

YOUTH does not always get the credit that it deserves. This is not a plea for the flapper or the college leader. For today they are old, sophisticated and blasé.

This is a hopeless demand that those young thinking animals aged one plus shall be given due acknowledgment and consideration in their superiorly aged adults' plans for their acclimatization to the complex world.

Babies are fed baby talk. Older youngsters are subjected to nursery tales, the uninteresting hulks of old wives' tales and the dregs of generations of superstition. That George Washington never told a lie, that Columbus discovered the world is round, and other historical legends comprise the intellectual diet of primary graders. "You are too young to know" is the damaging refuge of the uninformed, hurried parent.

Native inquisitiveness, one of the essentials of scientific research, is at a high peak in the pre-kindergarten ages. Unspoiled by attempted molding to the standard pattern, the young child is interested in things. His inquiries and thoughts, properly nourished, will bear rich fruit in later life.

Even when the school child grows older and less receptive, the bloom of youthful enthusiasm is not entirely faded. In the first few 'teen years, trees, insects, radio, animals and other concrete scientific activities inspire real interest.

But the child, toddler or senior, hates to be babied by having his activities too simplified or his reading matter too much written down.

The SCIENCE NEWS-LETTER is designed for adult laymen or for scientists (who are laymen except when working in their own little specialized niche). While it is used in many schools, it is not written down. Nevertheless, we are often told: "My boy reads nearly every line" or "I want it for my daughter in school."

Some scientists may rationalize in taking the SCIENCE NEWS-LETTER just as they do when they read the comics to little Johnny or shop for Christmas toys. We suspect they stealthfully read these pages if mother, son or daughter have not gotten there first and read them with scissors.

Editorial

Science News-Letter, March 17, 1928

Man-Made Lightning

Electricity

Three million six hundred thousand volts of electricity can now be stored in artificial "clouds" and discharged in a ten-millionth of a second, as shown on the cover, thus imitating in the laboratory the effects of lightning more accurately than ever before. This feat has been accomplished at the Pittsfield (Mass.) laboratory of the General Electric Company by F. W. Peek, Jr. Such a voltage is seventeen times as great as that carried over even the highest voltage power lines.

"As these sparks last but a ten-millionth of a second, and as light travels about 100 feet in that time, the blinding flash is all over when seen by a person only a hundred feet away," Mr. Peek explained. "Yet the flash appears to be there when he sees it!"

Although these voltages frequently have a duration of less than a millionth of a second, their rate of rise and fall or wave shape has been accurately measured by an instrument using a beam of electrons as a pointer and known as a cathode ray oscillograph.

"The object of the study is to secure scientific information on the nature of electricity and to obtain further engineering information on the protection of life and property against lightning, to build transmission lines, transformers and other electrical apparatus to resist lightning voltages," Mr. Peek said. "Lightning is one of the greatest foes to electrical apparatus, and much has already been done in this laboratory to produce lightning-proof apparatus. The present generator produces higher voltages than ever produced by natural lightning on transmission lines."

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