRINGFIELD, MO., at 2 o'clock p. m.,

Wednesday, Mar. 2, 1904

Sale will be held at Price's Wagon Yard, which is only four blocks from railroad depots, and one-half block from the Market Square.

L. K. & S. C. HASELTINE, Dorchester, Greene County, Mo.

Send for Catalogue.

Anything can be raised from a farm easier than a mortgage.-E. P. R.

of the soft

hands too well to

need to guess, and

Brange Department.

"For the good of our order, our country and mankind."

Conducted by E. W. Westgate, Manhattan, to whom all correspondence for this department should be addressed. Papers from Kansas Granges are especially solicited.

Mational Grange.

Aaron Jones, South Bend, Ind.
ecturer. N. J. Bachelder, Concord, N. H.
lecretary. C. M. Freeman, Tippecanoe City, Onlo

Master E. W. Westgate, Manhattan
Overseer J. C. Lovett, Buoyrus
Lecturer Ole Hibner Olathe
Steward R. C. Post, Spring Hill
Assistant Steward W. H. Coultis Richland
Chaplain Mrs. M. J. Ramage, Arkansas City
Treasurer Wm. Henry Olathe
Secretary Geo. Black, Olathe
Secretary Geo. Black, Olathe
Pomona. Mrs. M. J. Allison, Lyndon
Ceres Mrs. M. J. Allison, Lyndon
Flora Mrs. L. J. Lovett, Larned
L. A. S. Mrs. Los Radeliff, Overbrook
Executive Committee.

W. G. Obryhim.....Overbrook

W. G. Obryhim, State organizer, reports four granges organized in five weeks with an aggregate of 192 members, including the best farmers in the localities. Two of these granges are in the southeastern part of Anderson County, one in Linn, and one in Allen County. This work of Brother Obryhim shows that the fields are ripe for the harvest and only work is necessary for the reaping.

The Grange Bulletin Company, of Cincinnati, offers to send the Bulletin to ten persons not members of the Grange three months for \$1. I earnestly recommend subordinate granges and individuals to accept this offer and secure this valuable grange paper as a help towards bringing in desirable additions to our members. Select ten names or as many more as you please at ten cents a person, of those whom you would like to see within pur gates, send names and money to the Grange Bulletin Company, 127 E. Third Street, Cincinnati, Ohio, and then near the close of the three months follow up this with personal solicitation. And just one word more: When sending in this list of non-members, accompany it with another list of members at fifty cents each for one year and secure the best grange paper published.

Past Achievements; Present and Future Work of the Grange.

AABON JONES, MASTER NATIONAL GRANGE, IN A RECENT ADDRESS.

The master of the National Grange said, in part:

To chronicle the achievements and state the present and future work of the Grange would require a volume, not a brief talk. The Grange was the first National fraternal order that recognized woman by admitting her to a full participation in all rights and privileges on terms of equality with men. It did not invite her to a silent seat in its meetings, but asked her to take part in its councils by voice and vote. Her finer perceptions and intuitions and the refining influence of her presence gave to our meetings and discussions of the questions, "How to make happier and more prosperous homes," "Improve social and educational conditions," "Elevate the standard of citizenship," an interest and benefit that could not otherwise have been se-

The development of noble principles of manhood and womanhood in the minds and hearts of the vast membership of this order, wherever the grange-school has been established and the membership have taken advantage of the opportunities it affords, will be found on every hand, as evidenced in the elevating and refining influence made manifest in more prosperous, better, and happier homes, in more intelligent, united, and harmonious neighborhoods. Who can say what benefit this has been to those communities, to the country, and to the world?

In matters of finance, through wise cooperation in fire insurance, many millions of dollars have been saved to the farmers. In nearly every State the Grange has secured the enactment of laws making it possible for farmers to organize mutual fire insur-

ance companies. In our own State of Indiana, the Grange secured the passage of the law of 1877, and the amendments thereto in 1883. Under these laws about fifty farmers' mutual companies have been formed, saving in this State alone \$4,000,000. One company, organized under this law, has saved more than \$100,000 to the farmers of St. Joseph County.

In life insurance, in many States laws have been secured and mutual companies organized that have been almost equally successful with fire companies.

Co-operative creameries, corn-husking and shredding companies, and livestock improvement associations, have been a means of great profit and saving to the farmers. If co-operative laundries and bakeries were established also, our over-burdened housewives would rise up and bless the Grange for relief from these exacting duties that come to every home, especially in this day when domestic help is so hard to get.

In matters of legislation, the Grange has standing to its credit the elevation of the Department of Agriculture at Washington to a position equal to other departments of the Government, with its chief a member of the President's Cabinet, thus securing to farmers a voice in the affairs of the Nation. This great boon was secured after a hard fight of twelve years, as was also the Grout bill, protecting the dairy interests against the frauds practiced of selling oleomargarine as pure country butter.

It was the Grange that raised the question that Congress had power over interstate transportation companies, and had the right to fix freight rates. The question was carried by the Grange to the Supreme Court of the United States, and secured the decision that all corporations were subject to legislative control. On this decision the Interstate Commerce Law, saving hundreds of millions, and the Sherman Anti-trust Law rest.

Along the line of equalizing and cheapening transportation charges, the Grange stands for "opening out the channels in nature's great arteries, that the life-blood of commerce may flow freely," such arteries as the Mississippi, Ohio, Missouri, Hudson and Columbia, and other great rivers and waterways of our country, and the building of a ship canal uniting the Mississippi River with the Great Lakes and the Great Lakes with the Atlantic Ocean.

The Grange also successfully fought the slide-gate and driven-well patents, and saved the people millions of dollars that were being extorted from them by so-claimed royalties. Through the influence of the Grange on Congress the extension of the patents on sewing-machines was prevented, saving to the people millions of dollars annually.

The establishment of free delivery of mail was the result of Grange influence. Last year, for this service, \$12,000,000 was appropriated, and on June 30, 1903, there were 15,119 rural routes in successful operation, and the Postmaster-General estimates that by June 30, 1904, there will be 24,500 routes, with about 11,000 applications on file. He also states that if the rural carriers' salaries are raised, as they should be, he will ask for \$19,000,-000 for this service from June 30, 1904, to June 30, 1905. The value of this service to the country can not be stated in dollars and cents, but to farmers alone it is worth hundreds of millions of dollars, besides the increased value of country real estate caused by rural service.

There is now pending in Congress the Grange Good Roads bill, No. 18,765. In a conference held by leading Senators and Representatives recently, it was agreed by them that the bill drafted by the Legislative Committee of the National Grange was and is the best bill on this matter now pending in Congress. The enactment of this bill into law is a practical application (to farmers) of the principle of appropriations for rivers and harbors, coast surveys and aid in the construction of trans-continental railways, and of the Panama Canal, and other ap-

propriations of a like nature. Farmers must ask for recognition and demand their due share when the Government is distributing aid to other interests and industries.

There is also pending in Congress bill No. 6,273, giving additional powers to the Interstate Commerce Commission to pass upon exorbitant charges and discriminations and protect the rights of the people against arbitrary and unjust practices of transportation companies.

The pending pure-food law, 6295, if enacted and enforced, will prevent the adulteration of foods and medicines, and compel honesty in dealing. The pending bill establishing parcels-post will be of incalculable advantage and benefit to the people. This bill is opposed by the express companies of the United States and by the retail merchants' associations. These companies and these supposed private interests should not stand in the way of the passage of a law so beneficial to the great masses of the people. Senators and members of Congress should stand by the people, and not stand for the private interests of the few.

The consolidation of the forestry interests of the country into the Department of Agriculture, and safeguarding it to prevent the enormous frauds now being perpetrated under the present laws, and to save the forestry of our country for the benefit of future generations and to conserve moisture and climatic conditions so essential and beneficial for the agricultural interests of this country, are matters of great importance.

Many other pending interests that farmers are vitally interested in are now, and in the near future will be, considered by Congress; and it will be one of the duties of this Order to see that these various measures have due and fair consideration.

In the States is the question of just and equal taxation, just and fair distribution of the school funds, and equally as good schools in the country as in the city. In short, it will be always the duty of this Order to see that the farmer is accorded fair treatment in legislation and in business; and also to develop agriculture by the application of thought and business methods to the farm, making agriculture more profitable and restoring it to what God intended in the beginning, to the end that no occupation should be more honorable than that of agriculturle, through education. study, thought, investigation, experiment, to develop the best and most exalted type of manhood and womanhood and citizenship.

The above is but a fraction of the work done by this Order, and but a hint of what remains to be done in the future work of this organization. Yet so important and necessary does it seem to me, that I can not understand how any farmer can withhold his personal influence and active cooperation by uniting with the Order and aiding in its work, and thus advance his own interests, and the interests of this country.

Boma, in the Congo Free State, has a road nearly 150 miles long, which is practicable for automobiles.



for the moment she enters into the playful spirit of the child and forgets her toil and weariness. Then sudden movement sends a thrill of path through her and she realizes that though love may lighten labor it cannot lighten

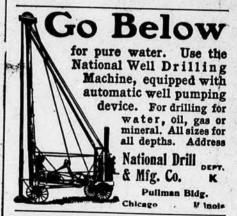
Thousands of women who have suffered from backache, headache, and other consequences of womanly disease, have been made well women by the use of Dr. Pierce's Favorite Prescription. It establishes regularity, dries unhealthy drains, heals inflammation and ulceration and cures female weakness.

weak ness.

"I cannot say enough in praise of Dr. Pierce's Pavorite Prescription as it has done me so much good," writes Mrs. Henry Harrell, of Tarbord, N. C., Box 100. "I was swollen so I could hardly walk when I began taking the 'Favorite Prescription.' I also had uterine trouble and could neither eat nor sleep only as I took morphin. Tried four different doctors and they all failed to do me any good, so one of my friends recommended your 'Favorite Prescription' to me and I took only three bottles and am now well and hearty. 'Can do almost any kind of work."

Dr. Pierce's Pleasant Pallets are the

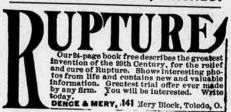
Dr. Pierce's Pleasant Pellets are the most desirable laxative for delicate women.



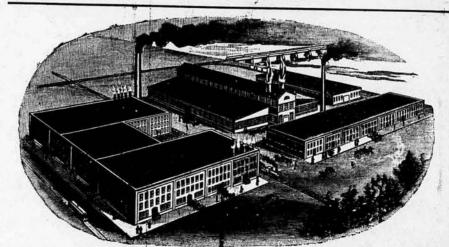
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The Houng Folks.

CONDUCTED BY RUTH COWGILL.

ODE FOR WASHINGTON'S BIRTH-

Welcome to the day returning,
Dearer still as ages flow,
While the torch of faith is burning,
Long as Freedom's altars glow.
See the hero that it gave us
Slumbering on a mother's breast;
For the arm he stretched to save us,
Be its morn forever blest!

Hear the tale of youthful glory,
While of Britain's rescued band
Friend and foe repeat the story,
Spread his fame o'er sea and land;
Where the red cross, proudly streaming,
Flaps above the frigate's deck,
Where the golden lilies gleaming
Star the watchtowers of Quebec.
Look! the shadow on the dial
Morks the hem of deadlier strife;
Days of terror, years of trial
Scourge a nation into life.
Lo, the youth became the leader!
All her baffled tyrants yield!
Through his arm the Lord has freed her;
Crown him on the tented field.

Vain is empire's mad temptation— Not for him an earthly crown; He whose sword hath freed a nation Strikes the offered scepter down. See the throneless conqueror seated, Ruler by a people's choice; See the patriot's task completed; Hear the father's dying voice.

By the name that you inherit,
By the sufferings you recall,
Cherish the fraternal spirit;
Love your country first of all;
Listen not to idle questions,
If its bands may be untied:
Doubt the patriot whose suggestions
Whisper that its props may slide.

Father! we whose ears have tingled With the words of doubt and shame, We, whose sires their blood have mingled

In the battle's thunder-flame,
Gathering, while this holy morning
Lights the land from sea to sea,
Hear thy counsel, heed thy warning,
Trust us, while we honor thee.

—Oliver Wendell Holmes.

Bonny Prince—The Autobiography of a Collie Dog.

MARION SEWELL.

MARION SEWELL.

CHAPTER XIII.—OLD SHEP.

"And what are you thankful for, Addie?"

"I'se thankful that we got old Shep."
A ripple of laughter went round the Thanksgiving board and 4-year-old Addie Osborn opened wide her eyes in wonderment. Then one of the guests asked, "Is that old Shep lying there watching us with such a sorrowful expression?"

"That's old Shep," answered Addie,
"and he'd be the best dog in the world
only—"

"Only for what?"

"He cries at night," and the quaint little girl holding a spoonful of pudding a few inches from her mouth regarded me with a mixture of admiration and pity.

The merry jests which followed the child's brief explanation were cut short by Farmer Osborn himself, who, pushing his plate back, neglected his dinner for a little while as he told the following story in praise of my services:

"Well, everything considered, I think we all have reason to be thankful that we came across Shep. You'll hardly believe it, but he's taken a man's place on this farm ever since he came here, three years ago. Addie was a mere baby then and that dog watched over her with a care which was both touchand and amusing.

"Shortly after he came I went into the sheep-business, starting with a flock of one hundred, and hiring two men to herd them; but it seemed impossible for the animals to be kept within bounds, and in a couple of months I had scarcely a neighbor that would speak to me, for they had naturally concluded that I brought in a lot of hungry sheep to pasture them at other people's expense!

"I was about giving up in despair when I thought of the dog which had during this time been proving himself so intelligent and useful about the house.

"I brought him out one day and told him just what I wanted, where the sheep were to go and where they must stay. After that there was no trouble; every morning the flock was taken to the meadow and every evening brought back; always at the same hour and never a break in their file." Then Mr. Osborn smiled at me and said,

"In winter Shep does chores and

looks after the general welfare of the family."

The guests were interested listeners to the rehearsal, while the six Osborn children and their mother beamed with delighted approval.

"And where did you get such a valuable dog?" queried a stout lady in whose eyes I had evidently gained favor.

Farmer Osborn then told of the gypsies who had plundered his granaries while he enjoyed a few weeks' summer outing, and how the "goodwife" missed some of her best Bronze turkeys and yellow-legged chickens, and how he had taken the dog as part payment for his loss.

"I sometimes feel a little guilty," he concluded, "for acting so hastily, as I have been since assured that the dog is worth money—much more, I am afraid, than the worth of the stolen grain and fowls."

"Do not let your conscience trouble you," remarked one of the guests, "the dog never cost the gypsies anything; of this you may be sure."

"Swiped old Shep, didn't they, papa?" commented Addie, innocently, and the Thanksgiving dinner ended as it had begun, with a laugh at my loyal little friend's expense.

When Christmas-time came around, the gayest of the Thanksgiving company returned, bringing with them the good cheer belonging to that happy season.

Aunts, uncles, and cousins stood near the well-laden Christmas tree, and after the presents were distributed (I was not forgotten), games and yuletide stories affored entertainment to all; but even when the merry-making was at its height I noticed that a cloud rested on the faces of Mr. and Mrs. Osborn.

I sat and looked at them for a long while, wondering how any one could be sad at such a time; then my eyes wandered to where 7-year-old Clay sat in a deep rocking-chair, taking no part in the boisterous games of the other children.

He was a pale little fellow, sflent and gentle, and my favorite in the Osborn family. He had not gone to school of late and now in the firelight he looked thinner than usual and I began to fear that there was a danger of his becoming ill.

Alas! I had good ground for anxiety. In another month Clay was not to be seen in his big chair, and the wise old doctor who came and went told the parents to be "hopeful," but he seemed unable to follow his own advice, for he always looked solemn and shook his head.

Then long weeks passed, weeks in which I was overlooked by every one; but I did not mind and I almost forgot my own trouble in sharing that of my friends.

One morning I heard a robin sing, and I gathered a vague inspiration from the sound of its voice, for I could not help but feel that with the coming of springtime our days would be brightened. And sure enough, while I was still listening to the shrill, sweet "cheer up," one of the older Osborn children came out of the house with a glad smile on his face and led me indoors. There I found Clay sitting before the fire, very pale and thin, as one might expect after his long illness; but there was life in the warm hand that stroked my head, and was that not satisfaction enough for the present?

Although the spirits of Mr. Osborn's family were greatly revived by the improvement in Clay's health, still there was a strangeness about things which puzzled me until that eventful day when I was again turned out into the big world to make my way, alone.

It was shortly after daybreak when the first buggy arrived, and some people began to come into the yard in such numbers that when the short, heavy-set man (spoken of as "auctioneer") mounted a large block, several hundred persons stood in front of him waiting to hear what he might say.

All kinds of farm stock, from "Cleopatra," the family driving horse, to "Speckle," the pet hen, changed ownership; a fact which I easily made out from the remarks of the auctioneer.

When those sales were concluded, Mr. Osborn turned to Roy, his oldest son, who had been a silent listener

A Matter of Health

There is a quality in Royal Baking Powder which makes the food more digestible and wholesome. This peculiarity of Royal has been noted by physicians, and they accordingly endorse and recommend it.

ROYAL BAKING POWDER CO., NEW YORK.

throughout it all, and said, "Now bring old Shep," whereupon Roy, bursting into tears and exclaiming, "I can't, I can't," ran wildly away.

Farmer Osborn, more businesslike if not less tender in his feelings, took hold of the strap which bound my neck and brought me to where I could be seen to advantage by the bidders.

As I crawled upon the block beside the auctioneer, there were murmured expressions about "thoroughbred," "trained," "fine Collie," but my mind was confused and I could make nothing out plainly.

The day, being in the early Maytime, was warm and sunshiny, but a cold wave went through and through me as I stood up before all those strange faces, and saw the numerous whips held by hands whose cruelty I might learn to know.

"Dollars! dollars! dollars!" How I trembled as the word was repeated again and again.

"A shame to let this beautiful Collie dog go at a sacrifice," chanted the auctioneer. After that the bidding was more enthusiastic. Then as one in a dream I heard—

"Sold to Cyrus Goldenheart, for \$10.60." The speaker's work was now done, and buttoning up his coat and pulling his hat down on his head he stepped off the block.

In a moment a strange man came and led me away.

(To be continued.)

Washington's Reverence.

Much of George Washington's firm strength of character was due to his splendid ancestry, as the following little anecdote will testify:

While reconnoitering in Westmoreland County, Virginia, one of General Washington's officers chanced upon a fine team of horses driven before a plow by a burly slave. Finer animals he had never seen. When his eyes had feasted on their beauty, he cried to the driver:

"Hello, good fellow! I must have those horses. They are just such animals as I have been looking for."

The black man grinned, rolled up the whites of his eyes, put the lash to the horses' flanks, and turned up another furrow in the rich soil. The officer waited until he had finished the row; then, throwing back his cavilier cloak, the ensign of rank dazzled the slave's eyes.

"Better see missis! Better see missis!" he cried, waving his hand to the south, where above the cedar growth rose the towers of a fine old Viriginia mansion. The officer turned up the carriage-road and soon was rapping the great brass knocker of the front door. Quickly the door swung on its ponderous hinges, and a grave, majestic-looking woman confronted the visitor with an air of dignity.

"Madame," said the officer, doffing his

cap, and overcome by her dignity, "I have come to claim your horses in the name of the Government."

"My horses?" said she, bending upon him a pair of eyes born to command, "Sir, you can not have them. My crops are out and I need my horses in the field."

"I am sorry," said the officer, "but I must have them, madame. Such are the orders of my chief."

"Your chief? Who is your chief, pray?" she demanded with restrained warmth.

"The commander of the American army—General George Washington," replied the other, squaring his shoulders and swelling with pride. A smile of triumph softened the sternness of the woman's handsome features. "Tell George Washington," said she, "that his mother says he can not have her horses."

With an humble apology, the officer turned away, convinced that he had found the source of his chief's decision and self-command.

And did Washington order his officer to return and make his mother give up her horses? No; he listened to the report in silence, then, with one of his rare smiles, he bowed his head.—L. R. McCabe, in St. Nicholas.

Washington's Preparation for Leadership.

The hand of Providence can not be more clearly seen in any human life than in the youth Washington's when he was turned from the sea and sent into the Alleghanies surveying on the south branch of the Potomac for Lord Fairfax, in 1748; it seemed unimportant, perhaps at the moment, whether the 10-year-old youth followed his brother under Admiral Vernon or plunged into the moaning forests along the Potomac. But had his mother's wish not been obeyed our West would have lost a champion among a thousand. As it was, Washington, in the two years of the first eighteenth century, made his acquaintance with the forests, the mountains and the rivers in the rear of the col-The tremendous silences thrilled the young heart, the vastness of the stretching wilderness made him sober and very thoughtful. He came in touch with great problems at an early, impressionable age, and they became at once life-problems with him. The perils and hardships of frontier life, the perplexing questions of lines and boundaries, of tomahawk and squatter claims, the woodland arts that are now more than lost, the ways and means of life and travel in the borderland, the Indian customs and their conceptions of right and wrong, all these and more were the problems this tall boy was fortunately made to face as the first step toward a life of unparalleled activity and sacrifice.—The Chautauquan.

For the Little Ones

WILLIE'S QUESTION.

Willie's QUESTION.

Where do you go when you go to sleep? That's what I want to know; There's lots of things I can't find out, But nothing bothers me so.

Nurse puts me to be in my little room And takes away the light; I cuddle down in the blankets warm And shut my eyes up tight. Ther. off I go to the funniest place, Where everything seems queer; Though sometimes it is not funny at all, Just like the way it is here. There's mountains made of candy there, Big fields covered with flowers, And lovely ponies, and birds and trees, A hundred times nicer than ours. Often, dear mamma, I see you there, And sometimes papa, too; And last night the baby came back from heaven,
And played like he used to do.

So all of this day I've been trying to think,
Oh, how I wish I could know Whereabouts that wonderful country is, Where sleepy little boys go.

—The Independent.

-The Independent.

Cheerful Davy and Humpty-Dumpty.

"Now I'm going to make a snow-man," cried Davy, rushing into the house and putting away his books. He was just rushing out again when his mother said, "The wood-box is empty, Davy.

"So it is. Well, I can fill it in a jiffy," he replied cheerfully, and he did. But as he brought in the last armful Grandma came into the room.

'You've come, have you, Davy?" she said. "I've been waiting for you. I wish you'd run down to the store and get me some blue yarn-I'm all out. Here's the sample."

Davy's face fell a little, but he answered pleasantly, "All right, Grandma!" and hurried away.

They were busy in the store and Davy had to wait quite a long time for the yarn. When he got home it was past five o'clock.

"I guess I won't begin my snow-man till to-morrow," he said.

The next night there was nothing for Davy to do but fill the wood-box; then he went out into the yard and began upon the snow-man. First he made some good legs. "I'm not going to have my snow-man wear a dress as some do," he said to himself.

By the time Davy had built up the short, stout legs and made a body, with snow-buttons down the front of the white coat, it was too dark to work any

"I'll finish him to-morrow," he said. The next day was warmer and the headless snow-man's legs grew weak in the sun. Finally one of them gave out entirely, and of course you know what happened then.

Davy looked almost ready to cry when he came home from school and saw the wreck, but concluded to laugh. "Humpty-Dumpty had a great fall," he said. "Next time I'll make him stronger—guess I'll call him 'Humpty-Dumpty.'" Then he began over again.

At dark the new Humpty-Dumpty was just as nearly done as the one before him. "I'll finish him to-morrow," said Davy again.

It was colder the next day and when he came home from school, Humpty-Dumpty still stood waiting to be finished.

But as Davy ran up the walk, Ponto cane bounding out to meet him. Humpty-Dumpty stood right in the Way, and in a twinkling down he tum-

"Now, Ponto! Just see what you've done!" Davy exclaimed with vexation. Then he laughed good-naturedly.

"You didn't mean to, did you, old fellow?" he said, patting the big dog's shaggy side. "Humpty-Dumpty was right in your path, wasn't he? Next time I'll put him in a corner."

So Davy began a new snow-man in a corner of the fence, and when it was dark the new Humpty-Dumpty was just as nearly done as the two others had been, and again Davy said, "I'll finish him to-morrow. It'll be Saturday," he added; "I can get him all done."

It was growing quite cold and the anow was beginning to fall as Davy went in. It snowed all night and the wind blew too. In the morning there Were big white drifts all about, and one of the very biggest was right in Humpty-Dumpty's corner, and of course he was completely buried.

It was a cold, windy day, and the

snow blew and flew, so Davy decided to wait till the next week before he tried again.

Monday was cold, too, but pleasant, and after school Davy began another snow-man and when it was too dark to work any longer there was just as much done on the new Humpty-Dumpty as there had been on the others, and Davy said once more, "I'll finish him to-morrow."

Nothing happened to Humpty-Dumpty that night or the next day, and after school Davy made his head with eyes, ears, nose and mouth. Then his arms were put on. For these, two short sticks were stuck into the sides of his jacket and covered with snow, which did not stay on very well, however.

For the last touch Davy set an old cap on his head and there stood his snow-man finished at last, and a funnylooking fellow he was—so very stout and so very short, not much taller than Davy himself.

The weather kept cold for several days and with a little patching up now and then, Humpty-Dumpty bravely stood his ground, and he was really a great deal of company for Davy.

Then the weather changed; it grew warmer, and warm weather does not agree with snow-men. Humpty-Dumpty got gradually thinner and one day when Davy came from school, where he had stood there was now only a melting heap of snow, two sticks, and an old cap.

"Poor old Humpty-Dumpty," Davy "All the King's horses and all the king's men couldn't make him stand up again, could they? Well, he and I had a good time. I shall make another snow-man some day."-Carrie A. Parker, in Exchange.

The Apiary.

Conducted by A. H. Duff, Larned, Kans., to whom all inquiries concerning this department should be addressed.

The National Bee-keepers' Association.

Objects of the association: To promote and protect the interests of its members. To prevent the adulteration of honey. Annual membership fee, \$1.00. Send dues

Annual membership tee, the control of treasurer.

Officers: W. Z. Hutchinson, Flint, Mich., president; J. U. Harris, Grand Junction, Colo., vice-president; George W. York, Chicago, Ill., secretary; N. E. France, Platteville, Wis., general manager and treasurer.

The Kansas State Bee-keepers' Association.

Officers: Dr. G. Bohrer, Lyons, Kans., president; E. W. Dunham, Topeka, Kans., vice-president; O. A. Keene, Topeka, Kans., secretary; J. J. Measer, Hutchinson, Kans., treasurer.

Annual membership fee, \$1.00. Send dues to treasurer. Official organ, Kansas Farmer.

Alfalfa and the Arkansas Valley.

Since alfalfa began to take the place of blue-stem and buffalo-grass the busy bee has been a source of profit in the Arkansas Valley. Previous to that time the swarms that were not fed in winter and fall were usually found dead in spring. I find that now in the Arkansas Valley can be found as many as four or five different varieties of the willow which furnish pollen and nectar for the bees, and these coming in early spring are a great help to the bees. The willows in connection with ms give the bees a good start, and then follows a slight vacancy between this and blooming time for alfalfa when the apiarist would do well to administer a little feed, and thus keep brood-rearing up to its utmost extent. Alfalfa begins to bloom in this locality about June 25, and after that time we have a very good honey-flow which consists principally of alfalfa, sweet clover, and spider-plant. The two latter have of late years just made their appearance here and are fast taking hold, and are going to be a great help to the beekeeper, especially the sweet clover.

I started the present season with twelve colonies, and increased during the season to twenty colonies, and took from them four hundred pounds of excellent honey, which consists principally of sweet clover. In regard to Bokhara clover, which we usually call sweet clover, I find that, in my locality, it is good for both pasty. Ind hay for

stock, and is in no manner an obnoxious weed, as some of our Eastern friends claim. It will be but a few years until the Arkansas Valley will be well stocked with it, and every one should welcome its coming.

I winter my bees by placing my hives close together and packing straw about them, and covering with roofing paper to keep the hives dry. My bees take but little of my time, and give me comparatively good profits.

Pawnee County. S. S. DICKINSON.

To Begin Beekeeping.

EDITOR KANSAS FARMER:-I am a subscriber to the Kansas Farmer, and a very much interested reader. I live in the city at present, but have a small tract of land near, and expect in a year or two to go onto it and raise poultry, fruit, alfalfa, etc. I want also to get a start in bees. I know nothing whatever about bees, and would be glad if you would advise me about starting and learning how to handle them. Would it be practicable for me to start with but a few colonies at first and at my home in town and thus experiment? What kind of bees should I buy and what price should I pay for good stock?

Wichita, Kans.

Your idea is certainly right. Get a few hives of bees in your city-place and experiment, and by the time you are ready to go on your farm, you will be ready to keep bees in any quantity you desire. Your locality is a good one for bees. Start by getting a good stock of Italian bees in the late Standard hives, and be sure you make no mistake about this, for if you get some odd hives that are not in the regular beaten path of successful beekeeping, you will surely have to change later on at a heavy expense if you wish to keep up with advanced beekeepers. Good, full colonies of improved stock of Italian bees in good hives will cost \$8 to \$10 per colony. Get a good work on bees, and study it and subscribe for some good bee journal. The Kansas FARMER apiary department will help

Questions About Bees.

EDITOR KANSAS FARMER:-I introduced an Italian queen to a colony last fall, but for some reason she became lost, and the introduction was a failure. I then gave them a frame of eggs from another colony which contained a full-blood queen, and the bees started several queen cells, and some hatched. There were drones in the same hive, perhaps some twenty or thirty, but none in the other hives. It turned cold soon after, and it is a query now if the young queen became fertilized. Is an eight-frame Standard hive with a half-depth super large enough for extracting? I use zinc queen-excluders to keep the queen below. Why did some of my extracted and comb-honey "foam?" I let it stand, and when it got cold it candied. It tasted good. . Will it sour when the weather turns warm again?

Crawford County. J. J. BURKE. Evidently, the introduction of your queen was not a success from some cause. It is to be supposed that you removed the original queen from the hive, or that you were sure the colony was queenless before attempting to introduce a new queen; but even if all the details were regular in this respect, it is not unusual to loose the queen in introduction. Owing to the fact that those young queens were hatched out so late in the season, I am of the opinion that the remaining young queen, if such there be, in the hive, is not fertilized; yet she may be, and you can tell by the presence of brood in the combs when the bees begin breeding, or the queen begins laying, which she will do now very soon. Such queens as these frequently turn out to be drone-layers, and you should be able to detect drone-brood from worker-brood. If a healthy young queen misses fertilization, she will in time begin laying eggs, but these eggs all hatch an inforior quality of drones, and of course she is no good.

In using the regular eight-frame hive

DEAFNESS CURED

A Device That is Scientific, Simple, Direct, and instantly Restores Hearing in Even the Oldest Person—Comfortable, Invisible, and Perfect

190-Page Book Containing a History of the Dis-covery and Many Hundred Signed Testimoni-als From All Parts of the World—SENT FREE.



The True Story of the Invention of Wilson's Common Sense Ear Drums Told by Geo. H. Wilson, the Inventor.

I was deaf from infancy. Eminent doctors, surgeons, and ear specialists treated me at great expense, and vail did me no good. I tried all the artificial appliances that claimed to restore hearing, but they falled to benefit me in the learn, but they falled to benefit me in the learn, but they falled to benefit me in the learn, but they falled to benefit me in the learn, but they falled to benefit me in the learn, but they falled to benefit me in the learn world, but their efforts were unavailing.

My case was pronounced incurable!

I grew desperate; my deafness tormented me. Daily I was becoming more of a recluse, avoiding the companionship of people because of the annoyance my deafness and sensitiveness caused me. Finally I began to experiment on myself, and after patient years of study, labor, and personal expense I perfected something that I found took the place of the natural ear drums, and I called it Wilson's Common Sense Ear Drums, which I now wear day and night with perfect comfort, and do not even have to remove them when washing. No one can tell I am wearing them, as they do not show, and, as they give me no discomfort whatever, I scarcely may be a serious of lecture from any part of a large church or hall. My general healt in my life, My sur Drums have made in my life. My sur dearly person to sur limit to life and the sound waves and life and the s

SCHOOL OF TELEGRAPHY Telegraphy thoroughly taught and posi-tions secured. Write us.

Missouri School of Telegraphy, Sedalia, Mo

for extracting, I would use a full-depth upper story. I have but little use for queen-excluders in extracting. Your honey simply candied on the approach of cold weather, which most extracted honey does, as also does lots of combhoney. No, it will not sour when warm weather comes.

The Some Circle.

CONDUCTED BY RUTH COWGILL. PAPA, WHAT WOULD YOU TAKE FOR ME?

She was ready to sleep, and she lay on

She was ready to sleep, and she lay on my arm,
In her little frilled cap so fine,
With her golden hair hanging out at the edge,
Like a circle of noon sunshine;
And I humm'd the old tune of Banbury
Cross,
And Three Men Who Put Out to Sea;
When she sleeplly said, as she closed her blue eyes:
"Papa, what would you take for me?"

And I answered: "A dollar, dear little heart,"
And she slept, baby weary with play,
But I held her warm in my love-strong

But I held her warm in my love-strong arms,
And I rocked her and rocked away.
Oh, the dollar meant all the world to me,
The land and the sea and the sky,
The lowest depth of the lowest place,
The highest of all that's high.
All the cities, with streets and palaces,
With the people and stores of art,
I would not take for one low, soft throb
Of my little one's loving heart;
Nor all the gold that was ever found
In the busy, wealth-finding past,
Would I take for one smile of my darling's face,

Did I know it must be the last.

So I rocked my baby, and rocked away, And I felt such a sweet content, For the words of the song expressed more

to me
Than they ever before had meant.
Than they ight crept on, and I slept and dreamed too glorious to be, Of things far too glorious to be, And I waken'd with lips saying close in "Papa, what would you take for me?" -Eugene Field.

WINGS OF A DOVE.

At sunset when the rosy light was dying, Far down the pathway of the West, I saw a lonely dove in silence flying

To be at rest.

Pigrim of air, I cried, could I but borrow

row
Thy wandering wings, thy freedom
blest,
I'd fly away from every care and sorrow
And find my rest.

But when the dusk a filmy veil was weaving,
Back came the dove to seek her nest,
Deep in the forest where her mate was
grieving—
There was true rest.
Peace, heart of mine! no longer sigh to
wander;

Peace, heart of the wander;
wander;
Lose not thy life in fruitless quest,
There are no happy islands over yonder;
Come home and rest.
Date D. D., in "The -Henry Van Dyke, D. D., in "The Builders and Other Poems."

Good Breeding.

An article in the Delineator seems worth repeating, because it emphasizes a point which is most important, i. e., that good breeding is acquired only in the home and therefore this, one of the most valuable factors in a child's education, is the responsibility of mothers and fathers. The article is by Mrs. Theodore W. Birney, honorary president of the National Congress of Mothers, who says:

There is so much to be gained through the exercise of good manners that it is amazing, in a world where success is such an idol, that greater attention is not given to training the young in this very important branch of education.

Genuine courtesy, thoughtfulness, consideration for others, are usually the result of what is termed good breeding and are most effective when practiced unconsciously or as a matter of course.

It is quite true that children are apt. to copy their parents both in principles and actions, and they acquire by example nothing so easily as good or bad manners. There are a few resolutions which parents should repeat each day, and one of them is this: "If I wish my children to be thoughtful and considerate of me and polite to others I must be thoughtful and considerate of them and polite to all with whom I come in contact." In no other phase of home life is example more potent.

In the simple matter of requests, how few people there are, comparatively, who throw any graciousness into their manner of asking favors of children. For instance, a group of women were engaged in preparations for a lawn fete for the benefit of some charity; the dress of one of them had become disarranged in her arduous efforts in decorating a booth, whereupon she turned to the woman nearest her, saying with a very pleasant smile, "Mrs. Blank, I'm so sorry to trouble you, but have you a pin and will you please fasten this ripped place for

me?" A moment later she called out in a peremptory tone to a small boy who was having a grand time with a lot of other youngsters on an adjacent lawn, "Johnnie, come here this min-Very reluctantly the little fellow sidled up to her, when she continued, Go straight up to the house and get that ball of twine on my writing desk. Now, don't dilly dally; I need it right away."

"But, mama," Johnnie protested, "it's so far to the house, and I've been six times already this morning; can't you wait until we come back from lunch?"

"Certainly not; go this instant, or I will tell your father not to take you to the football game on Saturday."

Another mother, on a similar occa-

"Henry, dear, mama is so sorry to take you away from your game, you seem to be having such a nice time, but I can not hang these beautiful Japanese lanterns until I have more twine. Will you please help us out?" adding with a smile, "Let me see, there are twelve lanterns and only this tiny scrap of string."

"Off went Harry at a run to do his mother's bidding, and if his childish mind could have expressed in words what he felt it would have been something after this fashion: "I'm a great boy to help people; my mother tells me all the time she does not know what she would do without me. She's so sweet, I don't care if I have been to the house six times; those lanterns have to be hung, and I'm the fellow to get the string." This is no selfglorification; he is simply expanding under the influence of recognition and affection; he is glowing with the joy of service; he is but feeling as we all do in an atmosphere of appreciation. Contrast his state of mind with that of Johnnie, who performed his errand with rebellion in his heart and heaviness in his footsteps.

It is the hundred and one small courtesies that add to daily life its sweetness and charm. It is not enough to be merely polite; children should see graclousness as well in the manners of those about them. To the mother who realizes that her home is lacking in this essential I would say: Do not be discouraged; begin to-day; and try the effect of extreme courtesy in your own conduct. If there are members in the household older than yourself, make your consideration toward them so marked that it can not fail to impress the children. Always offer them the most comfortable chair in the room; ask them if the light is agreeable, etc. If you have been negligent in such matters, you will have to overdo in the beginning in order quickly to establish a standard for the children.

The first requisite of good manners is self-forgetfulness. I have seen people whose social opportunities had been extremely limited appear to better advantage than those who had been accustomed to the usages of polite society all their lives, simply because they had no desire to outshine or impress other people, were good listeners and observant enough not to commit a breach of manners.

Politeness in the home should be a matter of course, and equally a matter of course should be appreciation. A pleasant sense of obligation should pervade all the household. If Kate has taken a little of her allowance to purchase flowers for the dining table or sitting-room, it is well for mama to say before all the family: "Kate, your flowers are beautifud; it is very sweet of you to give all of us the benefit of some of your pin-money." This will bring a little glow of satisfaction to Kate's heart and will be suggestive to the other children.

I recently heard a party of six or seven women commenting on the lack of manners among children. It was the experience of each that their friendly salutations to the children of their acquaintance were either ignored or received but scant recognition. One woman said: "I try to be charitable in my judgments of all children, but I must confess there are some who rather repei than attract me. Many appear so indifferent that my heart always goes out to two little girls whom I frequently meet and who always give me a smile and bright greeting."

It is usually a lack of training that makes children habitually negligent in this direction, though we must always bear with the shy, timid child or the dreamy, absend-minded one, whose thoughts may be far away even while she looks at you.

The shy and self-conscious child is at a serious disadvantage, for he is often too timid to do the thing he knows is proper. Such a child should be frequently praised, and opportunities afforded him to express himself in play and word and action.

One mother secured immediate and happy results in several directions by losing no chance to praise judiciously the manners of those about her. For example, she said to the children:

"Whom do you think I met this morning? Little Thelma D-, and what a dear little girl she is; she always gives me such a pleasant smile and bow, I really enjoy meeting her. I hope you always speak to mama's friends as pleasantly as she does to me." It is quite true that grown people are very often remiss in the matter of speaking to children. I once heard an old gentleman express enthusiastic admiration for a friend of mine, closing his remarks by saying, "Even when she was a little girl she never passed me on the street without a pleasant bow." When I told my friend of this she laughed heartily and said her reward had come after many years; she said her bows were received with such indifference that at first it required some courage to continue them. After a time, however, it became such a matter of course to her to bow pleasantly to him that she never stopped to consider his manner of response.

This is the great secret of the best manners. It is the being polite as a matter of course; nowhere does habit stand one in better stead.

Almost all affectation, save that which has its origin in a species of nervousness, arises from a desire to impress people one way or another, and children should be carefully guarded against this demoralizing tendency. It is one thing to desire the approval and affection of those around us; it is quite another to assume various affected poses in an effort to obtain them.

When children are urged to be polite and thoughtful the primary motive should be the simple one-because it is right; secondly, because it makes others happy and comfortable as well as themselves, and lastly, because only through the exercise of true courtesy can they win love and friendship.

Parents often do their children serious injustice by criticising or speaking harshly of their relatives, neighbors, or acquaintances in their presence. Such conversation, though the child may comprehend little of it, prejudices his mind and unconsciously affects his manner when he is thrown with the objects of his parents' disapproval. Children can not discriminate and are likely to confound criticism of trifling faults with serious condem-

nation. Refined table manners are an almost invariable accompaniment of good breeding; they are more difficult of acquirement and retention than any other class of manners, since children are usually blessed with good appetites. To restrain these at table, to teach the child to eat slowly, to masticate thoroughly each morsel of food, to hold knife, fork, and spoon properly, to take but a sip of water at a time instead of gulping down a tumblerful-all these things require unceasing attention on the part of parents or caretakers.

Some Delicate Deserts.

Chocolate Cream.—Heat 4 cups milk and pinch of salt; when hot add 3 tablespoons of flour; after it thickens, add yolks of 3 eggs, beaten to a cream with 3 tablespoons of sugar; cook a few minutes, and when done add 1 teaspoon vanilla. Beat the 3 whites stiff, add 3 tablespoons of sugar, then 3 tablespoons of grated chocolate. Spread it on the cream and brown it in the oven.

Floating Island.—Beat well the yolks of 4 eggs, add 5 tablespoons of sugar, and stir it into 1 quart of sweet milk; when cool, flavor and pour into a dish. Heap upor '+ the 5 well-beaten whites,

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For all Billous and Nervous Disorders
Such as Sick Headache, Wind and Pain in the Stomsch, Dizziness, Drowsiness, Chills, Flushings of
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Pansies side by side, each a different color? If s
you know that the effect is charming. Did you ev
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What every farmer needs. Thousands are using them. Simple. Complete. Printed headings for every item of a farmer's business. Three books in one. Good for eight years' business. Sent by mall on receipt of \$2.00. CENTRAL SUPPLY Co., 1618 Walnut St., Topeka, Kansas.



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FIT ALL PUMPS. Merits sell them. FULLY
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to which a little sugar is added, and 1/2 cup jelly. Dot with bits of jelly.

Rice Dessert.—Spread rice that has been cooked quite thick, on a plate; spread over it a layer of strawberry jam, then a layer of rice on top. Sprinkle powdered sugar on top and serve with cream.

Rice With Custard.—Boil 2 cups rice in 4 cups water, with a little salt; when done turn into small cups. When cold turn them onto a dish. Make a boiled custard with yolks of 2 eggs, 2 cups milk, and 1 teaspoon of cornstarch; flavor with lemon. When cold pour it over the rice-balls.

Banana Custard.—Make a plain boiled custard as follows: Bring 2 cups milk to the boil; beat the yolks of 3 eggs, add 3 tablespoons of sugar, a pinch of salt, and beat well; add the boiling milk slowly, and cook till thick; when partly cool stir in 1/2 teaspoon of vanilla or any other flavoring preferred. One-half teaspoon of cornstarch dissolved in a little cold water and boiled with the milk will prevent the custard from curdling, which it is sometimes apt to do. Pour over bananas cut in small slices. Beat and sweeten the 3 whites and drop it by teaspoonfuls into hot water. Take out of water at once and put over the custard.

Thoughts Worth Thinking.

Live for something. Do good and leave behind you a monument of virtue that the storm of time can never destroy. Write your name in kindness, love, and mercy, on the hearts of thousands you come in contact with year by year. You will never be forgotten. No, your name, your deeds, will be as legible in the hearts you leave behind as the stars on the brow of evening. Good deeds will shine, as the stars of heaven.-Chalmers.

Club Department

OFFICERS OF STATE FEDERATION OF WOMEN'S CLUBS.

Our Club Roll.

Mutual Improvement Club, Carbondale, Osage County (1895).
Give and Get Good Club, Berryton, Shawnee County (1902).
Woman's Literary Club, Osborne, Osborne County (1902).
Ladies' Reading Club, Darlington Township, Harvey County (1902).
Woman's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage woman's Club, Logan, Fillings County (1902),
Domestic Science Club, Osage, Osage
County (1888).

Ladies' Crescent Club, Tully, Rawlins
County (1902).

Ladies' Social Society, No. 1, Minneapolis, Ottawa County (1889).

Ladies' Social Society, No. 2, Minneapolis, Ottawa County (1889).

Ladies' Social Society, No. 3, Minneapolis, Ottawa County (1891).

Ladies' Social Society, No. 4, Minneapolis, Ottawa County (1891).

Cales' Social Society, No. 4, Minneapolis, Ottawa County (1897).

Chalitso Club, Highland Park, Shawnee County (1902).

Cultus Club, Phillipsburg, Phillips
County (1902).

Literatae Club, Ford, Ford County
(1903).

County (1902).
Literatae Club, Ford, Ford County (1903).
Sabean Club, Mission Center, Shawnee County, R. R. No. 2 (1899).
Star Valley Woman's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, R. R. No. — (1903).
Fortnight Club, Grant Township, Reno County (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County.
The Lady Farmers' Institute, Marysville, Marshall County (1902).
The Woman's Progressive Club, Anthony, Harper County.
[All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.]

Many a Little Makes a Mickle.

From the interesting reports of country clubs and their more or less elaborate programs published in our club department, it has seemed as if we had too little to report in comparison, and still there has been "something doing" in the Chalitso Club. (Of late Years I have tried to be too dignified to allow myself the luxury of slang, but when anything so expressive as "something doing" comes along, it comes to stay and we might as well enjoy welcoming it.)

Kansas History still claims our attention and though none of us are very proficient, we have had profitable gatherings. One member says: "It is much easier for me to read before the club than it was," and she can speak

for her side of the question before the club, too. A very enjoyable and helpful feature of the season has been our visitors. One felt herself handicapped in her chosen work by lack of age and experience! Bless her dear soul! they will both be with her soon enough.

The editor of this department brightened one day for us as you know from the kindly and encouraging notice she gave us. It was so good, too, to hear of her visits to other clubs, and though she pointed to some differences in methods, she pictured them all so alike as social helps with uplifting tenden-

Later, Mrs. M. M. Hale, who has so long been the president of W. T. K., that consists mostly of women of the first ward but also enough from the country beyond and from Topeka on the south of the beautiful Kansas River to make it a bond of sympathy between the different localities, gave us a very interesting and instructive talk on "Clubs and the Club President."

January 28 was our regular meetingday, but we met, only one day ahead of time, to celebrate Kansas Day, Mc-Kinley day, and incidentally, the natal day of the president of our club. One of our guests contributed to our program the following appropriate original poem:

TRIPLE WORTHIES. (In celebration of their natal day.) THE EAGLE-McKINLEY. THE EAGLE-MCKINLEY.

The eagle looked out from his erie,
And listened with glad amaze,
As ringing from summit to summit,
And echoed in roundelays,
Came tones of his own heart's music
From a nestling 'mong the braes;
With a sparkle of force and freshness,
Like his own undaunted gaze,
And the notes and the sparkle grew
stronger stronger Till lost in the far-away maze.

SUNFLOWER-KANSAS. Strong on her stem she standeth,
Prolific, nor fearing storm;
If the elements beat on her sorely,
Handsome, erect of form,
She riseth again to duty,
And waving her graceful arm
She scattereth golden blossoms
O'er the wayside, hamlet, and farm.

THE PANSY-MRS. OTIS. Beautiful, sweet-lippt heartsease,
Fairest of many flowers,
Bending thy head to the verdure
Gracing thy rustic bowers;
Typical thou, of the matron,
Whose virtues adorn the hours
Given to life's allotment,
In sunshine, and in showers.
—S. Hargraves.

Mrs. J. F. True, of Newman, gave us a graphic description of some picturesque scenery in that neighborhood and made us all wish we were on the eminence from which we could see both Mount Oread at Lawrence and the capitol at Topeka, but not that we were of the Mormons who once had a way-station in that vicinity, though, womanlike, our hearts were touched by

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An External Cure So Sure That the Makers Send It FREE ON APPROVAL. Try It.

Send your name and address to the makers of Magic Foot Drafts, the great Michigan cure for every kind of rheumatism—Chronic or Acute, Muscular, Sciatica, Lumbago, Gout, etc., no matter where located or how severe. You'll get a pair of the Drafts by return mail-paid—free on approval.

If they give relief, send them a dollar; if not, keep your money.



Magic Foot Drafts are worn without inconvenience and cure rheumatism in every part of the body by drawing out the poisonous acids in the blood through the great foot pores. You can see that this offer is proof of their merit, for hundreds of thousands of persons answer these ador thousands of persons answer these advertisements, and only those who are satisfied with the benefit they receive, send any money. Write to-day to Magic Foot Draft Co., F. E. 27 Oliver Bldg., Jackson, Mich., for a trial pair and be cured. A valuable illustrated book on rheumatism also sent free.

the romance of a poor old man who once was young and left the earthly form of the beloved of his youth to moulder in the earth on this eminence.

But here I am ahead of the program. should have brought you in facing the patriotic shield, the husband of one of our members made, that all who came must needs read. Great white letters on a crimson background reminding us that only through difficulties should the stars be reached. The daughter of another member brought beautiful water-color sunflower badges, enough for not only all of the members but all of the guests, who outnumbered the club itself.

The program committee furnished yellow cottonwood- and crimson oakleaves on which each person present wrote or pasted or printed her answer to roll-call, and what a loyal roll for Kansas it was! These were sort of after-dinner toasts, all to Kansas, as they were preceded by sewing and dinner.

After these (the president's address and what I have told you of) came a very graceful and inspiring talk from Mrs. Horton, president of the federation of Women's Clubs of Topeka, who, while she gives full credit to the clubs for the good they have done, would like to see more every-day help and less of the aesthetic in the future or, as she so aptly puts it, "More plain sewing and less embroidery."

Since beginning this there has come to me a thought of how we might accomplish county federation, which is so strongly recommended by Mrs. Horton, Mrs. Prentis, Mrs. Bradford, of Colorado, and the editor of our department in the Kansas Farmer.

Since the latter talked to us about it, it has looked enjoyable, but O, so far away, when our individual club needed more time than we could spare.

How would it do for each club to drop one day from its program and take that day to meet other Shawnee County clubs and talk the matter over? Each club could appoint their best talker to present the phase of club-life that had been most helpful to them. This, and the discussion would fill one day Highland Park schoolhouse has an assembly-room large enough to hold us all, a dining-room furnished with primitive tables and seats, dishes and cutlery to match, and is easy of access by the Vinewood cars for those who do not drive, or who live in any of the other suburbs. I am in no way officially authorized to invite you to meet us there, but in thinking over the members, I can think of none who would not like it. What do the other clubs think of it?

Through all winter we have felt a little behind other country clubs. Thinking back over our pleasant meetings, the visitors we have had, what they have said to us of club aims and club achievements, the message from Mrs. Thorp assuring us that even the little we have done has helped her in her good work, we are sure the time has been well spent. I am glad we tied a comfort and sent to her on Kansas Day, and, too, just a little proud to sign myself CHALITSO SCRIBE.

A plague of white ants is devouring the wooden houses in New Orleans.

Deafness Can Not Be Cured

by local applications, as they can not reach the diseased portion of the ear. There is only one way to cure deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the eustachian tube. When this tube gets inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give one hundred dollars for any case of deafness (caused by catarrh) that can not be cured by Hall's Catarrh Cure. Send for circulars, free.

F. J. CHENSY & CO., Toledo, O. Sold by druggists, 75c.

Con page 215 will be found the advergence of the county of the advergence of the cause of the sadvergence.

On page 215 will be found the advertisement of Willis' Nurseries in which they are making a special offer that will doubtless interest many many of our readers. We desire to say in addition to this that Willis' Nurseries have been established for many years and have won a reputation for the good quality of their goods and for fair dealing of which they may be proud. Notice the address in the advertisement and write them for their new spring catalogue.

Good lamp-chimneys one make my name on 'em all. MACBETH.

How to take care of lamps, including the getting of right-shape chimneys, is in my Index; sent free.

MACBETH, Pittsburgh.

WE WILL PAY HALF YOUR EXPENSES TO INVESTIGATE

WE WANT RESPONSIBLE MEN, with cash, to act as bone fide agents for a fuel saving apparatus to put on any stove or furnace. We want to correspond with men who mean business; who will take the agency for this money saver after they see with their own eyes how it does it. To such men we will pay half of their expenses to our office. Now don't write and use our time unless you're a hustler and mean to do business. You needn't worry about our being able to convince you — your own eyes and common sense will do that, Look us up in Bradstreet's—then write us.

CONSUMERS SUPPLY CO.

Bept. A, 490 - 493 Gricaheim Building Bleomington, Illineis



FREE GOLD CLOCK

This haadsome gold clock absolutely free with an order from our catalogue. Write at once, get a catalogue clock, and the agency for our extensive line of goods.

CROWN MFG. CO. Manufacturing Jewelers (Wholesale) 84 Wabash Ave., - CHICAGO, ILL

THE BALTIMORE FIRE

Has destroyed our office, with all its contents. Therefore, for the next few weeks I can not send out maps and literature about Mary and, as they must be reprinted. Meanwhile I shall be a da to answer letters or receive callers at our new offices.

HER MAN BADENHOOP. Secreta y State Board of Immigration, 233 Park Ave., Baltimore, Md.

WRITE ME

For list of Missouri and Kansas farm lands or first-class Kansas City improved and vacant property, either for a home or investment.

J. T. ROBINSON, 405 Mass Bldg., Kansas City, Mo.

A BUSINESS PROPOSITION with bank references \$65,000 in 7 months; no speculation: send stamp for particulars. FLOYD T. COOM, Sec., Milton, Wis.

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Bend for price list and FREE catalogue of Wire
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Build your own fence
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A HOT PROPOSITION!

To introduce our Sali-Bearing Steel Forges, Malleable Iron Vises and Blacksmith Tools for farmers use we will make special prices. Ship on approval. Prepay the freight. Write today for special offer. We'll save you money. Diplomas from Iowa, Nebraska and Kansas State Fairs. C. R. Harper Mig. Co., Box 105, Marshallto



Miscellany.

Corned Beef.

EDITOR KANSAS FARMER:-Will you please tell me in the Kansas Farmer how to put up corned beef? I put up some last year and lost it. A. FLAGG. Pratt County.

The following rule for corning beef will be found an excellent one, but can not be guaranteed to preserve the meat a full year unless it is kept in a very cold ice-house in warm weather. Corned beef was never intended to be kept so long a time, says the New York Tribune. It deteriorates rapidly in flavor after it has stood in salt and water many months, and is not as good at any time as meat eaten fresh, for the juices are extracted by the process of corning. There is always a great loss of nutritive value when beef is corned. The process is only intended for family use and not for the butcher's trade, although butchers often dispose of their surplus beef in this way.

The plate, navel, and brisket pieces make the best corned beef, and can not be used in any other way, except for stewing. The rump is the most expengive plece used for corning, but it is not as satisfactory as the brisket in which the fat is evenly mixed with the lean, and there is usually some proportion of bone. The brisket is always chosen by good housekeepers for pressed corned beef.

To corn fifty pounds of beef, add to four gallons of cold water four pounds of fine rock salt, two ounces of saltpeter and two pounds of brown sugar and mix these ingredients together and let them dissolve. The brine may be boiled up once to mix it more thoroughly together, but it must be ice-cold when used. Equal parts of molasses and sugar may be used instead of brown sugar.

Before the meat is placed in the brine it should have been treated for a couple of days to a week, according to the weather, by rubbing with a mixture composed of half an ounce of saltpeter and an ounce of brown sugar to a pound of salt. Rub the mixture all over the meat a number of times during the day, and keep it on an inclined board, so that the blood and brine can drain from it. When the blood has all dripped from the beef it is ready to corn. Care should be taken to see that the beef is absolutely without taint. Butchers sometimes attempt to use tainted meat in this way. Nothing could be more foolish as the corning does not, in any way, hide the fact that it is tainted, and the process of decay goes on, apparently, in spite of the corning.

When the beef has been in the brine for five or six days it is ready for use. It may be kept in this brine, or may be smoked, like ham or bacon.

A Wonderful Business.

Possibly there is no line of industry in the United States that has grown in such proportion in recent years as that of general advertising, which includes publicity in newspapers and magazines and outdoor display advertising, and through its tremendous force the entire basis of modern merchandising has been revolutionized.

The Chicago papers of the current week devote much space and time to the wonderful growth of the advertising business as a whole, and that of Lord & Thomas in particular, owing to the retirement of Mr. D. M. Lord, the senior member of the firm, who leaves active business life with a rich competence.

The business of Lord & Thomas has been one of the most aggressive and progressive of its kind in the country, having in recent years been under the active management of Mr. A. L. Thomas, whose judgment on advertising matters is considered as authoritaive by the vast body of publicity users. Mr. Thomas has succeeded Mr. Lord to the presidency and will continue at the head of the firm.

Mr. C. R. Erwin, the new vice-president, has been connected with the company for twenty years and is therefore a veteran in the field; assoclated with him and Mr. Thomas is Mr. A. D. Lasker, the secretary and treasurer.

To give some idea to the public of the growth of advertising as a whole, it might be stated that in two years the business of Lord & Thomas alone has increased one million dollars in the billing, and in the one month of January in 1904 this firm has booked \$750,000 in advertising contracts.

Thirty-five years of wide experience in handling the publicity of a large proportion of America's most successful advertisers have fitted Lord & Thomas to give most judicious and profitable service to enterprising business firms in every line.

"Speaking of the big show which is to come off at St. Louis reminds me of an interesting thing I came across in an old schoolbook the other day," said a man who is fond of old records, "and it shows, among other things, that 'the world do move.' The book is an 'ancient and modern geography,' and was apparently printed in 1820. Here is what it has to say of Louisiana: 'Louisiana is divided into the State and Territory of Louisiana. The Territory is of great extent: but its boundaries are so indefinite that they can not be given.' The towns are given as 'New Orleans, St. Louis, Arkansas, St. Genevieve, New Bourbon, and New Madrid.' The rivers put down as being within the State are the Mississippi, Red, Arkansas, White, St. Francis, Missouri, and 'also many others little known.' It is added that the Mississippi is the principal river of Louisiana, and one of the two largest in North America. It rises in the unexplored country northwest of the United States. It is generally deep and rapid, and seldom more than a mile wide."-Ex.

The profit to the Government on pennies pays the entire expenses of the mint.

The Beterinarian.

We cerdially invite our readers to consultius whenever they desire any information in regard to sick er lame animals, and thus assist us in making this department one of the interesting features of the Kansas Farmer. Give age, color, and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to realize through this column are free. In order to receive a prompt reply, all letters for this department should give the inquirer's post office, should be signed with his full name, and should be addressed to the Veterinary Department, Kansas Farmer, To peka, Kana, or Dr. N. S. Mayo, Manhattan, Kans,

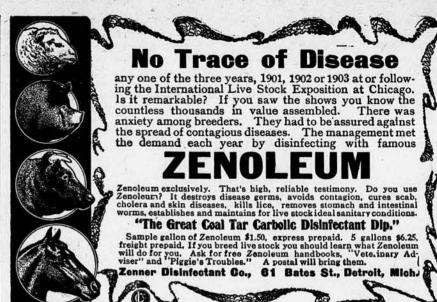
Ailing Boar.-I have a young registered Duroc boar that at times refuses to eat, and at no time does he eat a good meal. His bristles stand on end. I have tried a physic and various other remedies, but without success. Can you advise me? J. McC. Stockton, Kans.

Answer.—I am afraid not. I can only suggest some possible remedy. I would advise giving him plenty of outdoor pasture and exercise. Also place some salt, sulfur, charcoal, wood ashes, and coal slack where he can get them. Also try a variety of food and examine him carefully for any evidences of

Lame Colt.—I have a Hambletonian driving colt that hurt his ankle. He was running in the lot with other horses; I caught him and examined his hoof, foot, shoulder, and the leg thornone. I had a horse affected the same way some years ago and in a few weeks his ankle swelled up and got hard as if it were solid bone. I have been doctoring this colt but he does not seem to improve but rather gets worse. He seems well otherwise.

Cherryvale, Kans. G. H.

Answer.-I assume that you know positively that the lameness is at the fetlock; if there is severe inflammation with swelling, heat, and tenderness, bathe with hot water for fifteen minutes at a time twice daily, wipe dry, rub well with witch hazel extract and bandage with flannel. After the acute inflammation subsides apply a liniment, rubbing well in once daily, until the skin begins to get sore. If there are no signs of injury at the fetlock, examine the foot very carefully.



Your other horse evidently had a ring-

Hard-milking Heifer.—I have a 3year-old heifer, fresh recently. I would like to keep her for a milch-cow but she milks so hard it is almost impossible to squeeze milk from the front teats. Is there any way of opening the ducts or will I have to use milk tubes? J. H. W.

Answer.—The only treatment I could suggest would be to use some lead plugs that will just slip into the teat and gradually increase the size of the plugs. It may be possible to dilate them in this manner. I do not think milking tubes would give you satisfaction. They must be absolutely clean each time you use them or you will get infection into the udder.

Hemorrhage from the Nose.

I lost a valuable 10-year-old mare from bleeding at the nose. The blood began by drops, gradually increasing to a flow; after twenty-four hours it began to drip again. After thirty-six hours the mare was very weak, so I killed her. The blood came from the left nostril but if that was stopped up it would run out of the other; she seemed well in all other respects.

Holyrood, Kans. Answer.—The hemorrhage was due to the rupture of a blood-vessel; there may have been a little tumor there or just a natural weakness of the vessel. If it was at a place where the nostril could have been packed with obsorbent cotton, a blood-clot would have formed that would have probably checked the flow. Sometimes astringent solutions, such as a solution of alum, can be injected that will stop the blood. In most cases after the animal gets very weak the blood-pressure is lessened so that it will stop itself. If it was located in an inaccessible place nothing could have been

done short of a surgical operation.

Cancer Cured by Anointing with Oil. The Dr. D. M. Bye Co., of Indianapolis, have perfected a combination of oils which act specifically on malignant growths. All forms of cancers and tumors (internal and external), also piles, fistula, skin diseases, etc., successfully treated. Don't trifle with life; write at once for free books giving particulars and indisputable evidence. Address Dr. D. M. Bye Co., Drawer 505, Indianapolis, Ind.

Necessary as Oats and Hay.

Detroit, Mich., Nov. 19, 1903.

Dr. B. J. Kendall Co., Enosburg Falls, Vt. Gentlemen:—Having received some time ago from you your book entitled "A Treatise on the Horse and His Diseases," I must say that it is almost if not quite as valuable for the information as your Kendall's Spavin Cure, which I have used on my horse! also myself with grand results. It works like a charm; wouldn't be without it. Every horse-owner should have it in his stable, as well as his oats and hay. It is just as valuable for him as for his horses. I have found it so. Very truly yours.

JOHN J. VAN BUHLER, JR.

1519 Russell St.

J. B. Armstrong & Sons, the well-known seed-corn men of Shenandoah, Iowa, are perhaps the busiest people, in their line, in the State these days. This is not surprising, as they are liberal users of printers' ink, and have the corn to back up every statement they make. Their "Iowa White Wonder" and "Iowa Mammoth Yellow" varieties are indeed wonders in the corn line. Both are new varieties this year. Ears from ten to fifteen inches long, and weigh from one and a half to two pounds. One hundred bushels to the acre. Write to-day for their new 1904 catalogue. Address J. B. Armstrong & Sons, Bhenandoah, Iowa.

The Poultry Hard.

CONDUCTED BY THOMAS OWEN.

Leghorns as Winter Layers.

EDITOR KANSAS FARMER:-In the issue of February 11 is an article by a farmer's wife on Plymouth Rocks as good winter layers. I, too, am a farmer's wife, and am much interested in poultry, in fact, the poultry page is the first thing I read when we receive the KANSAS FARMER.

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I will give my experience with the Plymouth Rocks as winter layers. I raised them for about five years, but did not get rich from selling eggs. I had about eighty-five Plymouth Rock hens last winter, and during the month of January, 1903, I sold \$2.25 worth of eggs. Last spring I secured thoroughbrea Blown Leghorn cockerels, and raised about 105 pullets and kept about thirty Plymouth Rock hens. They have a good, warm henhouse in a sheltered location. The pullets commenced laying in November and in December I sold over 40 dozen eggs. During the month of January they laid over 65 dozen. I feed one-half gallon each of corn-chop and bran with enough boiling sweet skim-milk to moisten the feed. I have fed five pounds of poultry-food in their mash, besides all the Kafir-corn (in the head) they will eat, with a few bundles of oats, an armful of dry alfalfa hay, and about two heads of cabbage per week; and about one pint of coarse ground bone per day, with plenty of water, a running stream passing through their run. I give hot water on cold days.

My favorites are the Rose Comb White Leghorns as the single combs freeze so easily, and the White Leghorn is larger than the Brown.

I do not go in for all thoroughbreds as I intend to keep one or two dozen Plymouth Rock hens for early setting so as to raise early broilers. The Plymouths are large enough to eat at 3 months old while the Leghorns have to be about 5 months old. For winter eggs let me have the Leghorn.

One of my neighbors has a flock of 117 Plymouth Rock hens that receive the best of care, and while I was getting from 30 to 40 eggs per day, she was getting 7 or 8 eggs.

I wish some one else would tell about the Leghorns as winter layers. ANOTHER FARMER'S

Corrosive Sublimate for Bugs in Chicken-house.

EDITOR KANSAS FARMER: - Having bought and moved to a farm where the buildings were old, we found the chicken-house already occupied by bedbugs. I have bought and used different remedies without the desired result. I keep rid of them in the house by using corrosive sublimate dissolved in turpentine. Would it be safe to spray my chicken-house with that, or would it be liable to kill my flock of chickens?

Answer.-Corrosive sublimate dissolved in turpentine or coal-oil is a good thing to kill bugs or lice, and in spraying your poultry-house with it will not hurt your chickens. Where the buildings are infested with the large red bug mentioned, it is a very difficult matter to get rid of them, as they hide in every crevice. If the buildings are not too valuable it would be better to tear them down, burn the old lumber and build new houses.

Buff Turkeys.

EDITOR KANSAS FARMER:-Please tell me where I can get the Buff turkeys, not the Holland White, but the large buff or yellow kind. I have been unable to find an advertisement of them in any poultry or farm paper.

F. M. STAMBOCK. Sedgwick County.

nearly every kind.

Answer.—There are very few Buff turkeys raised in the West. Write to C. C. Shoemaker, Freeport, Ill., and J. R. Brabazon & Co., Delavan, Wis., for their poultry catalogue. They keep

Hatching by Incubator.

"An egg in the process oh hatching," says an expert, "is remarkably sensitive to vibration. Half the failures that amateurs encounter in hatching out chicks by an incubator method are due to lack of precaution in providing against the effect of vibration on the eggs. The rumble of a train or the passage of a wagon along the street will spoil a whole incubator full of eggs, if the faintest vibratory wave reached the apparatus. Even such a little thing as the banging of a door in some other part of the house will destroy the chances of hatching out a brood, where care has not been taken to place the incubator beyond the reach of such disturbances. A thunderstorm always gives breeders a

POULTRY BREEDERS' DIRECTORY.

EGGS FOR HATCHING—From my "Superior Winter Laying Strain" of Barred Plymouth Rocks, no edfor -ize and quality. Fifteen years careful exclusive bredding. 15 eggs \$1,50. E. J. Evans, Box 21, Fort Scott, Kans.

MAMMOTH Bronze toms, 24 pounds, \$4. J. H. Taylor, R. F. D., Chapman, Kans.

FOR SALE—Young Mammoth Bronze toms, large bone, fine plumage. Herd tom scores 98½ and weights 40 pounds. Address G. W. Perkins, Newton, Kans.

FOR SALE—Silver Wyandotte cockerels. Score \$7'4 to 22 points. Price \$2 to \$5 each. Mrs. D. M. May, Emporla, Kans.

BLACK MINORCAS—Biggest layers of biggest e.g.s. Fertile eggs for hatching, \$1.50 per 15; \$3 per 50; \$5 per 100. Also Light Brahmas. Black Langshaus. Barred and Buff Plymouth Rocks, White, Sliver and Golden Wyandottes, S. C. Rhode Island Reds, S. C. White and Brown Leghorns. American Dommiques, Houdans, White Crested Black Polish, Buff Laced Polish, Buff Cochin Bantams. Eggs from choice matings of above \$1.50 per 15. James C. Jones, Leavenworth, Kans.

SINGLE COMB BLACK MINORCAS—The lar-rest and greatest laying strain in the world. Eggs 42 her 15; 45 per 50; 48 per 100. Beautiful lilustrated circular with order. Address Geo. Kern, 817 Osage et., Leavenworth, Kans

WHITE PLYMOUTH ROCKS exclusively. Eggs or hatching, one setting \$1.50; two settings \$2.50; also wo M. B. turkey hens. Turkey eggs, \$2 per setting. C. Bostwick, Boute 2, Hoyt, Kans.

STOCK ALL SOLD—Booking orders for eggs from winners of 60 premiums, Barred and White Rocks, \$2.50 per 15 or \$4.50 per \$30. Mr. & Mrs. Chris. Bearman, Ottawa, Kas.

INDIAN RUNNER DUCKS—At Chicago, Nov. 1963, first and *econd prize on two entries. Black Langshane, Hestich strain direct. Wyandottes, White and Silver. Hen eggs. \$1 per 15 eggs. \$1 75 for 30, Duck eggs, \$2 per 13, or \$4 per 30. Write for circular. R. L. Castleberry, Sherman, Kas.

BUFF COCHINS—I have a few pure bred Cocketels for sale; fine birds; price \$1.50 each. J. H. Alexander, Alton, Kas.

BARRED PLYMOUTH ROCKS exclusively. Thempson, Leffel, and Tanner strain. Eggs \$1 per [5; 5] per 100. A few cockerels left. Mrs. Chas. Osborn, Eureka, Kans.

FOR SALE—10 White Wyandotte Cockerels, will score 90 to 94; they are I. K. Felch's strain, as fine as can be produced; also 10 Light Brahma Cockerels and 20 hens and pullets raised from stock the finest money will buy; correspondence solicited. Mrs. J. R. Kenworthy, Cottage Home Pouitry Yards, Wichita, Kas. FOR SALE-10 White

BARRED PLYMOUTH ROCK eggs exclusively, 15 for \$1.25, 50 for \$3, 100 for \$5, 200 for \$9; I can ship via Adams, American or Wrils-Fargo Express. Adam A. Weir, Clay Center, Neb., Route 2.

FOR SALE—Silver Spangled Hamburgs, Ros Comised Brown Leghorns, Cockerels. Write to o call on Chas. W. Gresham, Bucklin, Kans.

TOULOUSE GEESE—Partridge Cochins. Three fearling ganders; also some cockerels and pullets for ale. Eggs in season. Address Mrs. G. A. Rhoads, columbus, Kans.

EGGS FOR SALE—From well-mated hens, raised on free range. S. L. Wyandottes, S. S. Hamburgs, white and Barred Plymouth Rocks, \$1 per 18. Tries of S. L. Wyandottes, \$5 each; cockerels of firstithree varieties; especially fine Wyandotte cockerels. Write for prices. Jewett Bros., Dighton, Kans,

WHITE HOLLAND GOBBLERS-From first Prize stock, 44 each. E. W. Melville, Eudora, Kans.

SCOTCH COLLIE PUPS—Four more litters of tages high-bred Collies, from 1 to 3 weeks old, for ale. Booking orders now. Walnut Grove Farm, E. D. Nutting, Prop., Emporia, Kans.

POULTRY BREEDERS' DIRECTORY.

FOR SALE—Pure bronze turkeys, heavy boned, beautiful birds. Wm. Newcomb, Welda, Kans.

FOR SALE—Barred Plymouth Rock Cockerels, scoring 92 points; score furnished; Bradley strain; at \$1.50 each. A. P. Wright, Valley Center, Kas.

BARRED Plymouth Rock Egg*—B. P. Rocks ex-clusively; won first premium on B. P. Rock Capons, Kansas State Fair, 1903. Eggs \$1 per 15, \$5 per 100. S. H. Dunahugh, Route 1, Hoyt, Kas.

S. C. BROWN LEGHORNS—A few choice cockerels left. Eggs for sale. Satisfaction guaranteed. J. A. Kauffman, Acme, Dickinson County, Kans.

FOR SALE—10 fine Buff Cochin cockerels, \$1 to \$2 each. 20 pullets \$1 each. Eggs \$1 per 15. H. A. Thomas, Scranton, Kans.

A FEW CHOICE M. B. turkeys, from two separate pens, for sale; sired by Jerry Jordan and Dick Blue. Mrs. Fred Cowley, Columbus, Kans.

HIGH-CLASS POULTRY - Silver Wyandottes, White Wyandottes and White Plymouth Rocks-Eggs for hatching, 13 for \$1. R. F. Meek, Hutchin, son, Kans.

BARRED ROCKS—Some extra nice cockerels for sale at from \$1 to \$2 each. J. A. Sawhill, Edgerton, Johnson Co., Kans.

FOR SALE—Single comb pure White Leghorn cockerels, \$1 each. White Holland toms, \$2. A. Hutley, Route 2, Maple Hill; Kans.

FOR SALE—Mammoth Bronze turkeys, large bone, fine plumage; 2 pens not akin. Eggs in season. Address Mrs. T. M. Fleming, Route 3, Fontana, Kas.

PURE White Wyandottes for sale. Eggs for sale in eason. \$1 for 15. Darby Fruit Co., Amoret, Mo.

EPH, SIMPSON, 19th and Washington St., Topeka, Kans., has for sale cockerels scoring above 98 points and eggs of Black Minorcas.

BARRED PLYMOUTH ROCKS—Cockerels and cullets. Write for prices. E. W. Caywood, Clifton

CHOICE B. P. Rock cookerels and Collie pups for sale. Send for circular. W. B. Williams, Stella, Neb.

BLACK LANGSHANS FOR SALE—Some are scored; all are extra good. Mrs. Geo. W. King, Solomen, Kans.

S. C. W. Leghorns.

Yearling hens and cockerels from high scoring stock for sale. Eggs for hatching, \$1.50 per 15. E. B. Aley, R. R. 2, Topeka, Kans.

FOR SALE.

Ten varieties of pure-bred Chickens, Geese and Turkeys Eggs, \$1 per 13. Catalogue free. Address H. H. HINIKER, Route 4, Mankate, Minn

Black Langshans

5 cockerels for sale, scoring 92 to 92% by Rhodes; up to weight and good breeders. Eggs \$1.50 per 15. R. C. MARCH, 1313 W. 6th St., Topeka, Ks.

WYANDOTTES.

Silver Laced and Pure White, and White Holland Turkeys. High-grade birds for sale at reasonable rates. Write wants to

R. B. WALLACE, Stafford, Kans.

Toulouse Geese Eggs, \$1 per setting. Pekin and Rouen Duck Eggs, 18 for \$1. Colored Muscovy Duck Eggs, 10 for \$1. White Holland Turkey Eggs, 10 for \$2. Pearl Guineas, Houdans, White Wyandottes, Buff Cochins, Poultry Eggs, 15 for \$1. Satisfaction guaranteed. Write D. L. BRUEN, Oldenbusch, Neb.

Buff Plymouth Rocks

Exclusively at Beaver Creek Poultry Farm. A few choice cockerels from \$2 to \$5 each. Eggs \$2 per 15.

Homer Davis, Walton, Kans.

GOLDEN LACED WYANDOTTES Cocks, cockerels, hens and pullets, for sale at \$1 and upwards. The best all purpose bird for farm or pen. Fine winter layers. Chicks develop early, large and plump. No better stock to cross your flock for eggs or meat. No better layers. Eggs, 15 for \$1.50. L. HAWN, Leavenworth, Kans.

For Laying and Exhibition

BATES' Pedigreed White Plymouth Rocks, White Wyandottes and R. C. Rhode Island Reds.

Rhode Island Reds.

I won in every one of the four shows I exhibited this pass season, including the great Kansas State show at Topeka, January 1904. Eggs from our White Rocks and Rhode Island Reds, \$1.50 per 15; White Wyandottes (won 2d pen Kansas State Fair) \$1 per 15.

W. L. BATES, Topeka, Kans.

POULTRY SUPPLIES

	Thanelice (lice powder)25c Creo-carbo (lice killer)56c
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OWEN & COMPANY 520 KANSAS AVE., TOPEKA, KANS.

The Buff Plymouth Rocks

At Gem Poultry Farm

Are Better Than Ever. At State Fair at Hutchinson 1903, I won in warm compettion, lst cock, 1st hen, 1st pullet, 1st pen, 2d pen.

No Better Buffs Can Be Found.

Eggs from my two best pens, 15 for \$2; 30 for \$3.50. They are in the \$5 class. A few good cockerels forsale, \$1 to \$2. Mammoth Bronze turkey eggs, 11 for \$2.

C. W. PECKHAM,

Haven, Kans.

Incubator Book

The Best That Was Ever Written.

A man who has devoted 22 years to perfecting incubators has written a book. It tells all that he learned by hundreds of tests with different incubators in his hatchery. It tells in a fascinating way just the facts you should know before buying. We send the book free because the man who writes it is the man who has made the Racine Incubators and Brooders. He shows them as they are today, and tells why you should have one. No one can read this book without wanting this man's machine. Please write today. Warehouses at Buffalo, N.Y., Kansas City, Mo. and St. Paul, Minn. Address

Racine Hatcher Co., Box 88, Racine, Wis.

Barred Rock Cockerels Finest stock in the west. Lewis Peak, Logan, Kans.

1890 — BROWN LEGHORNS — 1904
AND BARRED PLYMOUTH ROCKS
In four shows this season won more firsts and seconds competed for than all competitors. Boston and New York winners. Send for circular. Eggs, §1.00 for 13. Cockprels for sale. Chas. C. Smith, 107 E. Seventh, Topeka, Kans.

FOR SALE.

Three hundred choice Light Brahmas, sure to please our customers. Write for what you want and we will make you prices that are right for the choice stock that is offered, these are the best lot of Brahmas we have ever offered. Eggs in season. Address F. W. Dixon, Holton, Kans.

Barred Plymouth Rocks.

Eggs for hatching from fine large stock, yards headed with males scoring from 90 to 91%. Hens and pullets scoring 98 to 92. Scored by Judges Rhodes and Russell. Eggs \$1.50 per 15. Packed carefully for any distance. Mrs. Geo. Clark, Sta. A., Topeka, Ks.

INDIAN RUNNER DUCKS

PRIZE WINNERS

See winnings in Kansas Farmer of Feb. 11th. Stock for sale. Eggs \$2 per 18. B. P. Rocks, good cockerels for sale. Eggs in season, by the setting, or hundreds.

O. C. SECHRIST, Meriden, Kans.

1,000 HEAD OF

PURE-BRED POULTRY

Over 300 prises won in last two years on my poul-try. 600 head of Barred, Buff and White P. Rocks, S. L., Buff and White Wyandottes, Black Langshans, Buff Cochins, and S. C. Brown and White Leghorns. 200 Pekin, Rouen, White and Colored Miscovy ducks, Toulouse and Emden geese. 200 M. B. and W. H. turkeys of heavy weight. Write for prices. GEO. A. HEYL, Washington, Ill.

LIGHT BRAHMAS

1st cockerel and 1st pen at the Kansas State Show Cockerels for sale (with score-card by Rhodes.) Write me what you want and I will try to please

Rolling Prairie Poultry Farm, Onaga, Kans. F. A. BROWN.

CASH FOR EGGS.

POULTRYMEN AND FARMERS

If you produce a case or more of eggs per week it will pay you to ship them to me. Write for particulars. J. H. PERRY. Established 1886. 1433 Blake St., Denver, Colo. Reference, Colorado National Bank.

FOR SALE E. C. FOWLER.

427 Shawnee Ave., Tepeka, Kans.
has Black Langshan cockerels for sale, by prize winning sires at Chicago, St. Louis, and Kansas City,
1903 shows. Had 46 birds at Topeka 1904 show. Took sweepstakes for largest display in Asiatic class. All birds scoring over 91 points. Has made a specialty of this breed for past 12 years.

FOR SALE---Cockerels and Pullets

Skinner's Famous Winter-Laying Barred Rocks. Skinner's Prize-Winning Cochins.

His coops won at Missouri State, Kansas City, Fort Scott and 1904 Topeka Shows. Address

O. E. SKINNER, Columbus, Kans. Sharpest Grit, 150 lbs. 50c. Beautiful Catalogue free

White Plymouth Rocks EXCLUSIVELY.

Three Grand Yards of the Best Strains in the Country

White Plymouth Rocks hold the record for egg laying over any other variety of fowls; eight pullets averaging 255 eggs each in one year. I have some breeding stock for sale at reasonable figures. Eggs in season, \$2.60 per 15, expressage prepaid anywhere in the United States. Yards at residence, adfolning Washburn College. Address

THOMAS OWEN, Topeka, Kansas.

DUFF'S POULTRY

Barred Plymouth Rocks, White Plymouth Rocks, Buff Cochins Partridge Cochins, Light Brahmas, Black Langshans, Silver Wyandottes, White Wyandottes, Silver Spangled Hamburgs, Brown Leghorns, and Brown China Geese First-class Standard Stock of Superior Quality. Stock For Sale. Eggs in Season. Write Your Wants. Circular Free.

A. H. DUFF, Larned, Kans.

CHICKENS COUNTY OF THE PARTY OF

\$80 A MONTH SALARY And all expenses to Introduce our Guaranteed Poultry and Steek Remedies. Sond for contract; we mean business and tun-nish best reference. G. R. Ricklett Co., X et Springed, III.



\$ | 2.80 For 200 Egg Perfect in construction and action. Hatches every fertile egg. Write for catalog to-day. GEO. H. STAHL, Quincy, III.

BURR INCUBATOR



No night watching because we use our 6-inch Double wafer Regulator, all latest improvements, California Redwoodcase, copper tank, 30 days trial. Your money back if you say so. Catalogue free;

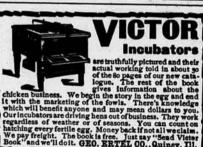
Burr Incubator Co., Box 235, Omaha, Nob



True Bred Poultry

All the Standard Breeds.
All the Standard Breeds.
Our Poulty Farm contains more high grade
poultry than any other farm in this country,
and is produced from a long line of promising
price winners. Our COMPLETE FOUNTAY
BOOK, postpaid for 6s. Worth many dollars
to you. Write for it today.

ROVAL POULTRY FARM,
Dopt. 481 Don Moines, lows.



we pay freight. The book is free. Just say "Sead Victor Book" and we'll doit. GEO. ERTEL 00., Quincy, Ill.

ncubators. 30 Days Trial Johnson's Old Trusty.|



New oil saving, perfect regulating heating system. A five year guarantee with every machine. Write to Johnson, the incubator man, and find out about the Great \$10.00 Special Offer. New catalogue with egg, poultry and incubator records. Keep books with the hens. Plenty of books. They're free. Quick shipments a specialty. M. M. JOHNSON, Clay Center, Neb.



No Guessing You know in advance what will come if the eggs are fertile when you use the self-regulating

Successful Incubators and Brooders

The machines for busy people and the inexperienced be cause they run themselves. That's the unqualified experience of thousands. The same under all conditions. Eastern orders have prompt shipment from the Buffalo House. 100 pens of Standard fowls. Incubator catalogue with fine illustrated poultry catalog free.

Incubator Company, Des Moines, la



OUT-HATCH—ONE TRIAL

Any one with common care can get a high per cent of chicks the first time when fertile eggs are put in a

Sure Hatch

Incubator. Sure regulator—even hen temperature—no guess at ventilation—clean, pure air for eggs and chicks. Send for free catalogue D-18 that tells of improvements and other conveniences.

SURE HATCH INCUBATOR CO. Clay Center, Neb., or Indianapolis, Ind.



When writing advertisers, please mention this paper.

scare, as thousands of eggs may be spoiled by a sudden heavy thunder clap. To sneeze or cough in the vicinity of the incubators will sometimes work a disastrous result."



1—C. J. Martin, President.
2—Wm. Seelig, Vice-president.
3—T. A. Thompson, Secretary.
4—O. P. Shoemaker, Director.
5—A. C. Epperson, Director.
Any one who contemplates buying an

5—A. C. Epperson, Director.

Any one who contemplates buying an incubator or brooder ought not to overlook the Sure Hatch Incubator Co., of Clay Center, Neb., and Indianapolis, Ind. The Sure Hatch is a hot water machine, and is so carefully constructed that it is as good as its name. It is not only well made and guaranteed, as to construction, but is also guaranteed to work successfully if the operator follows the simple directions furnished, even without previous experience or education in the use of incubators or brooders. The heating apparatus in the egg-chamber is made of heavy, hard-rolled copper, and gives perfect circulation of heat to all parts of the machine so that there are no cold spots or corners. The outside and inside walls are made of first-grade California redwood, and there are two dead-air spaces, which insures a warm machine. The egg-trays, the regulator, the heater and other features of the Sure Hatch show the ear-marks of success; and the Sure Hatch Brooders are constructed in the same careful manner. The book is filled with valuable hints on the care of incubators and brooders, and other poultry information; but not content with this, the company, for the benefit of Sure Hatch customers, have established an Information Bureau, which gives advice and practical information on nearly all branches of the poultry business. It pays to be a Sure Hatch customer, and any one who wants an incubator or brooder, or who is willing to be convinced that he could make money out of poultry, ought to write for a copy of the Sure Hatch catalogue for 1904.

On page 209 will be noticed a handsome advertisement of the Queen City
Creamery Co., of Parsons, Kans., of
which Mr. Geo. H. Littlefield, ex-president of the Kansas State Dairy Association, is at the head. Mr. Littlefield has
won sufficient personal reputation to entitle him to election to the highest office
in the gift of the State Dairy Association
and his company has won a reputation
which places it among the foremost business institutions of the kind in the State.
The hand-separator, together with a wellmanaged creamery, has solved the farm
dairy problem so that now the farm
gives attention in earnest to the milchcow who was formerly considered but a
kind of side-issue on the farm. We are
glad to make this announcement for the
Queen City Creamery Co., and bespeak
for them a vastly increased volume of
business during the ensuing year.

THE MARKETS.

Kansas City Live Stock and Grain Markets.

Markets.

Kansas City, Mo., February 22, 1904. The cattle market here last week was decidedly better than the previous week, the advance on dressed beef stuff being 10@15c. The advance was caused' largely by the increased demand for export and shipping stuff. The bulk of the supply was of the dressed beef kind and the supply consisted of some very choice offerings which sold at high as \$5.25. There was quite a bit of half-finished stuff that sold for only slightly increased prices. The receipts of she stuff last week were moderate and the demand was good. Several good strings of choice fat cows were in the offerings and sold only slightly higher than the previous week. The bulk of sales were from \$3@.65. An advance of 10c over the previous week was claimed by some of the salesmen. Shipments of stockers and feeders to the country last week were 317 cars, which was very much in accord with the demand. The market on stockers and feeders for the week was generally steady with the previous week, but it was rather slow and draggy at times and there were instances when dealers were almost willing to call it 10c lower. It has fully recovered from that weakness and is firm with best time of the week. Most of the feeder buyers were looking for medium fleshed 1,000-pound feeders and some inquired for the more fleshy kinds for short feeding.

To-day's cattle receipts amounted to 10,000, a very liberal supply for Monday. The dressed beef market opened slow to 10c lower on the more common kinds, but the better grades were fully steady, two good bunches selling for \$5. The market closed with a very weak tendency. There was only a moderate run of she stuff and the market was active. Good fat cows were strong to 5c higher and the bulk sold for from \$3@3.70. Stock cows and heifers sold readily and at steady prices, most sales being around \$2.50. The stocker and feeder market showed a better tendency than last week and all grades were steady to strong. A better market in this kind is expected for this week.

Receipts of hogs here

Special Mant Column

"Wanted," "For Sale," "For Exchange," and small or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Ini-tials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

FOR SALE—Ten head of registered Red Polled bulls at a bargain. Herd consists of following families: A 1, B 2, B 8, B 20, H 1, I 12, N 5, U 5, V 1, V 2, Butterfield (3410) at head of herd. Weight 2,450 lbs. Can ship over Union Pacific or Missouri Pacific railways. Otto Young, Utica, Ness Co., Kans.

RED POLLED BULLS—6 months to a year old, for sale. The kind that will please you. Write to-day. H. L. Pellet, Eudora, Kans.

FOR SALE—Registered Hereford bulls, 1 and 2 years old, short legged, heavy fellows, reasonable prices. H. B. Clark, Geneseo, Kans.

D. S. POLLED DURHAM BULLS for sale; also a registered Percheron Stallion; inspection invited. C. M. Albright, R. F. D. 2, Overbrook, Kas.

FOR SALE—Shorthorn bull, 20 months old, sire Godoy Butterfly 142556, dam the Rose of Sharon cow, Duchess 52d, by Aclam Sharon 5447; big and fine, Also a Cruickshank bull, 15 months old, sire Godoy Butterfly 142556, dam Barmpton's Joy by Red Victor 105113, second dam Barmpton's Pride by Imp. Prince Bishop (57570); third dam Imp. Barmpton Primrose by Viking (48573). Either one a herdheader. E. S. Myers, Chanute, Kans.

FOR SALE—8 head of registered Angus bulls from 10 to 20 months old; good individuals. R. L. Milton, Stafford, Kans.

REGISTERED RED POLLED bull, 4 years old. Will sell or exchange Address Box 36, Boyle, Kan.

HANDY HERD REGISTER—The improved Handy Herd Book for swine breeders is a record book that every breeder should have. It is perfect, sim je, practical and convenient and contains 101 pages or about one cent a litter for keeping the record. The regular price of this 1 andy herd book is \$1, but we furnish it in connection with the Kanaas Farmer one year for only \$1.50

FOR SALE—Registered Aberdeen-Angus cattle, six 2-year-old and 5 yearling bulls, also 25 head of cows and helfers. I am making special prices on account of shortage of pasture. Can ship on three different railways. A. L. Wynkoop. Bendena, Donlphan County, Kans.

FOR SALE—A fine lot of Red Shorthorn bulls from 10 to 20 months old. Part of them registered and part non-registered, but all thoroughbreds. The non-registered ones are just the kind for men with a common herd of cattle to improve them at a small cost. Also a few choice Poland-China boars, that will be priced right. All correspondence cheerfully answered; visitors welcome. Thephone 900-4 rings A. F. Huse, Manhattan, Riley Co., Kans.

FOR SALE—Cheap Shorthorn bulls. Address Joe Manville, Agency, Mo.

GALLOWAY CATTLE—Choice young stock of both sexes fer sale. W. Guy McCandless, Cotton-wood Falls. Kans.

FOR SALE—Two registered Shorthorn bulls, color red, one 2-year-old, the other 4 months. Two seven-eights Shorthorn bull calves, 8 months old, color red. I also have a few full-blood Rose Comb White Leghern cockerels. For prices address, P. H. McKittrick, McCracken, Kans.

FOR SALE—Choice registered Hereford bulls, 8 to 15 months eld. Address, or call on A. Johnson, R. R. 2, Clearwater, Kans.

FOR SALE—Feur thoroughbred Shorthorn bulls, color red, frem 5 to 24 months old. Also a few thoroughbred cows and heifers. For prices write, J. P. Engel, Alden, Rice Co., Kans.

FOR SALE—Guernsey bulls from best registered stock. J. W. Ferkins, 423 Altman Building, Kansas City, Mo.

Last week's hog market was called a hot one and such advances have not been experienced in the hog market for a long time, and everything indicates a further advance and the sellers should be encouraged.

The supply of hogs here to-day was a little better than 9,000, of which 1,300 were direct to Armour. The market opened steady to 5c higher, which advance was distributed well among the different kinds. The bulk of sales would not show much more than 2½c advance and a number of sales were only called strong. None of the mixed packer kinds sold under \$5.45 and the bulk of all sales were between \$5.2505.40. The top was 7½c higher than the top last week, the top to-day being \$5.55. If there was any difference in the advance of the different grades at all it would be found in pigs and lights, while there was several sales called steady there was also quite a number at 5c higher. All indications are for a better and higher hog market here the remainder of the week and prices are expected to continue higher for a substantial length of time.

Sheep receipts to-day were close to 5.500, with the majority in favor of the

mainder of the week and prices are expected to continue higher for a substantial length of time.

Sheep receipts to-day were close to 5.500, with the majority in favor of the lambs. Almost the entire offerings were of Westerns but the quality was better than usual and the market started out early with competition rather keen. Buyers were trying to fill orders and all wanted good muttons and lambs. Bidding throughout the day was spirited and a good clearance was made. Over 5,000 were in by 10 o'clock and thus buyers knew what they had to pick from. The general trade on heavy stuff was strong to higher, with hardly higher quotations called. Yearlings sold at \$5.20, wethers at \$4.50, and ewes up to \$4. Lambs were in demand but the unusually large proportion caused prices to weaken and sales were quoted weaker to 10c lower. Tops sold at \$5.80.

The run of horses and mules to-day was lighter as a whole than for the past few weeks, but horses were much in evidence and the offerings were about the usual number. Some extra good drafts were offered and the general quality was above the average. Prices ranged about the same as last week, some of the sellers claiming them to be \$10 lower but the general trade was on a weak basis. One pair of good drafters sold at private sale to Heinz Pickling Company brought \$75. Southerners sold up to \$85, and farm chunks up to \$135. The prospects for mule trade this week were not very promising if to-day's demand was a criterion. No outside buyers were in and trade was the dullest of the year for Monday. The light run was a good things, as shippers.

HORSES AND MULES.

FOR SALE—Clydesdale stallion, 5 black jacks, trotting-bred coits. Would trade for Percheron nares. J. C. Strong, Moran, Kans.

FOR SALE—Imported Shire stallion; the breeding of this house is unsurpassed. His sires and grand-sires were winners at the Royal shows at London and other places. His dam was half sister to Harold (5763) said to be the greatest shire in his day in England. James Auld, Alida, Geary County, Kans.

FOR SALE OR TRADE—1 Percheron stallion, 1 registered Hambletonian stallion, very cheap. Address G. A. Stites, Hope, Kans.

EGGS FOR SALE from the famous Ringlet and Latham strain. \$5 for 1st pen; \$3 for 2d pen; \$2 for 8d pen, and for range \$1, per 15 eggs. For beauty and utility strain these are the birds. Address Mrs. Lou-is Hotnan, Carbondale, Kans.

FUR SALE—Two black Mammoth jacks, 3 and 5 years old. One black Percheron stallion, 4 years old. E. E. Potter, Sterling, Rice Co., Kans.

FOR SALE—One registered black Percheron stal-lion, 4 years old, one big black jack, 5 years old, 2 jen-nets, 2 and 5 years old, one in foal, cheap if taken soon; no trade. J. E. Farris, 12 miles southeast St. Josepn, Fancett, Mo.

FOR SALE OR TRADE—Choice of 1, 2, or 3 of 8 native jacks, all ages up to 7 years; also choice or all, of 10 high-bred jennets, in fual by large jack, will take cheap stallion and other young stock in part payment; particulars address J. F. Harrelson, Wellington, Kans.

FOR SALE OR TRADE.

A black Kentucky ja k, 15 hands high; good breeder; cheap for cash or trade for cattle. U. A. Kline, Tecumsen, Kas.

11-WORTH COUNTY JACK FARM-14 jacks and 21 jennets on hand. Write me for prices. O. J. Corson, Route 2 Potter, Kans

FOR SALE—A good jack, 7 years old, sound, good size, heavy bone, color dark, with mealy points. Is a good foal getter; can show colts. Price right if sold soon. One half mile from Elmdale, Chase Co., Kans. Call on or address J. M. Brough, or J. F. Garner, Elmdale, Kans.

FOR SALE OR TRADE—For good jack or Short-horn cows, one 3-year-old saddle stallion. Geo. Man-ville, Agency, Mo.

TO TRADE—For registered Hereford cattle of Percheron fillies, one standard registered stailion, 8 years old, 16½ hands high, fine driver and saddler. No better bred horse in Kansas, H. T. Hineman, Dighton, Kans.

FARMS AND RANCHES.

FOR SALE—160 acres in Ottawa County, Kansas, \$3500; \$2200 cash, balance five years at five per cent; 125 acres under cultivation, 35 acres pasture, 100 acres growing wheat goes with farm; good seven-room stone house, barn that will hold 14 head of horses, granaries, machine sheds, etc.; the Solomon river valley can't be beaten; come and see for yourself or write us fer further information; we can sell you a home for a reasonable price; look us up and satisfy yourself that we are not advertising cheap western Kansas lands. The Bennington State Bank, Bennington, Kans.

FOR SALE—Two 80's real well improved for \$2,000; 180, 6 room house, 1 mile from Florence, \$3,200; 320, 5 r om house, new, with all outbuildings new, \$5,000; 720, rough pasture land, good blu-stem-grass, \$8,50 per acre. This is but a few of the many bargains that we have; write us for complete description. Garrison & Studebaker, Florence, Kans.

FOR RENT—A fruit ranch and land suitable for market gardening in the Rio Grande Valley, New Mexico; good land, good house and barn, good markets and pienty of irrigation and well water. Address Esmeralda Fruit Co., Box 173, Albuquerque, N. M.

FARM FOR SALE—160 acres; all good farm land, well located, good improvements; plenty of water; \$3,000 if taken soon. L. B. Chaffee. Chaff-e, Kas.

FOR SALE—Either of two good farms in eastern Kansas, one 300 acres, handsome prairie; other 340-acre rich bottom farm, with improvements on high ground, large, substantial buildings, running water, fuel, and tame meadows on each; rural mail and telephone. Either at a bargain until crop season opens. Address Box 189, Garnett, Kans.

FOR SALE—320 acres fine pasture land in Wau-baunsee Co., good grass and never failing water. L. T. klee, Halifax, Kans.

FOR SALE—160 acre farm, good improvements, abundant supply of excellent water, close lo school, 4 miles to church, post-office and cream station, \$1,200 cash. H. V. Gilbert, Wallace, Kans.

120 ACRES, new buildings, Usage Co., \$2,600. Bargain. Farm, R. F. D. 2, Williamsburg, Kans.

POULTRY.

WHITE WYANDOTTES exclusively. Eggs for hatching, one setting \$1. 100 eggs for \$5. Cockerels all sold. Mrs. E. F. Ney, Bonner Springs, Kans.

would have been heavy losers before get-ting rid of them. At the commission barn, some local demand was felt but no life was exhibited and a dull day was had, H. H. PETERS.

South St. Joseph Live Stock Market.

South St. Joseph, Mo., February 22, 1904. Receipts of cattle last week, 7,677; previous week, 8,641; year ago, 8,800. Good to Receipts of cattle last week, 7,877; previous week, 8,641; year ago, 8,800. Good to choice beef steers were far under the wants of the local dressed beef men and for shipping and export account, and prices advanced 10@15c for these kinds. Common and half-fat grades, however, met with a slow demand and values showed no gain. Cows and helfers sold readily on a 15@25c higher basis. Good qualitied fleshy feeders and thin stockers were in strong request and the market ruled 10@15c higher, but plain heavy feeders and common thin cattle sold to no better advantage.

Supplies of hogs last week, 33,622; preceding week, 34,672; year ago, 38,276. The trend of prices was higher again, the net gain being 30@40c, on top of which was another 6@10c advance to-day, with the tops going at \$5.55 and the bulk of sales at \$5.25@5.50.

at \$5.25@5.50.

Arrivals in the sheep department last week, 9.767; former week, 10.596; year ago, 9.522. The week started out with a higher range of values and the week closed up with a gain of 15@25c. The bulk of the offerings were from Colorado, the supplies from the nearby States being lighter than for some time of late. Today native lambs topped the market at \$6, and Colorados sold at \$5.95; Colorado yearlings, \$5.25, and Colorado ewes, \$4.05. GUY FRIDLEY.

CHOICE young shorthorn bulls at very low prices; also open or bred gitts, Polands or Durocs. M. C. Hemenway, Hope, Kas.

REGISTERED DUROC-JERSEY SWINE— Choice young stock for sale. R. H. Britton, Lebo,

FOR SALE—7 registered Berkshire boars, large bodied, heavy boned; also a fine Collie pup. E. D. King, Burlington, Kans.

ONE DOZ extra nice P. C. sow pigs for sale; they are 4 to 5 months old; are eligible to record; prices low considering quality. R. J. Conneway, Elk City, Kas.

FOR SALE—One yearling sow, foundation stock, to farrow February, \$35. Two May pigs, \$12 and \$15; 2 september pigs, \$10 and \$12. Eleven volumes Duroc-Jersey A-sociation pedegree, and one share of stock, \$20. Three pens of B. P. Rocks, 1 cockerel, 7 hens each, high scoring, \$15 per pen. Have rented farm and retiring from stock business. M. H. Alberty, Cherokee, Kans.

SEEDS AND PLANTS.

E. UKELE of Wallace, Kas., has Alfalfa Seed for sale.

WANTED—White and red Kaffir. Orange Cane, and Milet seed. Send samples and quote prices. McBeth & Kinnison, Garden City, Kansas.

I WILL furnish speltz, sacked and delivered at station, at 85 cents per bushel. Fred. Rowland, Lindsborg, Kansas.

ENGLISH BLUE GRASS for sale at 5c. per pound. H. E. Bachelder, Fredonia, Wilson county, Kas.

FOR SALE—English blue-grass for spring sowing, \$5 per 100. Write to D. O. Buell, Robinson, Kans.

ENGLISH BLUE GRASS—New crop, fine seed, price low. Send sample. Refer to First National bank. J. G. Hintsh, Eureka, Kans.

FOR SALE—Emmer (Speltz) at 65 cents per bu-shel. M. W. Axtell, Irving, Kans.

WANT To buy Kaffir-corn, cane-seed, milo-maize, Jerusalem corn, millet seed; car-lots. Send samples and quote prices. V. E. Jones, Syracuse, Kans.

SPELTS FOR SALE-60 cents per bushel, f. o. b Cash with order. Wheeler & Baldwin, Delphos, Ks.

WANTED at Willis Nurseries, Ottawa, Kansas, customers for the best selected lot of nursery stock in the West. Catalogue free on application.

WANTED—Sweet corn, Kaffir-corn, cane and millet seed, alfalfa, red clover, timothy and other grass seeds. Correspond with us. Kansas Seed House, F Barteides & Co., Lawrence, Kans.

SHEEP.

SHEEP FOR SALE—200 pure-bred Merino sheep 10 per cent investment. L. C. Walbridge, Russell,

PATENTS.

J. A. ROSEN, PATENT ATTORNEY

MISCELLANEOUS.

FENCE POSTS—Cedar, white oak, mulberry—in carload lots; good quality, low price. Jay Caldwell, Hinton, Okla.

FOR SALE—Pure Extracted Honey, Alfalfa, at 10c. pound; send for free sample vial. A. P. Wright, Valley Center, Kas.

SUCCESS BEARDLESS BARLEY for sale at 90 cents per bushel. Address W. C. Campbell, Ames, Kans.

WANTED—You to send for free sample pages of "Jesus Was—Carist Is," an optimistic religion. Smith Book Supply, Topeka, Kans.

WANTED—Some party with a sout 1 slope field to haul hog bair from our plant each day. Scatter, dry and return to us. Can handle ou shares. Chas. Wolff Packing Co., Topeka, Kans.

WANTED—Te sell or trade for any kind of stock, one 500-pound capacity Sharples separator, almost new. L. A. Abbott, R. R. 1, Wamego, Kansas.

PALATKA—For reliable information, booklets and other literature, address Board of Trade, Palat-ka, Florida.

VIEWS OF TOPEKA FLOOD—Having purchased the balance of the edition of the 'Views of Topeka Flood" of which many thousand sold at 25 cents each, we are prepared until the supply is exhausted to send them prepaid to any address on receipt of 10 cents. Address, Kansas Farmer Co., Topeka, Kans.

The Stray List

Week Ending February 11.

Greenwood County—C. D. Pritchard, Clerk. STEER—Taken up by W. D. Borton, Hill tp., Feb. 6, 1904, one red and white, 2-year-old steer. Clay County-J. H. Kerby, Clerk. STEER-Taken up by William Culman, in Grat

d steer, 1-yes d. valued at \$17.

Labette County—A. H. McCarter, Clerk, MARE AND COLT—Taken up by T. E. Hite, in Mound Valley tp., Jan. 18. 1904, one gray mare, slit in right ear; also one bay male colt, star in forehead. coming 2 years, valued at \$10 each.

Week Ending February 18.

Barber County—C. W. Wilson, Clerk.
HORSE—Taken up by Guy C. Sparks, in Sharon
pp., Dec 17, 1903, one grey horse 16 hands high, an
old wire cut on right front hoof and a lorg dim scar
on inside of right hind leg.

Montgomery County—Samuel McMurtry, Clerk. H&IFER—Taken up by James H. Graves, Chero-kee tp.. Jan. 27 1904, one dark red nelfer, 2 years old, shell knocked off left horn, no marks or brands, val-ued at \$12.

Harvey County—Jno. L. Caveny, Clerk.

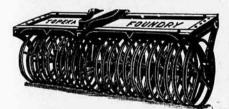
HORSE—Taken up by H. J. Trego, (P. O. Halstead, Kans..) Lakin tp., Dec. 15, 1903, one dark roam horse, about 9 years o'd, 16 hands high, with collar marks on both shoulders, white left hind foot; valued

Week Ending February 25.

Greenwood County—C. D. Pritchard, Clerk STEER—Taken up by M. F. Webster, in Eureka tp., one red and white spotted coming 2-year-old steer, notoh in right ear, crop and underbit in left ear, branded | on left hip.

"Pack Your Wheat"

Equal to One Inch of Rain.



Brings Moisture to the Surface and Gives the Wheat an Early Start.

Write for Prices.

TOPEKA FOUNDRY CO.

TOPEKA, KANSAS.

THE OLD RELABLE

ANTI-FRICTION FOUR-BURR MOBUL MILLS.

BURR MOBUL MILLS.

No ge-riug, no friction Thousands nuse, 4-ho-se mill grinds 60 to 80 bushels per hour; 2-horse mill grinds 50 to 50 bushels per hour.

We make full line: FEED MILLS, best sold, including famous Iowa Grinder No. 2 for \$12-50. Iso Feed Steamers, Farm Bollers and Furnaces Send f reatologue.

BOVEE GRINDER & FURNACE WORKS, lowa Grinder & Steamer Works, Waterloo, lowa



Neber Gasoline Engines sees adapted to small or large purposes. Every-hing from the 8½ horse Jr. to 300 h. p. Engines. All noney carners, built to last, absolute in safety. No killed engineer or license required. Any intelligent person can operate. Preferable to eteam for many reasons. Catalog shows why. Write for it-WEBER CAS & CASOLINE ENGINE CO., Box 251 , Kansas City, Mo.



Largest 1 00. Optical Mail Order House in the West.

Any style glasses for \$1. Write for free examina tion sheet and illustrated catalogue. Satisfaction guaranteed. B. H. Baker Co., 624 Kansas Ave., To beta, Kans.

Eureka Indestructible Fence Pests.

Cheaper shan wood. Made by the farmer where used. Composed of cament, sand, and cablewire Great inducements to agents to work territory. State and county rights for sale. For infermation write 8. F. STULTZ, 208 E. Crawford St., Eikharf, Ind

STEEL ROOFING 100 SQUARE FEET \$2.00



WINDSOR-CLIFTON HOTEL Contrally located; has 250 rooms \$1,00 up; also Firet-Clas-Restaurant at popular prices. CURIST BEIPP, Pris.

HOMESEEKERS EXCURSION

....VIA....

The Missouri Pacific Ry

Dates of sale: Feb. 2 and 16 March 1 and 15, April 5 and 19.

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ARKANSAS, INDIAN TERRITORY, LOUISIANA and TEXAS.

Rate one fare plus \$2 for the round trip. Limit for return 21 days. Tickets will not be sold to Hot Springs, Ark For further information address

H. C. TOWNSEND.

G. P. & T. A., St. Louis, Mo. Or call on F. E. NIPPS, Ticket Agent, Topeka, Kans.

Nerve Fag.

If You Waste Your Nerve Energy, After Awhile You Will Suffer For It.

You can waste nerve force by excess,

over-work, worry, anxiety, etc.
You can weaken yourself by not eating proper food or securing sufficient rest to

renew the nerve energy you use up.

The proper treatment, in addition to good phosphatic food, such as whole meal bread, prepared cereals, etc., is Dr. Miles' Restorative Nervine. This is as truly a brain and nerve

food as any food you could eat, and be-sides, furnishes strength and tone of its own, which goes to the weakened nerve system, and sets it to rights.

Dr. Miles' Restorative Nervine is a refreshing, revitalizing tonic food-medicine for the brain and nerves. It reconstructs worn-out nerve tissue, and fills your languid brain with new life and vigor.

Dr. Miles' Nervine has made so many marvelous cures, of people so sick the doctors thought they were incurable, that it is today the standard medicine in many thousands of American homes. The first bottle is guaranteed to help

you, or druggist returns your money.

"The extreme heat, close confinement and intense mental strain incident to the banking business, has caused me to suffer with nervousness and insomnia. It gives me pleasure to say that I have used Dr. Miles' Nervine with very satisfactory results in the treatment of these affections. I am now on my fifth bottle, and eat and sleep well, in fact have almost forgotten that I possess nerves."—R. L. DALBY, Asst. Cashier, State Bank, Texarcana, Ark. you, or druggist returns your money.

FREE Write to us for Free Trial Package of Dr. Miles' Anti-Pain Pills, the New Scientific Remedy for Pain. Also Symptom Blank. Our Specialist will diagnose your case, tell you what is wrong, and how to right it, Free. DR. MILES MEDICAL CO., LABORATORIES, ELKHART, IND.



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8 floors. Fine new rooms. Meals a-la-Carte at all hours.

BATHS OF ALL KINDS.

Turkish, Russian, Shower, Plunge, etc. The finest awimming pool in the world. Turkish Bath and Lodging, \$1.00. Most inexpensive first class hotel in Chicago. Right in the heart of the city. Booklet on application.

New Northern Baths & Hotel * 14 Quincy St.-QHIDAGO-Near State

GRAND BOOK FREE

DR. McLELLAND, the celebrated specialist in DISEASES of MEN, explains his methods, tells how seminal weakness, sexual debility, stricture and sleet, blood poison and loathsome skin diseases can be cured at home at small expense. 6% BEST MEDICAL BOOK FOR MEN of this or any age, 96 pages, profusely illustrated, sent postpaid sealed, with symptom charts, to every male reader mentioning this paper. Address C.A.McLELLAND. M, D., 318 E. Douglas, Wichita, Kansas



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And get Well, Strong and Vigorous.
If you will send me a sample of your
morning urine I will tell you what disease you have, its cause and if ourable
or not, free of charge. You can be cured
at home at a very small cost. I treat
both sexes. Send four cents for mailing case and bottle for urine. Address
J.F.SHAFER, M.D., Water Doctor,
216 Penn Ave., Pittsburg, Pa.

Are You a Strong Man?

If you are not as vigorous as you used to be, and feel that your vitality is slipping away from youno matter what your age may be or what causes your weakness—I want you to write me (Geo. S. Beck, 44 Main St., Springfield, Ohio.) in strict confidence, mentioning this paper, and I will tell you on my solemn oath about the "Wonder-Worker" that made me a strong man and has brought virile strength to more than 300,000 men in past five years.

VARICOCELE

A Safe, Painless, Permanent Cure GUARANTEED. 30 years' experience. No money accepted until patient is well. CONSULTATION and valuable BOOK Free, by mail or at office. uable BOOK Free, by mail or at office. DR.C.M.COE, 915 Walnut St., Kansas City, Mo.

PUPTURE CURED IN 10 DAYS

By a Scientific and Neverfalling Process. No knife, no
pain, absolutely no danger. IN TEN DAYS THE
PATIENT IS SOUND AND WELL—cured to stay
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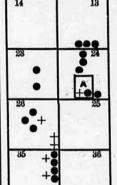
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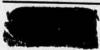
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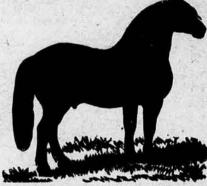


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At the American Royal, 1903, our Percheron stallions won every first prize.

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At the Indiana State Fair our Percherons won three first prizes out of a possible fifteen.

At the Indiana State Fair our Percheron and French Coach stallions won every possible prize. At the Kansas State Fair our Percheron and French Coach stallions won every first prize, including grand sweepstakes. Our last importation and the fourth for us in 1903, arrived in Columbus, Tuesday, Dec. 8. During the year we have imported from France four times as many Percheron and French Coach stallions as have been brought over by any body else. Our are a better heres for the money than can be bought elsewhere.

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Well, well; Cheer up; Get Busy-Iams' peaches and cream are ripe. They were sensational "show horses" at the Nebraska State Fair. (He had a snap.) Had a whole barn full of prise-winners there. Iams won first on four-year-old Percheron in class of thirty-two (an easy victory). Also championship sweepstakes Percheron stallion over all, and many more prizes. All the principal prizes in Percherons, Belgians, and Conchers. Iams kept his great 5100-ib. show pair and the best stallion in every class out of the Nebraska State and were not shown for prizes. None of the special, train of 100 stallions received August 23, 1963, were shown at Nebraska State Fair, and among these he had the first and second prize four-year-old Percheron at largest French horse show at Chartres, and many Percheron winners at leading "horse shows," as well as winners at leading "horse shows" of Belgium and Germany. At Jams'

SWEEPSTAKES STUD

Visitors thronged his barn'at Nebraska State Fair and said: Helle Tom! Say, Iams has the best herse show I ever saw. Yes; see those four 2000-lb, two-year olds. Iams is a hot advertiser, but he has horses better than he advertises. Hello Mr.! I'm Zeke. Say, this is the best string of stallions I ever saw they are sure peaches; and cream. See those six 2200-lb, three-year-olds—all alike, too. They are all wool and a yard wide, the "wide-as-a-wagon" sort.

"Mother, this is Iams' great show of horses. His horses are all back and big ton fellows. He always has the best. Samanthy, here is Iams' show herd. Everybody wants to see his horses. We came from California to see Iams' 6100-lb, pair of stallions. That's them. They are the greatest pair in the U.S. Yes, and worth soins 2,000 miles to see. Hello Loule, here is Iams' 2400-lb. sweepstakes Percheron stallion over all. "Doc!" I don't wonder at his competitors wanting this horse barred out of the show-ring. He is a sure winner anywhere. Mitty, see those fine coachers of Iams', Georgie, dear, they are levelyt they can look into the second story window. Yes, Kitty, Iams has more registered draft and coach stallions than any man in the U.S., and all good ones. Georgie, dear, buy your next stallion of Iams. His lorses are much better than the one you paid those Ohio men \$4,006 for, and Iams only asks \$1,000 and \$1,500 for "toppers." Iams has

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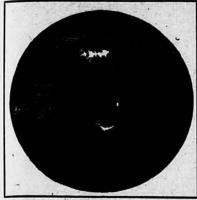
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19 Cows and Heifers, all bred or with Calves at foot by the Cruickshank bull, Red Gaunt-let 3rd 149507. 14 choice young Bulls, all reds; big, strong, lusty fellows, nicely bred; some herd headers among them. This is a good, representative lot of Shorthorns and will compare favorably with our former offerings. Sale will be in the PA-VILION. Catalogue will be sent on application.

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