

PUBLIC HEALTH

Cost of Workers' Illness Takes 13% of His Income

► **PROLONGED SICKNESS** costs the worker in private industry an average of 13% of his income each year, a five-year study of non-occupational illness conducted by the Research Council for Economic Security of Chicago indicates.

The average wage of the employees covered by the study was \$3,485 a year. Lost wages cost the average worker \$323 and in addition to this he spent \$129 in medical costs.

Medical costs are higher for men than for women although women have more prolonged illness absences than men, it was found.

Benefits from group insurance plans do not cover the costs of illness to the worker, it was discovered. Almost 71% of the benefits go for hospitalization and a little over 24% for surgical care. This leaves only five percent of the benefits for physicians' fees, nursing services and all the other costs of prolonged sickness. Hospitalization benefits cover 80% of hospital charges and 61% of surgeons' fees, but they cover only 16% of all the other charges.

For the average absentee due to prolonged illness, the net cost, after payment of group plan benefits for medical care, sickness compensation and sick leave, was equal to 13% of his normal earnings.

This was paid for by 41% out of savings intended for purchase of a house, a car, or some major household appliance such as a refrigerator or washing machine. About 19% arranged to pay for their sickness in installments and 16% borrowed to pay their debts.

In addition to this cost to the worker, there was a loss to production of the equivalent of the work of 453,000 men for a full year for the 52,400,000 non-farm workers.

Together the loss to employee and employer and to the nation runs into the billions.

Science News Letter, August 10, 1957

Questions

BIOCHEMISTRY—What information do scientists hope to gain from their study of radioactive poppies? see p. 94.

BIOLOGY—How can ultrasonics be used to detect cancer? see p. 88.

GEOPHYSICS—What equipment will the "baby" earth satellite carry? see p. 83.

MEDICINE—What biological chemical has been combined with uranium to form a possible cancer-killing compound? see p. 85.

PALEONTOLOGY—How important was the dinosaur's small brain in contributing to its extinction? see p. 88.

Photographs: Cover, Merck Sharp & Dohme; p. 83, Aeronutronic Systems, Inc.; p. 85, General Electric Company; p. 86, U. S. Army; p. 90, Fremont Davis; p. 96, E. I. Du Pont de Nemours.

OPTICAL BARGAINS

Photographers!

Adapt your camera to this Scope for excellent Telephoto shots and fascinating photos of moon!



See the Stars, Moon, Planets Close Up! 3" ASTRONOMICAL REFLECTING TELESCOPE

ASSEMBLED and READY TO USE!

Famous Mt. Palomar-Type

60 & 120 Power — An Unusual Buy!

You'll see the Rings of Saturn, the fascinating planet Mars, huge craters on the Moon, Star Clusters, Moons of Jupiter in detail, Galaxies! This is a fine quality, American-made telescope engineered and built for clear definition and resolution. Non-breakable aluminum covered tube. Equatorial mount with lock on both axes—you automatically follow stars across the heavens. Aluminized and overcoated 3" diameter high-speed f/10 mirror. Each mirror focault tested. Telescope comes equipped with a 60X eyepiece and a mounted Barlow Lens, giving you 60 & 120 power. Accessory eyepieces available for powers up to 250. An Optical Finder Telescope, always so essential, is also included. Sturdy, hardwood, portable tripod.

Free with scope: Valuable STAR CHART and 272 page "Astronomy Book."
Stock No. 85,050-Q.....\$29.50 f.o.b. (Shipping wt. 10 lbs.)
Barrington, N. J.

NEW! STATIC ELECTRICITY GENERATOR



See a thrilling spark display as you set off a miniature bolt of lightning. Absolutely safe and harmless — perfect for classroom experimentation. Ideal for Science Clubs. Sturdily made—stands 14" high. Turn the handle and two 9" plastic discs rotate in opposite directions. Metal collector brushes pick up the static electricity, store it in the Leyden jar type condenser until discharged by the jumping spark. Countless tricks and experiments. 24-page instruction booklet included.

Stock No. 70,070-Q.....\$10.95 Postpaid

MAKE YOUR SCHOOL A POWERFUL ASTRONOMICAL TELESCOPE

Grind Your Own Astronomical Mirror Complete Kits Including Blank, Tool and Abrasives



All over America amateurs are grinding their own mirrors and making expensive Telescopes cheaply. You can do the same using our Kits. These contain mirror blank, tool, abrasives, diagonal mirror and eyepiece lenses. You build instruments ranging in value from \$245 to thousands of dollars.

| Stock No. | Dia. Mirror | Thickness | Price |
|-----------|-------------|-----------|------------------|
| 70,003-Q | 4 1/2" | 3/8" | \$ 7.50 postpaid |
| 70,004-Q | 6" | 1" | 11.95 postpaid |
| 70,005-Q | 8" | 1 1/2" | 19.50 postpaid |
| 70,006-Q | 10" | 1 3/4" | 27.75 postpaid |
| 70,007-Q | 12" | 2 1/8" | 54.75 postpaid |

INSTRUCTION BOOKLETS

Easy to follow—accurate 8 1/2 x 11 page size—many illustrations. Do-it-yourself—Save! and have Fun!

| | Stock No. | Price Pstpd. |
|--|-----------|--------------|
| How to Build Projectors..... | 9014-Q | 30c |
| Homebuilt Telescopes..... | 9006-Q | 40c |
| Method to Clean Precision Optics..... | 9024-Q | 15c |
| Homebuilt Riflescopes..... | 9018-Q | 40c |
| All About Telephoto Lenses..... | 9036-Q | 60c |
| How to Condense and Project Light with Lenses..... | 9044-Q | 75c |
| Reticles and Their Uses..... | 9039-Q | 45c |
| ULTRA CLOSE-UP Photography..... | 9042-Q | 60c |
| Infra-red Light and Its Uses..... | 9040-Q | 75c |
| Homemade Stereo-Adapters..... | 9032-Q | 30c |
| Homemade Stereo-Viewers..... | 9034-Q | 30c |
| Photo Micrography with Pen Microscope..... | 9029-Q | 10c |
| Dummy Cameras..... | 9035-Q | 20c |
| Collimating Systems..... | 9047-Q | 35c |
| "Building a Condenser Enlarger"..... | 9038-Q | 40c |
| "Fun with Optics"..... | 9050-Q | 50c |

SIMPLE LENS KITS!

Fun for adults! Fun for children! Kits include plainly written, illustrated booklet showing how you can build lots of optical items.

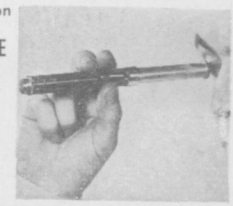
| | | |
|----------------|-----------------|------------------|
| Stock No. 2-Q | —10 lenses..... | \$ 1.00 Postpaid |
| Stock No. 5-Q | —45 lenses..... | \$ 5.00 Postpaid |
| Stock No. 10-Q | —80 lenses..... | \$10.00 Postpaid |

ORDER BY STOCK NUMBER . SEND CHECK OR MONEY ORDER . SATISFACTION GUARANTEED!
EDMUND SCIENTIFIC CO., BARRINGTON, N. J.

New! 2 in 1 Combination Pocket-Size

50 POWER MICROSCOPE and 10 POWER TELESCOPE

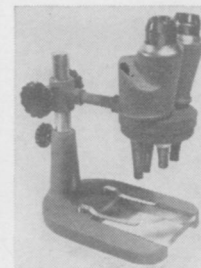
ONLY \$4.50 ppd.



Useful Telescope and Microscope combined in one amazing, precision instrument. Imported! No larger than a fountain pen. Telescope is 10 Power. Microscope magnifies 50 Times. Sharp focus at any range. Handy for sports, looking at small objects, just plain snoping.

Send Check or M.O. Satisfaction Guaranteed

Order Stock No. 30,059-Q.....\$4.50



STEREO MICROSCOPE

American-Made Instrument at Over 50% Saving. Up to 3" Working Distance—Erect Image—Wide 3-Dimensional Field. Used for inspections, examinations, counting, checking, assembling, dissecting. 2 sets of objectives on rotating turret. Standard pair of wide field 10X Kellner Eyepieces give you 23 power and 40 power. Helical rack and pinion focusing. Storage chest included. 10-DAY TRIAL... complete satisfaction or your money back. Order

Stock No. 85,039-Q. Full price, \$99.50 f.o.b. Barrington, N. J. (Shipping wt. approx. 11 lbs.) Send Check or M.O.

BUILD A SOLAR ENERGY FURNACE

Wonderful Geophysical Year School Project

Build your own Solar Furnace for experimentation — many practical uses. It's easy—inexpensive. Use your scrap wood. We furnish instruction sheet. This sun powered furnace will generate terrific heat — 2000° to 3000°. Fuses enamel to metal. Sets paper aflame in seconds. Use our Fresnel Lens—14 1/2" diameter... f.l. 14".



| | | |
|--------------------|--------------|------------------|
| Stock No. 70,130-Q | pkg. of 1... | \$ 6.00 Postpaid |
| Stock No. 70,131-Q | pkg. of 2... | 11.00 Postpaid |
| Stock No. 70,132-Q | pkg. of 4... | 20.00 Postpaid |

"FUN WITH OPTICS"



Tells How to Build Your Own Optical Instrument

Easily understood, diagrammed instructions for building telephoto lenses, telescopes, microscopes, artist drawing projectors, slide viewers, close-up camera lenses, binoculars, riflescopes, etc. We can furnish the lenses, prisms, and parts you'll need. Right now order your copy of "FUN WITH OPTICS"—a terrific book—tells all about lenses and prisms, too.

Stock No. 9050-Q.....50c postpaid

GET FREE CATALOG #Q—World's largest variety of Optical Items. Bargains galore. War Surplus—Imported—Domestic! Microscopes, Telescopes, Infrared Items, Prisms, Lenses, Reticles, Mirrors and dozens of other hard-to-get Optical Items. Ask for FREE CATALOG #Q.

