

### Study in Honey Color Problems

#### Three Government Bureaus at Washington Examine Over 450 Samples

Problems involved in the commercial handling of honey have led to a series of studies in which two other bureaus in the United States Department of Agriculture have co-operated with the bureau of entomology, which maintains a special bee culture laboratory at Beltsville, Md.

#### Coloring Materials

The work on the coloring materials in honeys of various types, undertaken by the bureau of entomology in co-operation with the carbohydrate laboratory of the bureau of chemistry, has now reached the stage when it is possible to undertake routine analyses of the samples of honeys from different plant sources collected for the purpose.

#### Area Plan of Wiping Out Dread Disease of Cattle

In the interests of improved live stock throughout the surrounding country, the First National Bank of Petersburg, N. D., is not only actively supporting the "Better Stock - Better Stock" campaign, but is aiding in financing it. An officer of the bank, in a recent letter to the United States Department of Agriculture, states that there are now over 90 pure bred sires in the immediate vicinity, most of them shipped in by the bank. In addition the bank has arranged to ship in 13 sires of breeding ewes from the West to place among its customers, and along with the ewes, there will be distributed pure bred rams of four leading breeds.

#### Wheat After Soy Beans Particularly Desirable

The idea seems general that a soybean hay crop removed from a piece of land leaves it in particularly desirable shape for wheat sowing as far as fertility is concerned. Such is not the case when the beans are removed. It has been practically demonstrated that the soil is depleted of phosphorus and potash have been removed. Wheat on land from which soy beans have been removed may well respond to a 2-12-6 fertilizer in a very satisfactory manner and some such fertilizer should be used. Only by turning under the beans is there any appreciable addition of nitrogen to the soil and wheat will always respond to a small amount of nitrogen when following soy bean hay.

#### Commercial Horses Have High Advertising Value

While dealers are complaining that there are not enough good heavy draft horses to go around, surveys made by the Horse Association of America show that the quality of commercial horses is improving. Competition in trucking has brought out most notably the fact that a good horse will render better service, last longer, and have a much higher turnover value than a cheaper one. And furthermore, commercial concerns have learned that good horses have a high advertising value.

#### European Corn Borer Is Increasing Infestation

Considerable increase in the degree of infestation by the European corn borer in Ohio has been noted during the past month in the infested territory, states a report to the United States Department of Agriculture. One field has been observed which has been as high as 17 per cent of the stalks infested. No definite information has yet been received that the insect will be a more serious pest this season than last.

#### Legumes on Acid Fields Are Helped by Limestone

Findings that the soils in which they are planted are acid and that some 38,000 farmers in 1922 followed the recommendation of their county agents to apply lime on these fields, they used for this purpose, according to reports to the United States Department of Agriculture, about 627,000 tons of lime or limestone.

### Detect Diarrhea in Young Chicks

#### Serum Agglutination Tests to Be Made at Illinois University

The laboratory of animal pathology and hygiene of the University of Illinois is prepared to make a limited number of serum agglutination tests for the detection of white diarrhea in chicks, for owners of breeding stock. Upon request vials will be furnished for collecting blood samples, as well as leg bands bearing numbers for the identification of the birds. A charge of five cents per sample will be made to cover in part the cost of making the test. Valuable assistance can be obtained from a competent veterinarian in collecting blood samples. University Agricultural Circular No. 273 describes the disease fully.

#### Diarrhea in Young Chicks

Diarrhea in young chicks is a specific, highly contagious disease of young chicks. It is one of the few diseases that may be transmitted directly through the egg to the offspring. The disease may also exist in mature stock, but it often remains unrecognized, since there are no visible characteristic symptoms, as in the case of chicks.

#### Symptoms of Infection

Chicks infected through the egg manifest symptoms in a few hours after hatching. In the acute type of the disease affected chicks (three to twelve days old) are drowsy and dejected in appearance. The feathers are ruffled, the wings droop and the chick stays back and forth when in a standing position.

#### Control of Disease

The control of bacillary white diarrhea depends on two factors: First, the detection of infected breeding hens by means of the serum agglutination test, and their removal from the flock; and second, the protection of newly hatched uninfected chicks against infection in incubators, brooders and houses.

#### Big Mistake in Feeding Laying Hens Stimulants

It is a mistake to feed nostrums and stimulants to hens or pullets in an effort to increase the present egg production, for the simple reason that the feeding of such stimulants has a very detrimental effect upon the performance of the hens during the subsequent breeding season. Stimulation of laying fowls, as in the case of human beings, through the use of drugs or stimulants, can cause nothing else but the eventual breakdown of the physical being of the individual.

#### Cow Tester Weighs Milk of Animals Separately

When the tester for the cow-testing association visits the farm of a member he weighs all milk and makes note of it in his book. At milking time he weighs the milk of each cow separately and takes a sample of it for testing. He does this both evening and morning. The following morning he tests these samples, calculates the production for the month, enters it in a book which is left with the farmer and then he is ready to move on to the next place at noon.

#### Necessary for Ducks to Have Water for Drinking

It was formerly considered necessary to have a swimming pool or pond for ducks, but they can be raised profitably without it. The eggs are more likely to be fertile, however, if given plenty of range and water to swim in. Ducks really do drink more water than hens, and require a deep pan of fountain placed near their feed so that they can run to it every little while and drink or wash their bill.

### DOLLAR

#### Automatic Ventilation Is Latest Convenience

Most poultrymen today acknowledge the value of good ventilation in the winter laying pens. But ventilation without objectionable drafts is often hard to accomplish, especially where snowstorms and blizzards are frequent occurrences. The open-air type of henhouse, which is in general use, is not entirely satisfactory because snow and rain can enter. Even if a muslin curtain is provided to prevent this it is necessary to adjust this curtain according to weather conditions, and this is very often neglected. To overcome these difficulties, and to make the ventilation entirely automatic, a Wisconsin poultryman devised the shutter arrangement shown in the illustration.



It consists of a frame projecting from the side of the poultry house as shown, about 6 feet long and 4 feet high, roofed over with paper. Seven 6-inch boards are suspended within this frame, with enough space between them to insure proper ventilation at all times, and arranged in such a manner that they swing easily upon pivot nails driven through the frame at each end.

#### Hens Must Be Well Fed During Moulting Period

Many people ask how to feed chickens through the molt. They seem to feel that the system of feeding during this normal resting period should be different than their feeding system during the other periods of the year.

#### Flashlight Egg Tester Is Quite Handy Device

Telling when an egg is bad by a pocket flashlight is easily done by putting the egg in a cardboard holder rolled like a funnel, the small end containing the bulb of the flashlight. A pressure of the button and the light is thrown up through the funnel and through the egg, which will thoroughly show the condition of its contents.

#### Supply of Oyster Shell Is Essential to Fowls

A constant supply of oyster shells or limestone grit is essential to the most profitable egg production. Recent tests in Ohio show that when the hens were denied oyster shells egg production was greatly reduced and the eggs averaged two ounces per dozen smaller.

#### Eggs in Softer Weather

With the first hard cold spell, hens may drop down in egg production. After they have become hardened to weather conditions, however, one may expect satisfactory results from them even in the severest months if they are well comforted.

### WILLIAM A. GRAHAM JUNIOR SUCCEEDS AS COMMISSIONER

#### State Department of Agriculture

William A. Graham Junior, son of the late Senator Graham, has been appointed as commissioner of the State Department of Agriculture. Mr. Graham, who is carrying his father's name, will come to his duties as soon as he has reached here.

#### Clean Up Droppings of Flock in Winter Months

The droppings of the flock should be cleaned up regularly, especially throughout the winter months while the birds are housed together without free range. Many diseases are spread from bird to bird by means of infective droppings of a sick fowl. Against all such risks, the successful poultryman defends his flock when he cleans up and uses powdered, air-slacked lime.

#### Weeds and Insects Are Big Drawbacks to Crops

Weeds and insects are the greatest drawback to large acreage yields. Weeds deprive the soil of the material contents necessary for the development of the cultivated plants. Clean cultivation is necessary to give the crop the benefit of the soluble nutrient material of the soil fall and winter; deep plowing will also assist in preventing damage by insects.

#### New Iowa Legume Being Shoved Into Limelight

The new legume found growing near Logan, Iowa, a few years ago, is being shoved right out into the limelight by H. D. Hughes, of Iowa experiment station. Hughes is the man who trotted out Hubam, the annual sweet clover, a few years ago. This crop has pleased the bee folks more than any other class, for Hubam is a great pasture crop for bees.

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### Be Wise and Build in Water

#### Construction Experts See Savings in Work in Cold Season and Consequent Elimination of Idleness

That winter construction is economically desirable from every point of view was the theme of the speakers at a luncheon meeting of the New York Building Congress, held in the Hotel Commodore on November 21. The building industry, they said, is carrying twelve months' business in nine months' business, and to correct that condition recommended that big construction be started in the cold months.

The number of contracts for new construction have increased this autumn beyond expectations, and reports show that a large amount of work in erecting buildings has been planned for the coming cold season.

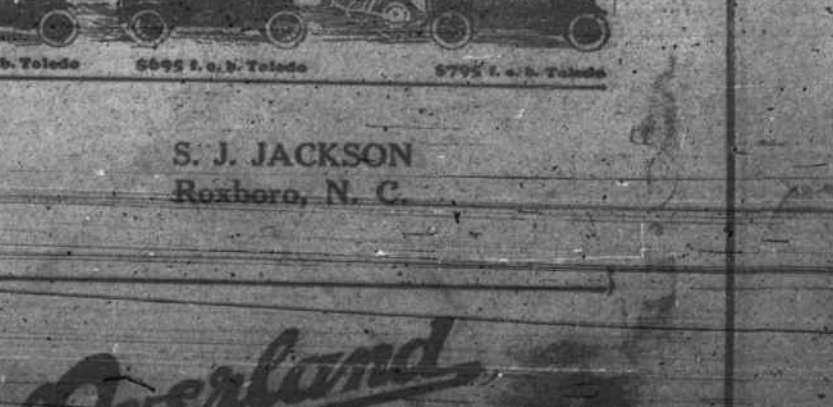
#### Working with concrete during the cold season is practical from every standpoint, explained W. J. Barney, president of the Barney-Ahlers Construction Company. More winter construction is the acknowledged remedy for seasonal unemployment in the building industry.

Total Contract	Time of Year	Cost of Project	Per cent of Total
\$225,000	Dec-Jan.	\$13,000	5.8%
180,000	Dec-Jan.	8,800	4.9%
25,000	Jan-Feb.	5,800	2.3%

Mr. Barney said that Charles E. Barney realized the value of winter construction. As a matter of fact, some time ago he gave the order to build \$500,000 worth of buildings. They were to be built next summer just as well as this winter. He realized that they would be finished on September 1, 1923, and in the course of construction, he had some of it in mind and some of it in the open. I will keep my game steadily employed the winter through, instead of sitting idle in the cold days on the outside. Through the winter I will save many thousands of dollars in the course of construction. Build in the winter and keep the architect, builder and subcontractor and labor busy. It will better balance up the industry.

#### Taking America Off Its Feet!

Overland Success is the Talk of the Country. The year just ended has been the greatest of all the fifteen years of Overland history. A great year made by great cars—the greatest Overlands ever built. Greatest in looks, power, action, comfort—and money's worth!



S. J. JACKSON, Roxboro, N. C.