

MEDICINE

Boys Weaker Than Girls

➤ **EVEN RIGHT** after birth, baby boys are less able to cope with diseases than baby girls.

From the time they are born, infant males are hit twice as often as infant females with staphylococcal infections, which cause boils and similar ills.

During the first three weeks of life, males showed a "remarkably consistent" tendency to be stricken with more disease than females, researchers reported in the *New England Journal of Medicine*, 269:337, 1963.

"It is believed that the fact of sex difference is of inherent biologic interest," they said. Many investigators currently working on the problem of staphylococcal disease may be helped by their discovery, made in a study of four Pittsburgh hospitals.

Observations were made on 1,938 newborn infants in the hospitals and later at home. Pus-forming lesions were found in 70% of the cases, and eye inflammation in 20%. The other 10% consisted of abscesses and infection of the navel and fingernail area.

It is known that the male of the human species, as well as of other mammals, is not

able to cope with his environment as successfully as the female. This is true in the uterus and during the first few months of life as well as later on.

Twice as many males as females under 15 years of age were hospitalized for infections of the central nervous system due to ECHO virus Type 9 in the 1957 epidemic in Milwaukee. Males are also more apt to get infectious hepatitis, purulent meningitis, brucellosis, tularemia and Q fever.

Few investigations have been made into the cause of newborn "staph" predominance in boy babies. Dr. Russell R. Rycheck, who collaborated on the Pittsburgh study, told *SCIENCE SERVICE* that so far no one knows why baby boys have so great a percentage of "staph."

"There are 100 different things that might cause it, and our team is continuing to study possible reasons," he said. "So far we have not found out why."

Drs. Donovan J. Thompson, Horace M. Gezon, Kenneth D. Rogers and Prof. Theodore F. Hatch, in addition to Dr. Rycheck, reported the study.

• *Science News Letter*, 84:223 Oct. 5, 1963

MEDICINE

Chest Massage For Babies

➤ **DEAL GENTLY** when using closed-chest heart massage on babies. Heavy pressure on the lower tip of the breastbone with the heel of the hand can cause rupture of the liver.

The technique of starting a stopped heart by pressing on the chest from outside must be modified for infants whose hearts stop beating, and this group is large.

Nearly three times as many babies under one year of age have stopped hearts than in any other age group, two Canadian physicians reported in the *New England Journal of Medicine*, 269:606, 1963.

Drs. Manning M. Thaler and George H. C. Stobie of the Research Institute, Hospital for Sick Children, Toronto, Canada, studied 20 children under five years of age on whose bodies autopsies were performed within a few hours after death.

They found that the infant heart is high, and that compression starts circulation when the thumbs are used on the middle of the breastbone, or sternum. Abdominal injury results, not so much from heavy pressure on the chest alone, as when the abdomen and chest both are compressed.

Parents far removed from a doctor might conceivably need to know the best technique for heart massage.

Correct closed-chest massage for infants requires that the head of the child must be held toward the one giving aid. The thumbs are superimposed over the middle of the breastbone, and for additional support the fingers are linked behind the back of the baby.

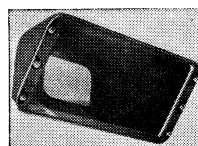
If only one operator is available, mouth-to-mouth ventilation can be easily adminis-

tered, but as soon as possible an electrocardiographic tracing should be obtained.

After trying mouth-to-mouth breathing, the closed-chest heart massage would do no harm even if the heart has not entirely stopped, pediatricians say.

A stopped heart due to electric shock from a hot wire would be a signal to any parent or nurse of a child to try the heart massage first. Choking and difficult breathing, on the other hand, would indicate mouth-to-mouth breathing as a first aid.

• *Science News Letter*, 84:223 Oct. 5, 1963



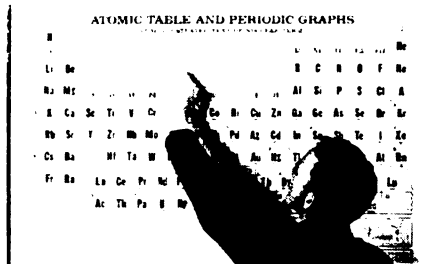
SEE-THRU MIRROR

Reflects as well as transmits light (half and half). Optical glass. Size 2 1/4" x 4" about 1/4" thick. Mounted in removable metal frame with window in back. Excellent if you wish to "see without being seen," as thru peephole. Each \$5.00

HARRY ROSS

Scientific & Lab Apparatus
61-L Reade St., N.Y. 7, N.Y.

SCIENCE SPECIALS



PERIODIC WALL CHART

Professional quality at low cost! The traditional scientific reference work with many added features. Illustrated text provides a basic education in atomic principles. Describes protons, neutrons, radioactive isotopes, atomic fission, fusion, alpha, beta, gamma rays. Compiled to new Carbon 12 standard, includes new element 103—Lawrencium. Shows atomic weights and number of electrons in each orbit, illustrates atomic structures. Widely sold to American schools, students and laboratories. 32x45", 4 colors, varnish coated. Shipped rolled, not folded. \$2.95 PPD.

SCIENCE OF SOUND



Created by Bell Telephone scientists for high school and college physics classes, but is sheer enjoyment for everyone. All major phases of acoustical science are demonstrated—pitch, frequency, echo, reverberation, Doppler effect, overtones, etc. Short narrations are followed by brilliantly executed sound demonstrations. The effect is thrilling to all who listen. 12" 33rpm record. \$5.95 PPD.

SOLAR TOWER MOTOR

At last! A solar cell and motor at a realistic price. Entire vertical tower assembly revolves in sunlight or under light bulb—a new concept that fascinates all observers. Powerful solar cell generates current to drive the precision ball bearing motor. Complete with motor, cell, base, bracket and 20 page experiment book. \$5.75 PPD.



THE FREY SCIENTIFIC COMPANY

273 ORANGE ST. MANSFIELD 8, OHIO
SATISFACTION GUARANTEED SEND FOR FREE CATALOG

How to Read 77 Newspapers —in 30 Minutes!



If the news is important to you or your organization; if you want it unbiased, stripped of sensationalism . . . In short, if you want just the **FACTS** of what's happening in every field of human activity, you need **World News Digest** published by **Facts On File!** Low annual subscription price of \$36 (special charter rate) brings you eight 8 1/2" x 11" pages weekly containing over 100 hours of news reading boiled down to 25-35 minutes.

HOW TO GET A CURRENT COPY OF WORLD NEWS DIGEST—Now see for yourself why John Gunther calls FOF's *World News Digest* "valuable beyond words." For copy of current issue, simply send 25 cents to cover postage and handling to Dept. N-80.

FACTS ON FILE, 119 West 57 Street, New York 19, N.Y.

