Current U.S. Patents

➤ A CONTRACEPTIVE device that is finding increasing use around the world to control human births and reduce the population explosion, a curved piece of plastic known as the Lippes Loop, was granted a patent by the U.S. Patent Office.

Its inventor, Dr. Jack Lippes of the State University of New York at Buffalo, was in Índia to check on use of the device there when the patent was awarded. India has one of the highest birth rates of any country in the world.

The Lippes Loop is cheap, safe and has proved effective during widespread testing. Although future research is expected to bring other birth control methods fulfilling these basic requirements, many millions of the Lippes type may be used before that day comes.

At least half a million Lippes Loops are now being used in the U.S., India, Taiwan and Korea. They are distributed uted abroad through Planned Parenthood Federation of America.

A key feature of the device for which Dr. Lippes was awarded patent 3,250,271 is the kind of plastic from which it is made. This plastic has a "memory" so that after it is molded into the desired shape, it can be straightened out for insertion, but will then return to its previous curved shape.

No one knows exactly how the Lippes Loop or any other form of in-trauterine contraceptive device, or IUCD, actually prevents conception. All that is known is that any foreign object in the uterus in some way stops fertilization.

Although IUCD's cost only a few cents, the physician's charge sertion can be quite high. However, once inserted, the device can remain effective for years. It is, therefore, more desirable for use in developing countries than today's birth control pills that have to be taken regularly and may cost as much as \$25 for a year's supply.

Other Interesting Patents

Using optical fibers to transmit images and a method of making a bundle of such fibers so that the light in each does not interfere with the others was awarded patent 3,247,756. Dr. Walter P. Siegmund of Woodstock, Conn., assigned rights to American Optical Company, Southbridge, Mass.

Tiny semiconductors can be made even smaller, thanks to a method of applying a protective coating to them developed by Drs. John A. Perri and Jacob Riseman of Poughkeepsie, N.Y., who assigned rights to patent 3,247,-428 to International Business Machines Corporation.

Patents 3,248,667 and 3,248,668 covering lasers made from calcium tungstate having small added amounts of either thulium or holmium were granted to Leo F. Johnson of North Plainfield, N.J., and Kurt Nassau of Springfield, N.J., who assigned rights to Bell Telephone Laboratories.

• Science News, 89:423 May 28, 1966

MEDICINE

Diet Helps Children With Acute Leukemia

➤ CHILDREN suffering from acute leukemia, a fatal malignancy of the blood-forming organs, could live longer on a special low-protein diet free of the substance purine, it is hoped.

A team of Polish scientists reported that a greater number of children with leukemia must be studied, but that 13 leukemic children have responded to the special diet.

The encouraging results of our observations require confirmation on a larger series of cases," the scientists said. However, the use of such a diet or some modification of it in acute leukemia, if their observations are confirmed, "may contribute to the prolongation of the life-span of children."

Drs. Boguslaw Halikowski, Jerzy Armata and Stanislaw Garwicz of the Second Paediatric Clinic, Medical Academy, Cracow, Poland, reported the findings.

Science News, 89:423 May 28, 1966

Special Awards Given

(Continued from p. 422) Ind., for "Effect of Surface on the Cholesteric Phase" (Alternate: Caro-(Alternate: Caro-Cholesteric Phase" (Alternate: Carolyn C. Gerhardt, 18, Terry Parker Sr. H.S., Jacksonville, Fla.); Aerospace Dynamics—Scott A. Jenkins, 15, Valley H.S., Albuquerque, N. Mex., for "Disturbance Theory for Rocket Drag Reduction" (Alternate: Greg Solberg, Bottineau H.S., Bottineau, N.

); Aerospace Electronics and Dak.); Aerospace Communications—Howard S. Katz, 17, Springbrook H.S., Silver Spring, Md., for "Complete Video Recording System" (Alternate: Howard S. Weiss, 17, Conard H.S., West Hartford, Conn.); Aerospace Environmental Sciences— Curtis Bryant, 16, Le Mars Community

-MEET THE HEAVENS!-

LUNAR MAP: 10" chart in 2 colors identifies 326 mountains, seas, craters. POPULAR STAR ATLAS: All stars to magnitude 5½ charted in book form. Write for new free catalogue N.

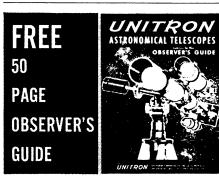
SKY AND TELESCOPE Cambridge, Mass.

H.S., Le Mars, Iowa, for "Studying the Solar Atmosphere" (Alternate: Dale E. Fitz, 17, Arnett H.S., Arnett, Okla.); Aerospace Medicine—Letantia B. Jankowski, 18, Immaculate Conception H.S., Lodi, N.J., for "Radioprotection and Immunosuppression" nate: Felice R. Tillman, 18, Metairie Park Country Day School, Metairie, La.); Aerospace Physics—H. Grady Rylander III, 18, Austin H.S., Austin, Texas, for "Construction of a Metal-Oxide-Surface Field-Effect Transistor" (Alternate: Eddie G. Napps, 18, Longview H.S., Longview, Texas); Aerospace Psychological and Social Sciences Rick P. Johnson, 17, North H.S., Evansville, Ind., for "Physical and Psychological Effects of Rapid Accelera-tion on Mice" (Alternate: Debra J. Towry, 15, Northwestern Jr. H.S., Natchitoches, La.); Aerospace Propulsion—Jeffrey B. Bentley, 16, Temple H.S., Temple, Texas, for "Effects of Oscillations on Solid Propellant Burn-Oscillations on Solid Propellant Burning Rate" (Alternate: Lewis Perdue, 17, Murrah H.S., Jackson, Miss.); Mathematical and Computational Sciences—Jon Pitts, 18, Austin H.S., Austin, Texas, for "Automatic Location of Points From Stereoradiographs" (Alternate: Lawrence D. Meisel, 16, Yorktown H.S., Arlington, Va.).

THE AEROSPACE EDUCATION FOUN-DATION OF THE AIR FORCE ASSOCIATION presented precision slide rules to each of the ten winners of the U.S. Air

Force Awards.

• Science News, 89:414 May 28, 1966



With artificial satellites already launched and with artificial satellites already launched and space travel almost a reality, astronomy has become today's fastest growing hobby. Exploring the skies with a telescope is a relaxing diversion for father and son alike. UNITRON's handbook contains full-page illustrated articles on astronomy, observing, telescopes and accessories. It is of interest to both beginners and advanced amateurs. **CONTENTS INCLUDE:**

Observing the sun, moon, planets and wonders of the sky • Constellation map • Hints for observers • Glossary of telescope terms . How to choose a telescope . Astrophotography

UNITRON INSTRUMENT COMPANY - TELESCOPE SALES DIV. 66 NEEDHAM ST., NEWTON HIGHLANDS 61, MASS.
Please rush to me, FREE of charge, UNITRON'S OBSERVER'S GUIDE and TELESCOPE CATALOG #5-V
Name
Street
CityState