# THE VISITOR

Devoted to the Interest of Agriculture and Manual Training in Minnesota High Schools

VOL. VII November, 1919 No. 3

## FARMERS' AND HOMEMAKERS' WEEK

The farmers and home-makers of the state will meet at University Farm, St. Paul, December 29, 1919, to January 3, 1920, for a week of inspiration, information, and fellowship.

There will be lectures, conferences, discussions, meetings of various organizations, and evening programs. In fact, it will be a week brim full of pleasure and profit for the farmers and home-makers of the state.

Some agriculture teachers and superintendents will find time to attend these meetings and all should call the attention of the farmers and home-makers of their community to them. Remember the dates, December 29 to January 3. For further information address the Secretary, University Farm, St. Paul, Minn.

## MOTION PICTURE FILMS

The following motion picture films are now available from this office:

**The Barbarous Barberry.**—This is a one-reel production of the United States Department of Agriculture. It is composed almost entirely of animated cartoons and drawings by Mr. George who originated the seed corn poster which was widely circulated through the state. This film can be used for general educational work or for class room instruction in botany or agriculture.

**Cement on the Farm.**—This film was produced by the National Association of Portland Cement Manufacturers. It contains no advertising. It demonstrates the construction of a monolithic cement silo also the making of fence posts and drain tile. (One reel.) This should be useful in classes in farm mechanics.

**Lighting the Farm Home.**—This film illustrates old methods and modern methods of supplying light and water on the farms. The film was produced by the Ford Motor Company in cooperation with the Domestic Electric Company and is placed with us by the Domestic Electric Company. (One reel.) This reel could be used for general education and in classes in farm mechanics, general agriculture, and home economics.

**Select Seed Corn Early.**—This film was made several years ago by the agricultural extension division. It deals with selection and storage of seed corn. (One reel.) It can be used in the early fall among the farmers and also in agriculture classes when studying cron.

## LANTERN SLIDES AND CHARTS

The following sets of slides and charts may be obtained through this office:

### Slides

Corn is King
Alfalfa on Every Farm
A Fertile Soil Means a Prosperous People
Livestock on Every Farm
Dairying
Greater Profit from the Oat Crop
Make More from Farm Poultry
Weeds Mean Waste
Home Economics and Sanitation
Fight the Fly
Great Forward Movement in Education
Home Canning
Development of Agriculture
Gardening
Sheep

### Charts

Corn is King
Alfalfa on Every Farm
A Fertile Soil Means a Prosperous People
Livestock on Every Farm
Dairying
Greater Profit from the Oat Crop
Make More from Farm Poultry
Weeds Mean Waste
Home Economics and Sanitation
Fight the Fly
Great Forward Movement in Education
Home Canning

Make your class room work live by using visual aids. Get the neighboring schools to go on a circuit with you and cut down expenses. Put a set of charts into that associated school. You may keep a set two weeks, and longer by special arrangement.

Published monthly by the Division of Agricultural Education, University of Minnesota, University Farm, St. Paul, Minn.
Entered as second class matter at the post-office at St. Paul, Minn., under the act of August 24, 1912.
Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized August 2, 1918.



## MOTION PICTURE METHODS

It is our purpose to list in the Visitor from time to time certain films and slides with suggestions for their use.

There are several ways in which motion pictures may be used:

1. For class-room instruction, fitting a definite place in the scheme of instruction.

2. For education and entertainment with the idea of education paramount.

3. Primarily for entertainment and incidentally to instruct or elevate.

4. For popular entertainment where the entertainment idea is the leading or only one.

It is obvious that each of these is a legitimate use of films and that there are certain definite principles that should be kept in mind when using films in any one of the four ways in order to make them most effective. Strive to avoid using the educational film in such a way that it becomes a mere showing of pictures.

Using a film for education (primarily) and entertainment necessitates more than the showing of the film. A person unacquainted with fungi will pass through the woods without having seen a specimen. A student of fungi will know what to look for, and the woods will teem with them. In showing a film of this kind, the teacher can properly introduce it in the class room by having his instruction lead up to it. He can point out what the pupils should look for; then show the film. If followed by discussions or papers, the class may want to see the film again. Showing lantern slides between reels or after the first showing of the reel gives an opportunity to study details.

There are on hand in the Bureau of Visual Instruction, General Extension Division, four reels of film "From Mine to Farm." They show the mining of iron ore, its smelting, its conversion to steel by the different processes, and its manufacture into nails, fence, barbed wire, etc. A set of slides can be furnished showing the outstanding points (still life) in the film. This film could be used in commercial geography, chemistry, and farm mechanics and other classes to simplify, clarify, and supplement the regular class work.

Possibly only one or two reels should be used at a time and all shown together for review. Such use of a film does away with the statement so often made: "I had that film last year, I want something different," and substitutes: "I have a place in my class work where I can use that film each year."

No doubt better methods of using slides and films will be developed. A few good slides or a short film properly presented is vastly more valuable than a large number or a long film so presented that it makes little impression.

## ACID PROOFING SOLUTION

Tables and cabinets are frequently made locally for agriculture departments. In this case it is highly desirable that the tops have a durable black finish. The formula and directions given below are for a standard finish which is said to be acid-, fire-, and water-proof, and is used on most chemical laboratory tables. This may also be used on old tables, if all old finish is first entirely removed. This formula has already been printed in the Visitor but is repeated for the benefit of the new men in the field.

If solutions A and B as well as the oil are applied hot, greater penetration is secured.

### Solution A

Analine hydrochloride ($C^6H^5NH^2HCl$), 100 gr.
(Made by mixing 71 gr. aniline and 75 cc. HCl.)
Ammonium chloride ($NH^4Cl$), 40 gr.
Make up to 650 cc. with water ($H_2O$).

### Solution B

Copper sulphate ($CuSO_4$), 100 gr.
Potassium chlorate ($KClO^3$), 50 gr.
Make up to 615 cc. with water ($H_2O$).

Half of this recipe will finish a large laboratory table top. To use, apply A and allow to dry. Then apply B and allow to dry. Repeat this until the required color is obtained. Then wash with strong soap suds (Gold Dust or other washing powder in water will do). When dry, rub several times with paraffin oil or vaseline. Do not use linseed oil.

## BOOKS REVIEWED

The Principles of Agriculture for High Schools—John H. Gehrs. This book covers the field of agriculture. The author states that the chief motive of the book is to show how agricultural production in the United States may be increased. 585 pages. Macmillan Company, 1919.

Applied Economic Botany—Melville Thurston Cook. The author states his aim in three points: (1) A brief statement of the recognized facts and principles concerning plants and plant growth usually given in text books for secondary schools; (2) a list of simple exercises for observations which the pupil can conduct without great difficulty and which will demonstrate many statements given in the book; (3) a list of questions which are intended to be suggestive to the pupils and to encourage further studies. 250 pages. J. B. Lippincott Co., 1919. Price $1.60.

Blueprinting—John F. Friese. The author has here presented practical information about blueprinting and blueprinting practices in current use. Topics discussed are printing room equipment and arrangement, blueprint papers, making blueprints, Vandyke paper and its uses, blueprinting from typewritten sheets. 54 pages. Manual Arts Press, 1919. Price 75 cents.

## BULLETINS ON BARBERRY

Copies of Farmers' bulletin No. 1058, "Destroy the Common Barberry," are available for distribution to high school superintendents, agriculture instructors, and botany and science teachers for personal or class use. A limited supply of United States Department of Agriculture Yearbook Separate No. 796, "The Black Stem Rust and the Barberry," is also to be distributed. These bulletins may be obtained by addressing Mark A. McCarty, University Farm, St. Paul, giving the number of copies desired.

## NEW BULLETINS

The following bulletins may be of interest to men in the field:

How Teachers May Use Farmers' Bulletin 1044, The City Home Garden—Alvin Dille, U. S. Department of Agriculture, Department circular 33. June, 1919.

Lessons On Dairying for Rural Schools—Alvin Dille, U. S. Department of Agriculture, Bulletin 763 (professional paper). June, 1919.

The U. S. School Garden Army, Garden Manual No. 2, published by the U. S. School Garden Army Bureau of Education, Washington, D. C., contains 25 lessons on school gardens. Write for a copy.

How Teachers May Use Publications on The Control of Disease and Insect Enemies of the Home Garden—Alvin Dille, U. S. Department of Agriculture, Department circular 68. September, 1919.

How Teachers May Use Farmers' Bulletin 876, Making Butter on the Farm—E. H. Shinn, U. S. Department of Agriculture, Department circular 69. September, 1919.

### U. S. Bulletins on Poultry

Goose Raising—Farmers' Bulletin 767. 1917.

Points for Egg Buyers—Circular 25. 1919.

Points for Poultry Packers, How to Wrap Heads. Department Circular 52.

Important Poultry Diseases. Farmers' bulletin 957. 1918.

Standard Varieties of Chickens. I—The American Class. Farmers' bulletin 806. 1017.

Standard Varieties of Chickens. II—The Mediterranean and Continental Classes—Farmers' bulletin 898. 1917.

Hints for Poultry Raisers—Farmers' bulletin 528. 1918.

The Community Egg Circle. Farmers' bulletin 656. 1917.

Studies of Poultry from the Farm to the Consumer. Bureau of Chemistry circular 64. 1915.

Duck Raising. Farmers' bulletin 697. 1917.

Squab Raising. Farmers' bulletin 684. 1915.

Natural and Artificial Brooding of Chicks. Farmers' bulletin 624. 1914.

Natural and Artificial Incubation of Hens' Eggs. Farmers' bulletin 585. 1917.

First Care of Baby Chicks—Bureau of Animal Industry—G 30.

Hatch Early—Bureau of Animal Industry—G 28.

A Simple Trap Nest for Poultry. Farmers' bulletin 682. 1915.

These may be obtained from the U. S. Department of Agriculture, division of publications, Washington, D. C.

## NEWS NOTES

W. O. Lutz, agriculture instructor at Austin, has twelve boys studying vocational agricultural education. The course began September 20. One half day is given to the recitation, laboratory and field work, and study in agriculture, and the remaining half day to English, mathematics, and science. Superintendent Wheeler and Mr. Lutz hope soon to have two units doing vocational agri-

culture for one half day each. An additional instructor will be needed for nine months in the year to assist Mr. Lutz with the vocational work and to handle the grade and normal work.

At Owatonna twenty-five boys are studying vocational agriculture under Henry Hartle. Mr. Hartle keeps up interest in his classes by studying the herds, buildings, crops, and machinery of the farms surrounding the school.

Superintendent Reishus and agriculture instructor Schreiber, at Spring Grove, have a class of eighteen boys studying vocational agriculture. Mr. Schereiber talked with the parents of some of the boys as much as fourteen times about sending the boys to school. His persistence has been rewarded.

The following people were in attendance at the sectional meeting of the agricultural instructors held at the recent meeting of the Western Teachers' Association at Montevideo: George Girrbach and G. W. Wisman, Hector; Carl Nelson, Olivia; W. Reiley and J. C. West, Renville; Leslie Colby, Appleton; J. C. Hening, Canby; Wilbur Drake, Wheaton; J. F. Lefforge, Montevideo; W. P. Dyer, Agricultural Education Department, University Farm, St. Paul; and B. M. Gile, State Department of Education.

C. A. Anderson, agriculture instructor at International Falls, has had the pupils in farm management lay out the fences and properly arrange the buildings on a miniature farm. Soil was used in a frame and crops are being grown to illustrate the proper rotation. This makes the work graphic and is of considerable importance, especially as real farms are not convenient and the pupils are mostly from town. This idea might be used with profit in the grade work in almost any town in Minnesota.

C. D. Yule, agriculture instructor at Hill City, organized a community fair in the fall and developed considerable interest in the agricultural department and in better farming for that section.

Leroy Uptagraft, the agriculture teacher at Milaca, is developing a farm near Milaca and has built a house on it during the summer and fall.

L. L. Colby, College of Agriculture, 1919, teacher of agriculture at Appleton, was married to Edith Myrtle Terpena, of Wheaton, October 31.

W. Reilly, of Renville, called at the Visitor office while attending the M. E. A. Mr. Reilly brought about a dozen fine photographs of various phases of his Smith-Hughes projects.

Marcellus Knoblach, Norwood-Young America, G. H. Isles, Hinckley, and E. A. Coe, Henderson, called at this office recently to arange for vasual instruction service for the agricultural departments of which they have charge.

D. J. Heppner, Sleepy Eye, and A. M. Jacobson, LeSueur Center, attended the M. E. A. and called at this office.

Fred S. Idste, College of Agriculture, 1918, was recently elected agriculture instructor at Big Falls.

W. M. Reiley, agriculture teacher at Renville, has two chart circuits among the rural associated schools. He is using six charts on each circuit. A chart is left at each school for two weeks in order to give time for a thoro use of each set.

F. A. Tripp, at Thief River Falls, has been using poultry, insect, hog, and other slide sets as part of his class-room work in animal husbandry.

A. W. Jardine, agriculture teacher at Pequot, has accepted a position as agriculture teacher at Ashland, Iowa.

The Sandstone high school boys' and girls' club members closed their season's work with an "Achievement day," at which time members brought exhibits of the products they had raised. There were 64 exhibitors of potatoes, poultry, canned goods, bread, and cakes. A program was given, consisting of club songs, stories by club members on their experiences in raising products, and talks by Jens P. Miller, county superintendent; W. J. Corwin, county agent; and others. One of the boys, Floyd Gruwell, told his story of clearing $286 on one acre of potatoes. The domestic science classes, under the direction of Miss Mamie Uehren, instructor, served lunch.

H. H. Amos, agriculture instructor, has had charge of the boys' and girls' clubs since their formation and has had such success that the members in open competition at the county fair won 4 prizes on chickens and 26 on vegetables. At the Pine County potato show, three prizes were won and the boys practically made a clean sweep at the local fair in September. Members of the Sandstone Bread Making Club won the Individual championship, the Team championship of Class A, and the Individual championship of Class B for Pine County.