Desire, in which some business with a crucifix was disapproved of, and Sean O'Casey's The Shadow of a Gunman, in which extreme unction was granted on the floor of a pub.

For the restoration of that one important means by which spectators at a theater may Cleanse the stuff'd bosom of that perilous stuff Which weighs upon the heart,

especially when the perilous stuff is a fierce disgust or disappointment, then, there is much authoritative argument. Even against the inexorable march of pictures on a silver screen, hisses, if the manager of the theater can be made to hear them, may be of avail in improving the quality of the programs. Certainly, judicious hissing by intelligent audiences will tell even more quickly than gradually diminishing box-office receipts whether the playing or the play is disliked. Some form of direction is necessary, of course, in a time when theatre-goers think that hissing is applicable only against Simon Legree or the lecherous villain who forecloses the mortgage on Nell's father's farm, or that it is a coarse practice remotely related to bronx-cheering, properly confined to vulgar entertainment. If only the serious lovers of the drama would gently revive this fine, venerable indication of distaste, boredom, and comment on the inartistic and unskilful, there is reason to believe that improvement in the theatre would follow. It is certainly worth trying.

ARGUS TRESIDDER

## A NATURAL HISTORY MUSEUM FOR VIRGINIA

HEN asked to make a talk to science teachers I felt rather bewildered and at a loss. You see, I haven't worked in a museum which had a really active science department since 1928, when I spent the summer in the

Highlands Museum in North Carolina, catching snakes. We kept our snakes alive—and what with providing live food for them, and catching the snakes when periodically they escaped, we had a very active department.

Since my particular job is in a museum, I think I'm expected to talk to you about museums. I should like to talk about science museums in Virginia, but since there aren't any except those in the colleges—which confine their activities to the colleges—I can't. Of course, I could talk about my own museum, but it isn't (except in one department) a science museum, and besides I understand that you aren't prepared to stay all day listening to me.

So I will remind you of the remark made by a lady who used to live here, when she was cautioned by a member of her family to hold down her lively stories—"How can you have interesting conversation," she said, "if you stick to facts?"

So I shall abandon facts, and talk about something that is non-existent, namely: the ideal science museum for the State of Virginia.

I am taking it for granted that you are with me in thinking that a science museum in each community is as much a necessity to education, to balanced living, and to enjoyment of the world and nature as a good library is a necessity for free thinking. I am sure we all believe with the founders of the first museum in this country that:

"many Advantages and great Credit would result to this Province, from a full and accurate Natural History of the same."

Their idea of a full and accurate Natural History is so quaintly worded that I should like to give you all of it, just as it was written way back in 1773:

"The Society wishes every gentleman who wishes well to the undertaking to procure and send to them all the Natural Productions, either Animal, Vegetable, or Mineral that can be had in

A talk before the science section of the Virginia Education Association, Richmond, November 29, 1935.

their several Bounds, with accounts of the various Soils, Rivers, Waters, Springs, etc., and the most remarkable Appearances of the different parts of the Country."

In other words, then, as now, they thought that the Museum of Sciences was concerned with living things, and also with the earth—the stage upon which the drama of life is enacted. Astronomy may be represented by rather limited material, but rocks and minerals, plants and animals, make up the bulk of the collections. Man, as one of the living creatures, naturally receives attention, but many science museums do not stop there. In addition to the anatomical materials of physical anthropology, they collect artifacts and undertake a broad treatment of anthropology which carries them into archæology and ethnology.

I do not visualize the ideal science museum as a grand building, with echoing halls, lofty ceilings, impressive façade, and spacious grounds. In fact, to my mind a building isn't at all necessary in the beginning, for the state itself—the mountains, the foot-hills, the sandy sea-coasts, the rivers, and inlets, the woods and fields and the inhabitants thereof-these are our science museum. For a long time it has been the tradition to remove from their natural settings sample objects of the many interesting things that nature provides, and display them in cases under glass. Don't think I minimize the importance of this collecting and preserving; it is extremely important and necessary. But it isn't an end and an aim in itself.

Collecting and preserving are means to an end, which end is the interpretation of the world of nature to the layman for the enrichment of his life. That is why I say that a building is not necessary in the beginning—since nature itself is the museum.

The first natural history museum in this country began in a library society, and for years—indeed, not until after the Revolution did it have a building to house a col-

lection. But all those years the members were becoming increasingly aware of and intimate with the natural history of their region—and the effect of their interest became evident in the succeeding generation when as great a group of scientists was produced in that community as any locality in this country has ever contributed.

So our ideal science museum in Virginia can begin in our schools. Let each school science group take for its field its own region. Let science teachers consider themselves museum directors and encourage the pupils to look upon themselves as department-workers—each developing his own hobby into a collection, each interpreting his own collection for the enrichment of his own living and for the enlightenment of his neighbors. Botanists, geologists, ornithologists are all latent in the high-school pupils of our state. Who knows what budding Linnæus, Agassiz, or Audubon may be in our classrooms even now?

None of us, however, wants to feel that he is working alone. The advantages of united work are too obvious to need mention. A teacher-museum-director in Winchester and his pupil-department-workers will take more joy in creating the Virginia science museum, if they know that another teacher-director and his pupil-departmentworkers in Newport News are attacking the same problems in the same way. It will be a simple matter for the leaders in this work to unite in agreement upon methods of labelling, marking, cataloguing, and all the detail of museum work just as scientists long ago came to agreement upon the scientific method of naming specimens—whether they be mammals, minerals, or men.

Once a set of standards as to method and material is agreed upon, a system of exchange can be instituted. A museum group in the mountains can exchange with a museum group in the tidewater section, and thus people in different sections of the state can, without the cost of travel, become ac-

quainted in a broad sense with the environment which creates us all.

Of course, objections may be raised on the score of ignorance of museum methods among teachers and pupils upon whom the responsibility of creating the state museum rests. But handbooks which provide enlightenment can readily be obtained, and whenever expert advice is required the men in the state departments of conservation and development, and the professors in the state institutions, stand ready to provide it. In fact, Dr. William McGill, of the State Geological Survey, has provided this week, at the Valentine Museum, a thrilling sample of what can be done once we have our state museum functioning.

The local units of the great state museum have a responsibility toward their communities as well as to the great whole and to each other. Too often, oh, far too often! interest in nature means to the adults of our country picnics which leave trails of forest fires behind, flower trips which leave fields and trees denuded of their beauty, and hunting parties which destroy our wild life.

Recently, I attended a dinner party where the subject of wild fowl was thoroughly discussed. The comparative value of ricebirds and wild duck, partridges and turkey as table delicacies were thoroughly gone into. And nobody mentioned the keen joy, the breath-taking beauty of wild birds in flight. Recently, I went into the heart of a swamp in August-white herons, snowy egrets, the great blue and Louisiana herons, fish-hawks and the marvelous anhingaanhinga were to be seen in abundance. But I was greedy for more beauty than even that perfect day provided, and I said to the Negro man who was paddling my boat, "I want to come back when the wild ducks are here." And he replied: "Yas ma'am; you come back when the hunters stop bamming; you see t'ousand upon t'ousand of dem bird; it is a sight to see." And I thought of that simple creature more aware of the beauty than the hunters who came "bam-

ming" and compared him in my mind with W. H. Hudson, that naturalist whose winged words have carried many of us to the places he loved, to enjoy with him the great soaring birds he loved,—

"flock succeeding flock, filling the world with their clangor"...until..."a great chorus of wild, ringing, jubilant cries, echoing and re-echoing all over that illimitable watery expanse; and I knew it was the crane,—the giant crane that hath a trumpet sound."

I said when I started that the state museum of which I wanted to speak was nonexistent. I think I will qualify that. It is non-existent except in our minds. If it exists there, if we see it as something not only useful and desirable, but as something necessary and important—see it as something created and existing, we have gone more than half the way to its realization. The beautiful buildings which we will have in every county to house the collections through which the natural history of our state is interpreted will come, the money to maintain them will come, all in due course-if we carry in our minds the conviction that "many Advantages and great Credit will result to this state, from a full and accurate Natural History of the same."

HELEN G. McCormack

## TEACHER EDUCATION AS THE STUDENT SEES IT

welfare of society and to the continued improvement of its institutions is acknowledged. The teacher gives meaning to facts and interprets life. His duty is to set standards of taste in art, literature, manners, and morals. The instructor champions constructive forces in community life; he must know the past and be able to appraise the present civilization. Teaching is an important, delicate enterprise requiring the highest order of intelligence, character, and professional standards. Only teachers worthy of the profession can develop self-contained individuals,