

# THE VISITOR

Devoted to the Interests of Agricultural Education in Minnesota Schools

Vol. XIX

DECEMBER, 1931

No. 4

## THE SHADOW BOX

All boys and girls should know and love the out-of-doors. To bring about this end, should be an important aim of all nature study teachers. Any device which can be used to develop the interest of the pupils so that they will seek fur-

any place inside at the front top of the box. The contrast of light and shadow is brought out best if a sixty-five watt light is used with a reflector in the upper front left corner of the box.

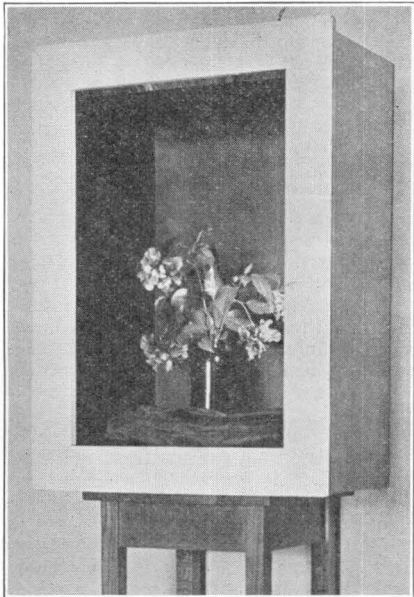
Teachers of agriculture can use this device to good advantage in store window displays of exhibits relating to the work of their department.

At a recent Horticultural Show in Minneapolis, prizes were offered for the best arranged "Shadow Box." A number of types of shadow boxes were exhibited, and there was a good deal of discussion as to the value of such exhibits. From this discussion came the thought that an adaptation of the shadow box exhibit might be used to good advantage at school both from the standpoint of attractiveness and of education. It was tried out at Edison High School and the results surpassed expectations.

The Shadow Box must be attractive in order to receive attention and to keep up interest. It may be used as a device to stimulate interest in subjects which the pupils are not taking, it affords an opportunity to display superior work, and it keeps the rest of the school informed as to what various departments are doing.

The shadow box in Edison High School has been used primarily by the Botany department for calling the attention of the pupils of the school to the many kinds of flowers in bloom during the spring of the year. No difficulty is experienced in getting a selection: the problem is which one of the many to use. Both cultivated and wild flowers are shown because many children are not acquainted with what are considered common flowers by many people. In the winter there may be shown displays of hothouse plants or plants suitable for home use, dish gardens or pupils' work which fits into the general plan.

The construction of a shadow box is simple. The box should be eighteen inches deep with a front opening about twenty by thirty inches surrounded by a six inch frame. The proportion for the opening is about two to three. The walls of the box should be flush with the outside of the frame, and the entire inside should be painted flat black to avoid reflections. The frame and outside



This shadow box is an effective device for developing a better appreciation of flowers at the Edison High School

ther information for themselves, should interest every one. One such device is the shadow box.

A shadow box may be made by arranging an ordinary wood (or heavy cardboard) box in such a way that it can be illuminated inside by an electric light in a manner similar to the show cases used in stores. The box which has an open front should be painted black inside or lined with black paper or other material to add to its attractiveness and at the same time show off the exhibits to the best advantage. A frame made to fit the front of the box improves the appearance and also aids in shielding the electric light. The light may be located

## THE VISITOR

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.

Accepted for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized August 2, 1918.

## THE STAFF

A. V. STORM

A. M. FIELD

V. E. NYLIN

## Merry Christmas

should be treated to match the woodwork of the room in which the box is to be placed. A narrower frame does not allow enough space for light adjustments. The use of cloth for covering the back and sides is probably better than flat paint as it casts no reflections, but since it is likely to collect dust, it is not considered entirely practical. To have a number of colored cloth panels which may be placed to form a background suitable to the different objects shown is advisable. These panels do not need to cover the entire back. If panels are used they must be worked out with care. They should be arranged so that they may be put into place easily.

Satisfactory lighting is the most difficult feature. A sixty-five watt show case light has proved very satisfactory. The show case light has a long slender bulb, and is fastened into the top of the box in such a way that one can stand very close without seeing it. Theoretically, the idea of the shadow box is for the observer to stand back and look at the picture; practically, everyone wants to get up close and the smaller pupils want to climb right in. When the regular sixty-five watt bulbs are used, although they are very effective and cannot be seen from a distance, the light is apt to shine into the eyes of small pupils when they stand close to the box. In planning the lighting, therefore, it is well to consider the distance of the box from the floor and the height of the pupils. Blue flowers do not show well in artificial light and when these are shown, a daylight bulb should be used to get color value. A reflector of some kind is necessary to keep the back and corners of the box in the shadow. Direct light on the back of the box reflects and shows the

corners, and consequently distracts from the exhibit.

The floor of the shadow box varies with the object displayed. Some of the taller objects appear best when placed flat on the floor and others need to be built up rather high. A piece of black fabric should be available to cover the floor. Care should be taken to tuck in all loose edges.

Attractive displays, frequent changes of the exhibits, and careful labeling will keep the interest in the shadow box for a long period of time. Attractiveness does not mean size but selection and arrangement of specimens. Special care should be taken in the selection of the container and the arrangement of flowers. In most schools flower arrangement is taught by the Art department and the box can be made an object lesson.

The exhibits should be changed frequently. In the spring and fall, when there is an abundance of material, this should be done daily. It has been found effective to have some exhibits so large that they will fill the box and others so small that they can be seen clearly only upon careful observation. A good example of the former is the tulip as compared to the strong-scented violet or the wild geranium and pussy's toes. One pupil suggested a Minneapolis flour be shown, so "Pillsbury's Best" was exhibited.

Labeling must not be overdone. The tendency is to put too much on the label. The teacher is anxious that the pupils should not only be told the name of the plant, but also be informed as to its habitat, Latin name, and other interesting facts. If this is done, it is likely to be accepted as "more book stuff" by many pupils and they lose interest. Simply give the specimen its common name and such expressions as "Gee, is that what that is called? We've got that in our back yard" or "I've gathered lots of that near where we go summers" will be heard. The pupil will remember some of the common names of those he has previously seen and the next time he finds this plant he will be more likely to connect the name to it than he would if he had a great deal more to remember. A peculiar characteristic or interesting anecdote might be referred to with benefit; it will help fix the name.

Extremes are very desirable because they bring forth many comments and discussions. For example, one of the pupils found a hothouse-grown Jack-in-the-Pulpit which came from a bulb dug in the woods last summer and was forced in a greenhouse just recently.

This Jack was about two or three times the normal size, perfect in detail. Some pupils wouldn't believe it was real; others had stories of bigger ones that they had seen; the majority, however, pointed out that it must have been raised in the greenhouse.

Flowers of trees, especially trees having staminate and pistillate flowers on different plants, are extremely interesting. Good examples of this are the box elder, all willows, poplars, and cottonwoods. Often the fruit arrives almost before we realize the tree is in bloom, and interest increases with the question on the label, "Did you see the flowers last week?"

Garden flowers which deserve to be raised more may be exhibited to create interest: scilla, grape hyacinth, and the true crocus are good examples. Different varieties of dahlias may be shown to advantage, as pupils often mistake these for chrysanthemums.

Enthusiasm on the part of the person in charge of the shadow box is vital. To do a haphazard job would be unfortunate. Cooperation with the Art department as to arrangement of exhibits would be ideal. The Art teacher might welcome this opportunity to teach flower arrangement. If no art is taught, cooperation with the Home Economics department, where applied art is taught, might be welcomed.

The only exhibits mentioned have been plants. That is because the teacher in charge at Edison is especially interested in Botany, but with a little thought the idea of a shadow box could be adapted to any department. Put a glass front on it and open it at the side to exhibit such things as beautiful books, works of art, or exceptional pieces of work in any department.

S. Chatwood Burton has a good article on artistic composition in the *Minnesota Horticulturist* for November, 1930.

Jefferson Benner,  
Edison High School, Minneapolis.

### BERTHA CHAPTER A BIG GUN IN F. F. A. WORK

The Bertha Chapter of the Future Farmers of America wakened the country side with reverberations from the high school fair which they held on September 25th.

Twenty-one vocational agriculture boys gave the gymnasium a genuine "fair" atmosphere with their array of farm products arranged in booths of standard size and original design. High standards were set up for the contents of the

booths and the boys met them with the highest quality of products obtainable.

Plans for a gala parade composed of livestock and floats, and led by the high school band had to be given up because of intermittent showers and muddy streets. The burden of the disappointment fell heavily on Arwin Lippert who planned to parade his "four horse team" made up of two sheep, one goat, and one dog.

Livestock for all 4-H classes was exhibited and a fair-sized crowd watched the judging at which R. C. Shaw of Henning, the Agriculture agent for East Ottertail County, acted as official judge.

Awards were subscribed by local business men and the Future Farmers of America chapter.

At the high school gymnasium in the evening, a program of music was given by Lawrence Hanson and Deward Schultz. A realistic stage-setting of a miniature farm, pumpkins, and corn shocks, formed the background for a reading by Miss Elsie Grams. Addresses were given by Dr. W. W. Will, president of the local commercial club, and by Adolph Herseith, superintendent.

The Bertha Chapter holds its meetings twice a month at which they discuss pertinent farm problems.

Last year they boasted a basketball team with a regular schedule and won the Todd County Future Farmers of America tournament held at Bertha.

In addition to the School Fair the local chapter each year sponsors a parents and sons banquet which is attended by all members of the Future Farmers organization and their parents, all agriculture boys who are not members, their parents, and local townsmen who are especially interested in the work. An outside speaker is usually engaged for this affair.

In other years they have produced plays which were usually of an instructive nature and which served the four-fold purpose of recreation, advertisement, entertainment, and fund-raising.

Another activity of the chapter is the keeping of cost records on the herds in the community by agriculture boys who use the school tester. The school is reimbursed for the acid and other materials used.

The Bertha chapter boasts membership in the only county Future Farmers of America organization in this state and desires to know if there are any others in the nation. Long Prairie and Staples are the other two schools in the county with Vo-Ag departments; their F. F. A. chapters complete the triumvirate.

### PLAINVIEW BOYS WIN TRIP TO NATIONAL DAIRY SHOW

William Woodward and Everett Armstrong, students in Jay Seymour's agriculture class, placed first in the dairy demonstration work at the State Fair and therefore represented Minnesota at the National Dairy show at St. Louis. In the national contest the boys placed second. The boys demonstrated the prevention of the growth of horns on dairy calves.

Jay and his demonstration team are to be congratulated on their achievement in 4-H club work.

### NEW BOOKS

BOSS, WILLIAM, DENT, J. GRANT, and WHITE, H. B. *Mechanical Training*. A book of instructions on the use of mechanical tools and the construction of exercises demonstrating fundamental principles in mechanical work. Bruce Publishing Co., St. Paul, Minn. 1931.

The authors state in the introduction that "This book has been written in response to many requests from teachers, students, and co-workers, to put in printed form the lecture outlines, charts and illustrations which they have prepared and are using in the various courses in the Division of Agricultural Engineering of the University of Minnesota. The subject matter in the fifteen chapters has been carefully selected as having practical value to any person seeking a knowledge of mechanical operations. All of the exercises shown have been successfully used and offer abundant material for high schools and colleges as well as for the mechanic or any person mechanically inclined."

**Mechanical Training** is written in a clear and interesting manner and is unusually well illustrated. The volume should be of special interest to teachers of agriculture and to teachers of industrial arts.

HURD, LOUIS M. *Practical Poultry-Farming*. New and Revised Edition. The MacMillan Co. 1931.

"This book is prepared as a practical guide for both large and small poultry-keepers and those interested in starting a poultry enterprise. The practices and methods are those most commonly used by successful poultry-keepers and are based on scientific principles."


BIRD, CHARLES. *Effective Study Habits*. The Century Co. 1931.

This volume should be of special interest to teachers of agriculture who are developing a program of individual work on the part of the students in agriculture. The material presented is of interest and value to students as well as to teachers.

TROW, WILLIAM CLARK. *Educational Psychology*. Houghton, Mifflin Co. 1931.

The attention of agriculture teachers is called to this recent book on educational psychology. It will not only serve as a guide to professional improvement but will also furnish a delightful digression from the usual close attention to subject matter in the field of agriculture.

Professors Pitirim A. Sorokin and Carle C. Zimmerman have published, with the assistance of Professor C. J. Galpin, the second volume of their "Systematic Source Book in Rural Sociology." The new book, which comes from the University of Minnesota Press, deals with the rural family, and with rural economic, educational, moral, religious, recreational, and political activities. Most of the readings on these subjects are translations from foreign languages, prefaced by critical and explanatory introductions by the editors. Professor Sorokin is now chairman of the Department of Sociology and Social Ethics at Harvard, and Professor Zimmerman, who recently accepted an associate professorship in the same department, spent the past year investigating social conditions in Siam. Professor Galpin is chief of the Division of Farm Population and Rural Life in the U. S. Department of Agriculture.



*Merry Merry Christmas*