

*House*, 48 p., illus., \$2.00. A space adventure to the moon for the 6- to 10-year-olds.

SPORTSMAN'S DIGEST OF FISHING—Hal Sharp—*Sterling*, 253 p., illus., \$1.50. Contains practical information for the fisherman.

THE STARS ARE YOURS—James S. Pickering—*Macmillan*, rev. ed., 298 p., illus., \$3.95. Explains astronomy, emphasizing the objects you can see without a telescope, and avoiding involved scientific terminology and higher mathematics.

A THIRD CENTURY HOARD OF TETRADRACHMS FROM GORDION—Dorothy H. Cox—*University of Pennsylvania Press*, 28 p., illus., paper, 75 cents. Excavations at Gordion in 1951 unearthed 114 silver coins which are indexed here.

THIRTEEN AMERICANS: Their Spiritual Autobiographies—Louis Finkelstein, Ed.—*Harper*, 296 p., \$3.00. Includes chapters on Edwin G. Conklin, Henry N. Russell and Basil O'Connor.

Science News Letter, April 4, 1953

#### FORESTRY

### Scientist Hunts for Abnormal Pine Trees

► DR. BRUCE ZOBEL, geneticist with the Texas Forest Service, has sounded a call for pine trees with abnormal cone development.

Certain types of cone abnormalities can be used, he explains, as a source of controlled hybrid seed, now much in demand among foresters and geneticists, particularly those in southern states.

Pines most needed are those bearing large numbers of female cones on each branch, instead of the usual one to five cones. Of particular interest, also, are so-called male sterile pines which produce abundant female cones but on which no pollen-bearing cones are produced.

Most interesting of all types of pines for hybrid research would be those described above that produce the same abnormality each year, showing it to be genetic in nature, rather than merely an isolated physiological abnormality.

Science News Letter, April 4, 1953

### INSECT NETS and ENTOMOLOGICAL EQUIPMENT

Everything needed for collecting, mounting and displaying butterflies and other insects is offered in the 48-page illustrated *TURTOX NATURALISTS CATALOG*. This helpful publication contains a special chapter on "Making an Insect Collection." Write for your free copy, addressing General Biological Supply House, Inc., 761 East 69th Place, Chicago 37, Illinois.

#### PHYSICS

## Sun-Heated Houses

► SCIENTISTS ARE trying to capture the energy in sunlight and harness it to everyday living in America. But so far, big, black clouds seem to be darkening the sunny outlook for fuelless cars, furnaceless houses and coalless power plants.

From Ohio State University, Dr. J. Allen Hynek sounds the warning that it is "high time" science began learning how to use the sun as a source of industrial power. He points out that coal, oil and gas supplies will not last forever.

The fuel reserves will be lost "many millions of years before any very great change occurs in the sun's radiation," he said.

Dr. Hynek suggests that a tower-mounted black hemisphere could collect heat from the sun to supply modest amounts of power at a relatively small cost. Mirrors, spotted over several acres of land, would catch the sun rays and focus them on the black half-ball.

In open, semi-arid regions, heat captured by the hemisphere would be enough to boil water. The resulting steam presumably could be piped into a small electric generator or fed into home radiators.

R. S. Dill, chief of the heating and air conditioning section of the National Bureau of Standards, said solar heating of houses has been satisfactorily demonstrated as far north as Boston, but pointed out that solar

heating plants probably would be too expensive for widespread use.

The heating system might also detract from the looks of the house, as well as require that a room or part of the basement be made a heat reservoir in which heat could be stored in the day for use at night.

Solar-electric power stations probably could not produce power in quantity as cheaply as hydro-electric and steam plants produce it today.

Such solar-electric plants would have another disadvantage: they would supply the maximum amount of electric power about noon, whereas the peak power demand comes just after dark when electric stoves, house lights, store signs and television sets are switched on.

Commercial electric power is generated to be consumed instantly. It cannot be stored.

Science News Letter, April 4, 1953

#### TECHNOLOGY

### "Brain" for Rent—\$11,900 Per Month

► "BRAIN" FOR rent—for \$11,900 or more per month, you can buy the computing time of the first production model of the "701" calculator just put into operation in New York.

It will not replace or substitute for the human brain, but it will perform routine computations to solve such problems as calculating the radiation effects in atomic energy, and the design of steam and gas turbines. First of 12 or more scheduled for production this year, the "701" was built by International Business Machines Corporation in Poughkeepsie, N. Y.

The "brain" can perform more than 16,000 addition or subtraction operations a second, and more than 2,000 multiplication or division operations a second.

Science News Letter, April 4, 1953

## Questions

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DENTISTRY—What chemicals are responsible for tooth growth and eruption? p. 216.

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