

MEDICINE

Cleft Palate Handicap Overcome By Thousands

► ONE OUT of every thousand children born alive has a cleft palate or harelip, but there is a better chance than ever before of overcoming this handicap.

The U.S. Children's Bureau declares that it does not necessarily bar a person from any line of work. A new bulletin (see SNL, July 18, p. 44) states:

"Thousands of men and women born with a cleft palate have become business leaders or hold responsible, well-paying professional jobs, often where good speech is highly important."

Plastic surgeons can make a cleft lip look natural, and the operation is done shortly after birth. A cleft palate is usually much more complicated. In some children, an operation may be done at about two years of age, in others it is delayed until the fourth or fifth year. For others, an operation is not needed. Where the top of the mouth did not grow together can sometimes be remedied by an artificial palate.

No condition which parents or physicians could control has yet been shown to cause clefts in children.

Science News Letter, July 25, 1953

ARCHAEOLOGY

Live in Cave Home Of Stone Age Baby

► THE MOUNTAIN cave in Iraq in which the bones of an Old Stone Age infant were recently found by a Smithsonian Institution anthropologist holds, under its floor, a continuous record of the handiwork of man from perhaps 100,000 years ago until the present day.

Shanidar Cave, in the Baradost Mountains, is still lived in. The present tenants lined up, agog with interest, to watch the scientists dig and, like "sidewalk superintendents," to give advice.

Dr. Ralph Solecki, Smithsonian scientist, made a preliminary study of the cave last year. In his first scratchings of the surface of the cave floor, he found so much of intense archaeological interest that he applied for a Fulbright grant to continue the work. Since his application received the support of the Iraq museum, it was granted.

Caves in the vicinity were searched in 1950 for evidence of Old Stone Age Man by a joint expedition of the Peabody Museum of Harvard University and officials of the Iraq government. Dr. Henry Field, director of the expedition, reported his findings in SCIENCE NEWS LETTER (July 29, 1950, p. 74).

In Diana Cave, 3,500 feet up on Jebel Baradost, painted pottery with incised designs was found. This pottery was used by some unknown housewife about 5,000 years before the birth of Christ.

In another cave in nearby Iran, Dr. Field found flint implements and flakes made by

hunters of the Old Stone Age. No human bones of Stone Age Men were encountered at that time.

The skull of the child's skeleton found by Dr. Solecki was badly collapsed, he reported to the Smithsonian. Not until it is painstakingly pieced together like a jig-saw puzzle will it be possible to tell what type of early man is represented. The baby was between eight months and one year old when it died.

Science News Letter, July 25, 1953

OPHTHALMOLOGY

Stay in Dark Before Using Eyes in Dark

► IF YOU want to see well on a dark night, you had better stay in the dark for 30 minutes before you are going to want to use your eyes.

Practical experience in the armed services has shown that you can see well enough for most purposes if you protect your eyes for a half hour ahead of time with red goggles. Using the red goggles you can then consult instruments, read maps or even pick up a book in a normally lighted room or airplane cockpit.

Some experiments have even suggested that the red goggles give better dark adaptation than does complete darkness. But new experiments show that darkness is really better, especially for the first few minutes after the goggles are removed and the eyes put to work.

The new experiments are reported by Dr. Walter R. Miles of the Psychological Laboratories, Yale University, to the *Journal of the Optical Society of America* (June.)

To get completely comparable results, Dr. Miles tried out both methods of dark adaptation on the same persons at the same time. He put red goggles over one eye of the subjects and an opaque cardboard that cut off all light over the other eye. The eye from which all light was kept out was the better adapted for vision in darkness.

However, this finding need not affect the practice in the armed services, Dr. Miles says. The complete success of the red goggles in preparing men for effective night vision on outdoor missions has been demonstrated in practice.

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BIOCHEMISTRY

Animal Starch Plays Role in Sterility

► A FORM of animal starch, called glycogen, seems to play some role in sterility in women and also in uterine cancer, Dr. William B. Atkinson, University of Cincinnati anatomist, told a seminar held at Jackson Laboratory, Bar Harbor, Me.

Researches under way are aided by the staining of this starch a vivid red, which allows the location of the chemical in the animals studied.

Science News Letter, July 25, 1953

IN SCIENCE

MEDICINE

Grant Two Patents Parents Should Note

► A MAN who evidently believes not in sparing the rod but in using the rod sparingly has invented a paddle which will not let a parent hit his child too hard. It has a breakaway handle, so that the paddle portion, if used with too great a force, dangles uselessly by tapes from the handle. This inventor is George F. Jorgenson, Norfolk, Va., and he received patent number 2,645,488, for his paddle of the golden mean.

The patent says the paddle portion is "of sufficient area to contact a substantial area of the rump of a child."

For younger children, Warren G. Davis, Madisonville, Ky., has invented an automatic baby carriage rocker. It consists of an electric motor mounted below the crib of the carriage. It has an automatic timer for turning it off when desired. Patent number is 2,644,958.

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TECHNOLOGY

Teletypewriters Send 100 Words Per Minute

► NEWS SOON may click into newspaper offices over new teletypewriters than can spell out 100 words a minute. Present machines transmit about 60 words a minute.

Developed by the Teletype Corporation for use in the Bell System, the new machines proved so successful that the Navy and Air Force now are installing them on ships and in areas not served by communications companies.

The new teletypewriter is quieter in operation, more pleasing in appearance and requires less maintenance than current machines. Its type can be changed in a matter of seconds when different typefaces are desired. Ribbons last twice as long in comparison to those serving on present machines.

Each type character is set on an individual pallet. The pallets are arranged in four horizontal rows, each carrying 16 characters. They are housed in a box one-half inch thick, one inch wide and two inches long.

When a key is struck, the type-carrying box is positioned automatically so the character will print where it should. A tiny hammer strikes a pin protruding from the rear of the pallet. This prints the letter on the paper.

The new machines will begin clicking out messages for the Bell System after urgent military orders have been filled.

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CI FIELDS

ENTOMOLOGY

Trace Flies' Flights With Colored Threads

► IF A fly carrying a brightly colored streamer with him through the air lights in your yard this summer, do not be alarmed.

Your unexpected guest will probably be one of the thousands of flies tagged with nylon threads of red, blue and other colors by the U.S. Public Health Service for experiments in normal flight range, rate of dispersion, reaction to insecticides and other phases of the insect pests' life.

By tagging the flies with inch-long colored nylon thread, the PHS scientists are able to locate, recover and identify the insects after their release.

A mechanical fly-tagging device that speeds up the tedious process of gluing the thread on the small thoraces of the insects is described by Drs. John W. Klock, David Pimentel and Robert L. Stenburg of the PHS Communicable Disease Center, Savannah, Ga., in *Science* (July 10).

The new device holds 25 experimental flies, anesthetized with carbon dioxide, in an assembly line chamber. The nylon thread is fastened to the thoraces of the flies by glue from a small hypodermic syringe under which the flies are moved.

When this work had to be done by hand, unskilled workers could only tag about 800 flies a day. With the mechanical tagger, the output is nearly doubled, and without undue fatigue to the workers.

When properly attached, the inch-long threads do not interfere with the normal activities of the flies. No injury to the flies has been observed because of the tagging.

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HEMATOLOGY

Blood Grouping Tests Can Exclude Paternity

► ABOUT HALF of the men falsely accused of paternity can establish their innocence through use of blood grouping tests, Dr. Lester J. Unger, director of the blood and plasma bank of University Hospital, New York University-Bellevue Medical Center, declares in the *Journal of the American Medical Association* (July 11).

"Blood tests may exclude paternity, but they can never prove it," Dr. Unger explains. "Nevertheless, on occasion, even non-exclusion, although not proving paternity, has allayed a husband's suspicions and saved a marriage."

Only three blood group systems are made use of legally, although there are at least nine independent blood group systems. The

ones commonly used are the A-B-O, M-N, and Rh-Hr systems and they are used simultaneously.

The various systems of blood grouping result in more than 50,000 different varieties of blood. Dr. Unger suggests that the complete blood grouping may some day rank with a person's fingerprints.

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GEOLOGY

Bore 10,530 Miles In Petroleum Search

► PROSPECTORS BORED 10,530 miles down into the earth last year in the stepped-up search for new oil and natural gas deposits in the United States.

Of the 12,425 exploratory holes drilled in 1952, totaling 55,615,389 feet, 2,335 became producers. One successful hole was drilled for every 4.3 dry holes. Average depth of the exploratory holes was 4,476 feet.

Comparative figures show a steady growth in number and efficiency of petroleum exploration for the United States in recent years. In 1939, less than 3,000 exploratory holes were drilled, while over 8.5 holes were drilled for every one that became a producer.

By 1951, exploration had increased to 11,756 holes a year, with one producer discovered for about every 4.2 holes drilled.

These figures were reported in the Bulletin of the *American Association of Petroleum Geologists* (June) by Dr. Frederic H. Lahee, chairman of the association's committee on exploratory drilling statistics.

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ZOOLOGY

California Reptiles Stay Unchanged 20,000 Years

► SUDDEN CLIMATIC changes in southern California during the past 20,000 years that wiped out such large animals as the saber-tooth tiger, the ground sloth and the mastodon, apparently had little effect upon reptiles in the same area.

Bayard Brattstrom, University of California at Los Angeles zoologist, recently examined a collection of bones from Los Angeles' famous La Brea tar pits. The examination indicated that small reptiles and amphibians common to southern California have existed for the last 20,000 years just about as they do today.

Such common present-day animals as king snakes, rattlesnakes, fence lizards and western toads were included in the collection. They showed little change in structure over the centuries. The bones of only one extinct animal, a type of toad, were found.

"It is difficult to determine the exact time that these animals existed," the U.C.L.A. zoologist says. "But there is evidence that many of them may have been trapped in the bubbling tar some 15,000 to 20,000 years ago."

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AGRICULTURE

New Tobacco Variety Resists Wilt Disease

► A NEW tobacco variety, highly resistant to destructive bacterial wilt and from 5% to 18% more productive than current wilt-resistant varieties, has been developed for flue-cured tobacco fields of the south.

Called Dixie Bright 28, the new variety was developed jointly by the U. S. Department of Agriculture and the North Carolina Agricultural Experiment Station. In tests on value per acre of tobacco, Dixie Bright 28 was 8% higher than Dixie Bright 27 and 21% above Oxford 26, the two wilt-resistant varieties now grown commercially.

The Federal-State scientists who bred the new variety recommend that Dixie Bright 28 be used only where the tobacco disease, black shank, is not present. It has no resistance to that disease.

Science News Letter, July 25, 1953

INVENTION

Rear View Mirror Has No Blind Spots

► A REAR view mirror that gives the driver a look at everything behind him at one glance and has no blind spots has been invented. The driver sees this panoramic view by glancing at a set of mirrors on his dashboard, according to inventor Ronald N. Darroch, Detroit, Mich.

The invention, patent number 2,645,159, consists of two or more sets of three mirrors each. One of these three mirrors is located on the dashboard. The other two are housed in a sort of dome on the roof of the car. One faces the rear. The other reflects the image of the rear down onto the dashboard mirror.

A series of these sets of three mirrors, so placed that their images overlap, give the panoramic view, the inventor says.

Science News Letter, July 25, 1953

PSYCHOLOGY

Protect Badly Treated Children From Pictures

► NEWSPAPERS ARE taken to task for publishing pictures of children inhumanly treated by parents by being chained or tied up. *The Journal of the American Medical Association* (July 11) makes a plea for the protection from unnecessary public display of children "whose only crime is to have the wrong parents."

Children feel deeply hurt when they believe they are betrayed by their parents, teachers and friends, the editorial explains.

Report the story, the editorial advises, but publication of a picture in which the child can be identified even by strangers may profoundly affect the future life of a normal child thus held up to public ridicule, taunts and even well meant sympathy.

Science News Letter, July 25, 1953