



### Christmas Gifts for Boys

Books describing fascinating hobbies that your boy will enjoy.

- EXPERIMENTING AT HOME WITH THE WONDERS OF SCIENCE, by E. H. Lord, \$2.  
 SCIENCE EXPERIENCES WITH HOME EQUIPMENT, by C. J. Lynde, \$1.34.  
 SCIENCE WITH SIMPLE THINGS, by R. F. Yates, \$2.50.  
 INVITATION TO EXPERIMENT, by Ira M. Freeman, \$2.50.  
 EASY EXPERIMENTS IN ELEMENTARY SCIENCE, by H. McKay, 60c.  
 SCIENCE EXPERIENCES WITH INEXPENSIVE EQUIPMENT, by C. J. Lynde, \$1.60.  
 AMATEUR TELESCOPE MAKING, edited by Albert G. Ingalls, \$3.  
 AMATEUR TELESCOPE MAKING, ADVANCED, edited by Albert G. Ingalls, \$3.  
 THE MICROSCOPE MADE EASY, by A. Laurence Wells, \$1.50.  
 AMERICAN BOYS' BOOK OF BUGS, BUTTERFLIES AND BEETLES, \$3.  
 THE BOYS' BOOK OF INSECTS, by Edwin Way Teale, \$2.  
 HANDBOOK FOR SHELL COLLECTORS, by W. F. Webb, \$2.  
 EASY EXPERIMENTS WITH PLANTS, by H. McKay, 75c.  
 PLANT CHEMICULTURE, A GUIDE TO EXPERIMENTS IN GROWING PLANTS WITHOUT SOIL, by C. D. Dawson and M. V. Dorn, \$1.  
 THINGS A BOY CAN DO WITH CHEMISTRY, by Alfred Morgan, \$2.50.  
 THINGS A BOY CAN DO WITH ELECTROCHEMISTRY, by Alfred Morgan, \$2.  
 FIRST ELECTRICAL BOOK FOR BOYS, by Alfred Morgan, \$2.50.  
 THE BOY ELECTRICIAN, by Alfred Morgan, \$2.50.  
 ELECTRICAL AMUSEMENTS AND EXPERIMENTS, by Gibson, \$2.50.  
 AMATEUR MOVIES AND HOW TO MAKE THEM, by Alex Strasser, \$3.50.  
 THE BOYS' BOOK OF PHOTOGRAPHY, by Edwin Way Teale, \$2.  
 THE RADIO AMATEUR'S HANDBOOK, 1941 ed., Amer. Radio Relay League, \$1.  
 THE RADIO AMATEUR'S HANDBOOK, 8th ed., by A. F. Collins, \$2.  
 THE BOOK OF MINERALS, by Alfred C. Hawkins, \$1.50.  
 MODEL AIRPLANE CONTESTS, Air Youth of America Guide, \$1.25.  
 THE MODEL AIRCRAFT BUILDER, by Chelsea Fraser, \$2.50.  
 BOY'S BOOK OF MODEL BOATS, by R. F. Yates, \$2.  
 MODELLING FOR AMATEURS, by C. and R. Ellis, \$3.50.  
 SOAP CARVING, by Lester Gaba, \$3.50.  
 WOOD CARVING, by Alan Durst, \$3.50.  
 WORKING WITH TOOLS FOR FUN AND PROFIT, by A. F. Collins, \$2.

Shop early, through the Book Department, Science News Letter, 2101 Constitution Ave., Washington, D. C. Send check or money order to cover price only; we pay postage.



#### PHYSIOLOGY—PSYCHOLOGY

## Babies Born in War Noise May Have Nervous Ills

### Even Before Birth Infants May Suffer From Noise Or Terror of Mothers; Will Be Thin and Restless

**B**ABIES born amid the crashes and bursting shells of war may run the risk of nervous illis even before they come into this world, Dr. L. W. Sontag, director of the Samuel S. Fels Research Institute, Antioch College, indicated to the Society for Research in Child Development meeting at Harvard Medical School as he described his experiments, on the unborn baby, of sounds, mothers' emotions, and other conditions.

A frightened mother who must give birth to her baby among the unusual noises of bombardment and anti-aircraft fire may find that the infant is affected by this unfortunate environment. If the disturbed conditions continue for a long period just before birth, the baby may actually suffer from a neurosis both before and after birth. He will be restless and overactive. He may have feeding difficulties and heart spasms. He will probably be thin.

Other conditions besides maternal terror and unusual noise which were described by Dr. Sontag as affecting the unborn are certain drugs, lack of vitamins in the mother's diet, maternal toxemia and abnormal functioning of the mother's thyroid gland. Mothers who take quinine for malaria before the birth of the baby may have a baby who is born with defective hearing. Lack of vitamins may produce rickets in the newborn baby, or in extreme cases even before birth.

*Science News Letter, November 30, 1940*

### New-Born Differ in Age

**N**O INDIVIDUALS differ so much as new-born babies, Dr. Arnold Gesell, director of Yale University's Clinic of Child Development, told the meeting. Infants at birth may differ as much as 20 weeks in age, from extreme prematurity to late birth.

Although coming into the world may hasten certain motor, eye, and postural adjustments, it does not alter the tempo of development. The baby, Dr. Gesell explained, who is born eight weeks ahead of time will develop no faster than if

he had not been born until the normal time. At 20 weeks of age he will be developed only to the level of the normal 12-weeks-old baby.

*Science News Letter, November 30, 1940*

### Speech Sounds of New-Born

**T**HE speech sounds made by babies less than ten days old were studied and reported to the meeting by Dr. Orvis C. Irwin, of the Iowa Child Welfare Research Station.

In the crying sounds of new-borns, Dr. Irwin found, 93% are what are known to phonetics students as "front vowels"—such sounds as are in "Wah-ah-ah!" A few consonants were also heard.

*Science News Letter, November 30, 1940*

### Many Sorts of Ages

**B**IRTHDAYS are only one of many important ways of measuring the age of children, Dr. Willard C. Olson, of the University of Michigan, told the meeting of the Society for Research in Child Development.

With "mental age" the parents of school children are already familiar. It is also possible to measure height age, weight age, dental age, strength-of-grip age, reading age, and what is called "carpal age," the latter being based on changes, with development, in the bones of the hand and wrist. Dr. Olson also recommends what he terms an "organismic age," an average of all the different

## Books

SCIENCE NEWS LETTER will obtain for you any American book or magazine in print. Send check or money order to cover regular retail price (\$5 if price is unknown, change to be remitted) and we will pay postage in the United States. When publications are free, send 10c for handling.

Address Book Department  
 SCIENCE NEWS LETTER  
 2101 Constitution Ave. Washington, D. C.

ages that may be available for the child.

Repeated measurement of all a child's ages will show the general tempo of his development and also the spurts and rhythms of his growth both in general and in special characteristics.

A "time slice," a sort of cross-section

of a child's growth, may later be taken from these records for study or comparison with his level at a different period of development.

Much more accurate comparison of brothers and sisters of different ages is possible with this new method of study.

*Science News Letter, November 30, 1940*

familiar Indian cultures. Pronounced just about the same as the well-known Klamath and Modoc Indians cultures of the Northwest, the artifacts of these latest lake settlers were found on abandoned beaches and islands of the recent lake.

Dr. Cressman has hope of fitting together these finds from the Oregon lake site with material from roughly similar horizons in Oregon caves, and tracing their relationship to early Southwestern cultures. He is searching museum collections of eastern cities for possible clues from other expeditions.

*Science News Letter, November 30, 1940*

#### ARCHAEOLOGY

## Unnamed Hunters of 6000 B.C. New Characters in Prehistory

**D**ISCOVERY of new characters in American prehistory, pioneers and big game hunters of the Oregon country about 6000 B. C., is stirring archaeologists. So new are these ancient Americans that science has not yet named them.

To Dr. L. S. Cressman, director of the University of Oregon's Museum of Natural History, who led the expedition unearthing these new clues to shadowy and ancient figures, the most significant thing about these peoples is the kind of weapons they used—stone dart points of unusual design.

Dr. Cressman, now in the East as a Guggenheim Fellow, has reported his finds before the American Philosophical Society and other scientific societies.

Evidence of the Oregon hunters' presence in early America has been dug from beneath old peat beds in a dried-up lake of southern Oregon, Dr. Cressman explained in an exclusive interview.

Thousands of years ago, wild horses, camels and elephants were trapped in swampy ground at the place and shot down by stone-tipped darts hurled from the hands of determined, and probably hungry, Oregon men.

Darts they used are remarkable because they are not like grooved stone blades which the now-famous Folsom Men of early America habitually used in their hunts.

While Folsom and Yuma hunters were seeking similar game east of the Rockies, these Oregon hunters shared the American wilderness with them, perhaps without either group knowing of the other. The weapons, which may seem a small clue, mean much, for in those days America's leading industries were making weapons and hunting wild beasts.

Bone tools hardened to fossil state and crudely made stone knives are among other belongings abandoned at the Oregon hunting ground.

Three successive chapters of early America can be read at this site, Dr. Cressman's excavations thus far reveal. A later wave of wanderers arrived when the low ground was beginning to fill with water, and these camped by the lakeside. Grinding stones and mortars and large stone projectile points for tipping weapons demonstrate their existence, about 2000 B. C.

Latest at the site were arrivals at about the dawn of the Christian era, America's immigration waves from Asia by that time had blossomed into the

#### AERONAUTICS

## Windshield Wiper Now On Ships of Airlines

**A** WINDSHIELD wiper for airplanes, said to be the first that is practical, is now being installed on the ships of one of the large airlines. It operates by hydraulic pressure, on the same principle as a steam pump, weighs only 6½ pounds, and has provisions to feed alcohol as required to de-ice the windshield in winter flying. (*Acrotorque Co., Cleveland.*)

*Science News Letter, November 30, 1940*

- **ANATOMY**

- **ANTHROPOLOGY**

- **MORPHOLOGY**

- **NEUROLOGY**

- **NUTRITION**

- **PHYSIOLOGY**

- **ZOOLOGY**

- Journals of The Wistar Institute of Anatomy and Biology merit your careful examination.

- Contributed to and edited by outstanding scientists in the respective fields.

*Authoritative!*

*Informative!*

*Invaluable to the scientist and research worker!*

*For further information, address*

**The Wistar Institute of Anatomy and Biology**

**Woodland Avenue and Thirty-sixth Street**

**Philadelphia, Pa.**