

## Corn Improvement Discussed By Christie; President Stone of Purdue Speaks Tonight

### PRES. STONE SPEAKS.

One of the feature attractions of the Short Course and Corn School, which is coming to an end, will be the address at the high school auditorium this evening by President W. E. Stone, of Purdue University. Prof. M. W. Richards also will speak on "Decorations of Home Grounds." Music will be furnished by a male quartet. The program will begin at 7:30 o'clock, and will be short in order to allow all who may desire to attend the basketball game at the Coliseum.

### ABBOTT DISCUSSED SOIL IMPROVEMENT

"Commercial fertilizer has been quite largely used in Indiana for a good many years, but the men who are using it all too often fail to take the trouble to understand its relation to crop production and the permanent maintenance of the fertility of the soil," said J. B. Abbott in his lecture on "Soil Improvement." Continuing he said, "there seems to be a tendency to regard it much as patent medicines are regarded; to attribute to it some mysterious stimulating effect on the soil, and to fear unfavorable after results, particularly if its use is discontinued. This attitude is all wrong and is costing the users of fertilizers a good many dollars every year. There is nothing mysterious about fertilizers; nothing that is not easily comprehensible to everybody; and it looks like mighty poor business policy for the farmers of Indiana to spend hundreds of thousands of dollars every year without any clear idea as to what they are buying or why. The facts behind the use of fertilizers, as nearly as can be summarized in a few words are about as follows:

"Fertile virgin soils keep on producing a luxuriant growth of vegetation indefinitely because nothing is removed from the land, and the supply of plant food is used over and over again, but cultivated soils will not keep on producing crops indefinitely because every crop or portion of a crop that is removed takes away some of the none too abundant plant food, thus in time reducing the supply so low that the soil ceases to produce profitable crops. Three elements of plant food nitrogen, phosphorus and potassium, are liable to thus become deficient; and when we buy fertilizers we are simply buying one or more of these elements as a direct food for our crops. Fertilizer is just as truly a food for plants as corn or clover hay is for steers, and it is just as important from the financial standpoint to know exactly what food our plants require and where we can buy it cheapest.

Field fertilizer tests conducted by the experiment stations in various parts of the state have shown that the soils fail to supply enough phosphoric acid, nitrogen or potash for maximum crop production. The first thing to do so to save what plant food there is left by saving manure, straw, corn stalks, etc. The next thing to consider is the growth of clover or cow peas to furnish nitrogen and decaying organic matter. But is important to remember that legumes fix atmospheric nitrogen within their own tissues rather than in the soil, and if the crop is removed from the soil the nitrogen goes too and leaves the soil a little better off than before. The mineral elements of plant food, phosphoric acid and potash, must be purchased in the form of commercial fertilizer or raw materials, and of these mineral elements phosphoric acid is by far the more important; though both may be needed.

"The experiment station does not advise the purchase of commercial nitrogen for general farm crops except in relatively small amounts for wheat, as it does not usually pay."

### "HORSE PRODUCTION" THOMPSON'S TALK

The last lecture on Friday was by Prof. Thompson who spoke on "Horse Production." He said a survey of the horse situation in the state reveals that while here and there a farmer or a group of farmers are breeding and rearing draft or heavy horses in an intelligent, painstaking, and thoughtful manner, the majority of our farmers, the men who produce the great numbers of horses of the state are not governing their operations by a consideration of the horse market demands.

Three of the things which the market is most particular about the things for which it condemns a horse if he is faulty in them and the things which the producer should therefore pay attention to are soundness, weight and conformation. The subject of conformation has been taken up pretty thoroughly in the instruction in judging as well as the examinations for soundness. Hence, these unsound nesses which are considered to unfit a horse or mare for breeding purposes will be considered here. Moon blindness, glass eye, and cataract, heaves, broken wind, spavins, ringbone, side bones, navicular disease, malformation of the hocks, feet, couplings, and pasterns, are generally conceded to be

undesirable in the breeding stallion of mare.

Rations for the mare while nursing the foal and for the foal after weaning were then discussed and the necessity of keeping the foal in a thrifty, growing condition during the whole period of growth was shown. Horses weighing above sixteen hundred pounds on one animal is worth \$25.00 per hundred as is demonstrated in the sales pavilion every day in the year.

The value of breeding mares is prepotent, pure bred, stallion was shown and illustrated by a chart showing statistics gathered in Wisconsin. These figures showed that at the age of four to six months there was a difference in actual selling price in favor of colts sired by pure bred stallions of \$27.52 at the age of one year a difference of \$47.84; at the age of two years, \$59.30; and at the age of four years a difference of \$8102.90.

A consideration of the work ration and methods of cheapening it and retaining its efficiency, concluded the lecture. Substitutes for oats suggested by different experiment stations and which have proven satisfactory are ear corn, pound for pound; bran, one part; corn one part; oil meal or cotton seed meal. It is wise to give the horse on Sundays or holidays a much lighter ration than he gets on working days. Bran, a little corn or oats; and plenty of hay; together with light exercise should be given on the Day of Rest. Monday morning disease is thus avoided.

### CORN IMPROVEMENT CHRISTIE'S TALK

In the corn room on Friday, Prof. Christie gave a talk on "Corn Improvement." He said that the corn this year in Indiana is in very bad shape, and in many corn shows the question of vitality had to be left out altogether if prizes were to be awarded. Corn in the neighboring states is in as bad condition and it is not safe for farmers to send to these states for their seed corn. He advised every farmer to select one hundred ears of their best corn and lay them out on a table, take out the best ones and compare it with the rest and in this way select twenty-five good ears. Shell off the tips and butts and use only the remaining kernels for planting. These twenty-five ears should be planted in a separate bed in the south or west side of the field to prevent the wind blowing the pollen from other corn on this seed corn.

Every farmer cannot have a breeding plot, he said, but every one should have a seed corn patch. He advised the farmers to go through this plot as often as possible and pull out the young stocks that "knuckle over" barren and smutty. Should the stocks be quite green when these are noticed, he advised pulling out the tassels. Like produces like, he explained, and the offspring of a corn stock that has been pollinated with pollen from a smutty or barren stock have a tendency to reproduce barren stocks. In the fall, go through this plot and pick out the best ears for next year's seed. He can be sure it is from good stock because he has seen it grow and knows it is free from barrenness.

Many elevator men over the state are putting in germinators and hiring men to germinate the corn for the farmers in the vicinity. This work is done free of cost to the farmers, the elevator men paying all expenses. This method is proving very satisfactory in that the farmer plants good corn, gets higher yields, and the elevator man has more and better corn to sell and both are benefited. Seed corn should be properly stored because the germ is filled with water and when this water freezes it has a tendency to break down the cells in the little germ and in that case the germ is dead and will not sprout. Mr. Christie is advocating that all farmers who sell seed corn, instead of selling it by the ear or bushel from the seed house as is now done, germinate each ear before selling same and sell only those that germinate one hundred per cent. This will keep only the good ears on the market and will have a tendency to help the average farmer who does not germinate his corn, to grow good corn.

### THE MANAGEMENT OF POULTRY ON FARM

At 9 o'clock, Mr. Crane who has charge of the poultry work at Purdue talked on the subject of "Management of Poultry on the Farm." He touched first on the subject of marketing eggs and poultry, showing the immense annual loss of at least \$500,000 due to present methods of handling eggs, and advocating a grading system of buying eggs according to quality. At the present time eggs are bought at so much per dozen, regardless of quality, thus providing no incentive to the farmer for better eggs. Such system should be abolished. Lack of business methods on the part of both the buyer and farmer is the cause of this present condition. In order to market eggs they must first be produced and since the present prices of eggs make the question a pertinent one, Mr. Crane showed some of the

causes for the production of eggs.

Hens over two years old must be discarded because they will not lay well; heavy meat producing hens do not make good layers; and breeders possessing poor vitality can never be expected to lay or produce hatchable eggs, no matter how well they may be fed. Any fowl showing the least signs of low vitality should be discarded. Eggs are made of the feed given to the hens and grain alone will not make eggs. If winter eggs are desired the poultryman must attempt to reproduce summer conditions. This can be done by supplying beef scraps or skim milk mixed with bran and shorts accompanied by some green food such as sprouted oats, cabbage, or beets. Few Indiana farmers know how their flock of poultry stand financially, due to the fact that few records are kept. No one can tell the standing of any line of business without records and Mr. Phillips and Mr. Crane heartily recommended the keeping of a few records at least.

### BAKING SODA AND SODA MIXTURES

Miss McChesney gave a demonstration on "Baking Soda and Soda Mixtures." She stated that baking powder was made of cream of tartar and soda, together with a little flour or corn starch. When action takes place by the addition of water and heat the acid in the cream of tartar liberates the gas in the soda. Alum when added to a baking powder injures the system. Many of the cheaper baking sodas contain alum. She said baking powder was in demand because of its quick action, biscuits and small breads being in this way gotten ready quickly for the table. One trouble is that the dough in the center is not always cooked as well as it should be and the same complaint may be made in regard to the raised batter. Cake owing to its long baking is better in this respect. If bread is harder to masticate and digest on account of the moisture still retained how much more so must the mixture of starch and fat in the cake be moist and soggy as it is when taken from the oven. Cakes and cookies should if possible be made at home as much of the fat and eggs used in the commercial article are not just what one would care to use.

### LECTURED ON MAIN- TENANCE OF HOME

In the Domestic Science department in the afternoon, Miss Woodward delivered a lecture on the "Maintenance of the Home." She said in part: "The Maintenance of the Home—my topic for today—has been chosen because of the fact that so many women make, unknowingly a drudgery of their home work. Much of the present aversion to household duties would vanish if all possessed adequate preparation to perform them, for it is a known fact that whenever one's knowledge of a subject has passed the stage of drudgery and becomes science its performance becomes a pleasure. There is little in a home more pathetic than a household in which no organization exists, no systematic direction of activities and order. A haphazard aimless management of home leaves its unmistakable stamp upon its inmates. Without the knowledge of it the housewife in such a home suffers infinitely more friction, loss of time, and strength and money, than it would cost to keep her housekeeping in better hand. The easiest way to care for one's home is to drive ones household duties before one and to do this successfully it must first be known what is to be done; second: who is to do it; and third: when it is to be done. This however cannot be managed without a knowledge as to how to perform each detail of the house work in its best and simplest manner which means necessarily in the long run the quickest and most satisfactory way. A routine for ones work should be planned and each woman will find her own best methods although it will be possible to give some general suggestions as to it."

### PROF. CRANE TALKED ON FARM SEPARATOR

Professor Perry Crane had for his subject on Friday afternoon, the "Farm Separator." He described the different methods of separating cream used on the farm and gave a detailed description of each. The farm separator, he said, is based upon the law of centrifugal force. Here the milk is run into the machine while warm and the speed of the bowl throws the heavier portions to the outside, forcing the lighter portions to the inside and these two products are allowed to escape through separate outlets and the result is skimmed milk in one and cream in the other vessel. He said the gravity cream or cream secured by the gravity system seldom tests as high as thirty per cent. fat. It will not churn as completely as thicker cream and find a great loss of butter fat is found as there is a larger amount of butter milk.

The care and setting up of the hand separator are very important factors in the efficiency of the machine. It must be held securely and level. The bowl of a separator not properly set up will tremble which means a loss of fat in the skimmed milk. The speed of the separator also influences the efficiency of separation. The machine must be run at the speed indicated upon the handle for the best results. The efficiency of separation is also affected by the condition and temperature of the milk, the best results being obtained when the milk is separated directly, after being drawn from the cows. The machine should not be forced beyond its capacity as there will be a loss if too rich a cream is required. There is a great deal of dissatisfaction

among creamery patrons because their cream tests vary from time to time. It should be understood that there are a great many factors that may cause this variation, and in most instances the man testing has better control of his operations in testing than the farmer does of his operation in producing. There are a few factors not controllable by the producer, such as the percent of fat in the milk to be separated and it is found that the percent of fat in the cream varies directly as the percent of fat in the milk. That is when other conditions are the same, 3 per cent. milk will produce 30 per cent. cream and five per cent. milk will produce 50 per cent. cream. Then we have many conditions under the control of the producer that cause a variation in the percent of fat in cream such as adjustment of cream screw, speed of machine, steadiness of machine, rate of inflow, and amount of water or skimmed milk used for flushing, all of these and many more cause a wide variation if not absolutely uniform.

Then too there are conditions under the control of the purchaser that will influence the uniformity of the test. They are: fairness of sample; care of sample; and accuracy of test. All of the above should be considered when there is a variation in the cream test before anyone is accused of dishonesty. The farm separator is one of the most important factors in the dairy business either for good or evil, depending upon the way in which it is used.

It is the abuse and not the use of the separator that has struck such a blow at the quality of butter in the past few years. If reasonable care be taken of separator cream, there is no reason why butter cannot be made from it that will compare with the best butter from the whole milk system.

### PARENTS SACRIFICE SAVES BABY'S LIFE

(American News Service)  
Chicago, Feb. 10.—Sacrifice by her parents, Mr. and Mrs. Christopher Cheevers has saved the life of Annie Cheevers, three years old. The child was scalded Jan. 21 by falling into a tub of hot water. The father and mother sacrificed 105 square inches of skin on Saturday to be drafted on their baby. Today it was announced that the baby would recover.

### VICTIM OF OLD AGE

And His Family Are Saved by Charity.

Crippled with the infirmities of age, L. J. Jackson, colored, living with his family at Thirteenth and South C streets, has earned \$6 since January 1, which went towards the support of the family. With the aid of charitable organizations and township trustee James Howarth, the Jackson family has been kept from starvation and freezing. Jackson is employed by street commissioner Goun, but his ailments prevent him working steadily. The township has given the family about a ton of coal since the first of the year.

Last year Canada paid out \$13,511,931 in subsidies and subventions, of which \$1,736,372 went for mail subsidies and steamship subventions.

### BIG GAME TONIGHT

Indiana Meets Earlham in Basketball at Coliseum.

For the first time in several years Indiana university and Earlham will meet on the basketball floor this evening. Indiana will arrive in Richmond this afternoon primed for a hard contest. Word from Bloomington says that Indiana is expecting a hard fight and that the regular team is in shape for the contest. The state university has five veterans on its squad as Barnhart, Davis, Hipskind, Graves and Berndt are either playing their second or third years. Berndt has played in Richmond on the Manual Training high school team of Indianapolis but with that exception none of the down state athletes have ever been seen on a Richmond floor. Barnhart, the son of the Democratic congressman from Rochester is the big goal getter of the team. Against Purdue he scored a majority of the points. Hipskind is a product of Wabash high school and athletic club and is captain of the team succeeding Barnhart who led the crimson five last year. He is a little fellow but fast. His game is to play close under the basket while Barnhart plays the corners of the court. Both Davis and Berndt dribble down the floor from their guard position and as they are good shots at the basket, the Quaker forwards will have to play a defensive as well as offensive game. Graves at center is said to be the best Indiana has had for some time. He was a guard last year.

### GILBERT DUNHAM'S BARN BURNED

Defective wires caused a small fire in a brick barn in the rear of the home of Gilbert Dunham, North Tenth street, about three o'clock this afternoon. The damage was not great. The heavy smoke attracted many persons to the scene of the blaze. Four hose companies fought the blaze for nearly an hour.

### NAMED GUARDIAN

The Dickinson Trust company has been appointed guardian of Leona M. White, the minor heir of the late Eddy K. White, the Whitewater farmer who died in December, 1909 as a result of arsenic poisoning.

### TRUNKS Suit Cases Traveling Bags

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827 MAIN ST.  
Quality in Leather Goods.

### DEBATING CLUB IS HOLDING PRACTICE

The debating club of the high school is holding practice meets frequently in preparation for the debates which will be held with teams from the Marion, Kokomo and other high schools in the state in the spring. The debates with the Marion and Kokomo high school teams will be on the subject, "Resolved, That a Commission Form of Government Should Be Established in All Cities of 20,000 Inhabitants." The dates have not been definitely fixed.

On the safe side.  
"What is a safety match?"  
"Marrying a girl to escape a breach of promise suit."—Exchange.

### HAMMOND ATTENDS WATER WORKS MEET

H. M. Hammond, president of the board of works, and City Engineer Fred Charles, went to Indianapolis, on Friday morning, to attend a meeting of water works men. There are several matters concerning sewage filtering which the board wishes to investigate.

### PATROLMAN WESTEN- BERG HAS THE GRIP

Patrolman Henry Westenberg, one of the oldest and most efficient patrolmen on the local police force, and former chief, has been off duty for several days on account of a severe attack of grip. Westenberg will return to duty Monday.

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Don't use a small, concentrated light over one shoulder. It puts an unequal strain on your eyes. Use a diffused, soft, mellow light that cannot flicker, that equalizes the work of the eyes, such as the Rayo Lamp gives, and avoid eye strain.

The Rayo is designed to give the best light, and it does.

It has a strong, durable shade-holder that is held firm and true. A new burner gives added strength. Made of solid brass and finished in nickel. Easy to keep polished. The Rayo is low priced, but no other lamp gives a better light at any price.

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Dealers Everywhere. If not at yours, write for descriptive circular to the nearest agency of the

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## Saturday Market

### Dressed Chickens

### To Fry, Roast or Stew

### VEGETABLES

Fancy Head Lettuce, Fancy Mangoes, New Tomatoes, New Carrots, New Green Beans, New Cauliflower, New Cucumbers, Brussel Sprouts, Kumquats, Spinach, Rhubarb, Spring Onions, Leaf Lettuce, Celery, Cranberries, Parsnips, Turnips, Jersey Sweet Potatoes, Parsley

ORDER SOME OF THOSE FINE FAT MACKEREL for your Sunday Morning Breakfast.

FLORIDA GRAPE FRUIT—5c, 6 for 25c; 7c, 4 for 25c; 10c, 3 for 25c.

FANCY ORANGES—15c doz., 25c doz., 30c doz., 40c doz., 50c doz.

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He will show you five blends at different prices. The lowest priced blend may be the coffee you'll like best.

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Do you like a keen, tangy, sparkling coffee? Choose Karex. A piquant, high-flavored coffee? Choose Navarre. A soft, mellow, velvety coffee? Then order Briardale. A rich, savory, aromatic coffee? That is Vienna. Or do you prefer the distinct brew produced only by the most expert blending of real Mocha & Java? Then select Golden Sun Mocha & Java.

Each always uniform in goodness—in air-tight packages, pure, clean, and containing the luscious oil which is the "life," flavor, aroma, and coffee berry. Most of this goodness escapes from coffee handled in bulk.

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Make coffee time a delight every time. Your grocer will gladly help you select your particular Blend. He will show you the Golden Sun Table of Tastes so you can make no mistake in securing the flavor that makes coffee your most welcome drink.

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