THE WEEKLY SUMMARY OF CURRENT SCIENCE



Underwater Eye

See Page 279

A SCIENCE SERVICE PUBLICATION

FIELD BOOKS FOR NATURE LOVERS

FB1. FIELD BOOK OF WILD BIRDS AND THEIR MUSIC. By F. Schuyler Mathews. Identifies birds by their songs, color, and characteristics. Details regarding appearance, life and habits of each bird, with songs reproduced in musical notation. With numerous reproductions of water color and monotone studies of birds. 390 pages, 25 color plates, 46 black & white illustrations. \$4.50

the white illustrations.

FB2. FIELD BOOK OF EASTERN BIRDS. By Leon A. Hausman. A simplified yet complete book on Drawings by Jacob Bates Abbott, famous bird artist.

G75 pages, 6 color plates. Hundreds of black & \$4.50

white illustrations.

FB3. BIRDS OF THE PACIFIC COAST. By Willard Ayres Eliot. A brief account of the distribution and habitat of 118 birds common to the Pacific Coast states and British Columbia. 285 pages. 56.50

plates. \$5.50
FB4. BIRDS OF THE OCEAN. By W. B. Alexander. A handbook of all the seabirds of the world with notes on their habits and guides to their identification. New revised edition. 140 illustrations, 16 mo., 420 pp. \$7.50

tification. New revises current.

5.50

FB5. FIELD BOOK OF AMERICAN WILD

FLOWERS — revised edition. By F. Schuyler

Mathews. The most popular, dependable, and convenient guide to the wild flowers and shrubs east of
the Mississippi. With special color key, 32 color
plates, 276 black and white illustrations, 558 pages.

55.00

plates, 276 black and white Industrials, 55.00

FBG. FIELD BOOK OF WESTERN WILD

FLOWERS. By Margaret Armstrong. 664 pages, 48 full-color plates, 600 line drawings. \$5.00

FBT. FIELD BOOK OF AMERICAN TREES AND

SHRUBS. By F. Schuyler Mathews. A ready means of identifying the native trees and shrubs throughout the United States. This is an ideal book to enhance your nature enjoyment. 554 pages, 16 color plates, 130 line drawings, 50 crayon drawings. \$3.95

FB8. FOREST TREES OF THE PACIFIC COAST.

By Willard Ayres Eliot. A brief account of the characters, distribution and habitat of the trees native to Alaska. British Columbia, Washington, Oregon, Idaho, northern California and eastward to the Western Slopes of the Rockies. 585 pages, 248 photographs, 13 line cuts, large 12 mo. 57.50

FB9. FIELD BOOK OF COMMON MUSHROOMS.

By William S. Thomas. 164 species of mushrooms described and illustrated. Instructions on collecting and examining, propagation, structure, cooking, etc. 384 pages, 16 color plates, 24 photographs, 52 line cuts. 55.00

st. Sp. St. October 19 pages, 10 color pages,

Completely revised and edited by R. Newton and Margaret Mayall. November 1954. A presentation of the main facts of astronomy and a brief mythology of the constellations. A practical handbook. 5-00 FB12. FIELD BOOK OF COMMON ROCKS AND MINERALS. By Frederick H. Loomis. For identifying the rocks and minerals of the United States and interpreting their origins and meanings. 370 pages, 50 color illustrations, 50 line cuts, 50 photographs.

S2.95

FB13. FIELD BOOK OF NATURE ACTIVITIES.
By William Hillcourt. A broad outline of all the possible activities in the field of nature study, and a wealth of ideas for every conceivable nature hobby. It is extensively illustrated with numerous drawings and diagrams, and is written by the National Director of Southeraft of the Boy Scouts of America. 320 pages.

S3.95 FB15. FIELD BOOK OF ANIMALS IN WINTER. By Ann Haven Morgan. A book that really tells what happens to animals when winter comes. Authoritative but non-technical and readable. 542 pages, 25 line cuts, 4 color plates, 22 pages of photographs.

tive but non-technical and readable. 542 pages, 257 line cuts, 4 color plates, 22 pages of photographs.

FB17. FIELD BOOK OF PONDS AND STREAMS. By Ann Haven Morgan. A complete guide to the plants and animals that live in fresh water—their appearance, life and habits. Suggestions are made on the finding and collecting of water animals, and their care in aquaria. 464 pages, 23 color plates, 314 line cuts, 42 photographs.

FB18. FIELD BOOK OF SNAKES OF THE U.S. AND CANADA. By Karl P. Schmidt and D. Dwight Davis. By respectively the Chief Curators of Zoology and Anatomy at Field Museum of Natural History. Chicago. Discusses history, folklore, definition and classification, collecting, preserving, treatment of snake bite, and place of snakes in nature. Gives systematic account of all North American and Canadian snakes. 378 pages, 4 color plates, 80 photographs, 103 line Irawings.

FB19. FIELD BOOK OF MARINE FISHES OF THE ATLANTIC COAST. By Charles M. Breder, Jr. General habits, range and most prominent features of each species found in the waters of Labrador to Texas. 370 pages, 395 line cuts, 16 photographs.

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tures of each species found in the waters of Labrador to Texas. 370 pages, 395 line cuts, 16 photographs.

\$5.00

FB20. FIELD BOOK OF GIANT FISHES,
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appearance structures, habitat, diet and breeding
habits. 398 pages, 8 color plates, 128 line cuts.

\$5.00

FB21. FIELD BOOK OF SEASHORE LIFE. By
Roy Waldo Miner. A compact manual of all the
investebrate animals inhabiting the shallow oceanic
with 24 color plates and over 200 line cuts covering
approximately 1300 species. The classic has been
twenty years in preparation. 630 pages.

\$7.00

FB21. THE BOOK OF BIRDS FOR YOUNG
FEOPLE. By F. Schuyler Mathews. The text in
this nature study book is in narrative form and the
this nature study book is in narrative form and the
submitted tools in color. Index,
illustrated in color. Index, illust, large 12 mo., 397
pages. Grade seven.

\$3.95

FB30. THE BOOK OF WILD FLOWERS FOR
YOUNG PEOPLE. By F. Schuyler Mathews. Studies
from nature written in narrative form and the
fillustrated in color. Index,
illustrated in color.
FB20. THE BOOK OF WILD FLOWERS FOR
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FB23. FIELD BOOK OF THE STARS. By W. T. Olcott. All matters of technical or theoretical nature are omitted and only what can be observed with the naked eye is included. 176 pages, 40 diagrams, \$3.00

FB24. BEGINNER'S GUIDE TO WILD FLOWERS. By Ethel Hinckley Hausman. This is by far the most complete field guide to wild flowers covering over a thousand species with an individual illustration and description for each flower. 384 pages, 1080 line drawings. \$3.50

FB25. A BEGINNER'S GUIDE TO THE STARS. By Kelvin McKready. A guide to help beginners in their very earliest steps toward recognizing the stars and planets. 93 pages, 28 line cuts and charts. \$2.00

FB26. BEGINNER'S GUIDE TO SEASHORE
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FB29. THE BOOK OF BIRDS FOR YOUNG PEOPLE. By F. Schuyler Mathews. The text in this nature study book is in narrative form and the volume is beautifully illustrated in color. Index, illus, large 12 mo., 323 pages. Grade seven. \$3.95

FOR THE SCIENTIST'S BOOK SHELF

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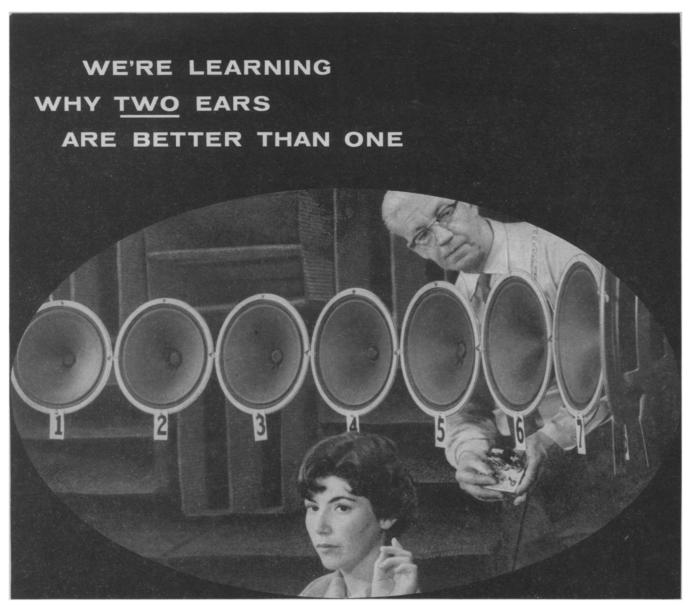
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Which speaker is making the sound? In echoless chamber at Bell Labs, Robert Hanson measures test subject's ability to localize sounds — observes how two ears operate in partnership. This and other tests may point the way to better telephone instruments.

In listening to stereophonic music, how is it that our ears and brain construct a picture of the entire orchestra with but two samples (the sounds from two speakers) to work with?

How is it that our ears and brain are able to pinpoint *one* voice in a roomful of talkers—to listen to it alone and ignore the rest?

What makes two ears better than one?

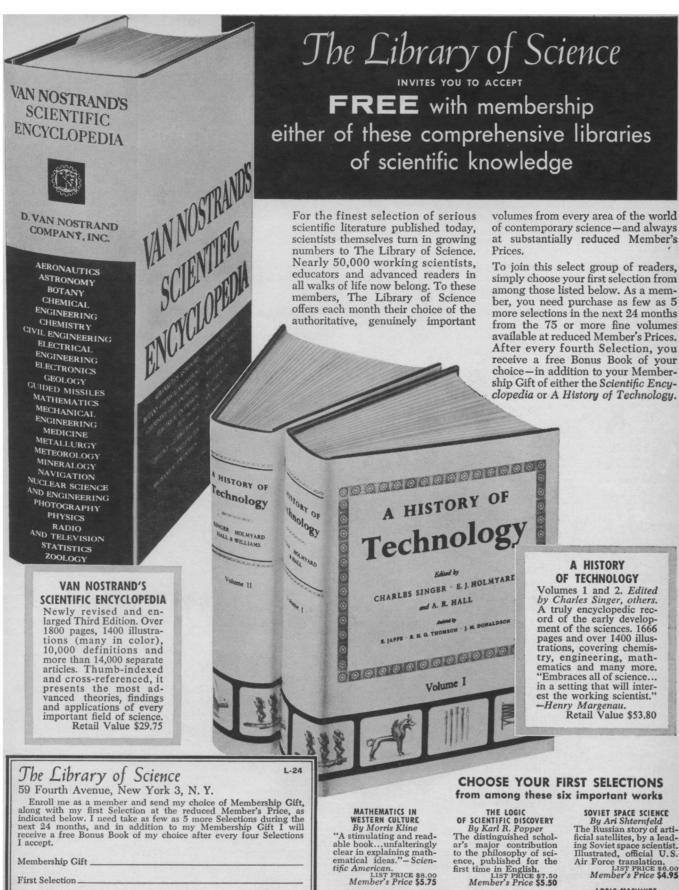
Bell Telephone Laboratories scientists are searching for the answers. For in finding them, better telephone instruments and better ways of transmitting sound will surely result.

Our hearing performs feats that no electronic system can yet duplicate. How? Laboratories scientists believe the secret lies in the way our two ears function in partnership and in the way our neural network connects them with our brain. *The problem:* to discover what functions the network performs and to see whether electronic duplication might enhance understanding.

The work is under way. Electronic circuits that simulate the operation of nerve cells have already been created—and conceptual models of the neural network are being constructed.

Alexander Graham Bell's interest in deafness and hearing led to the invention of the telephone. Bell Laboratories' current explorations in binaural sound may well lead to important new advances in the transmission of speech and music.





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