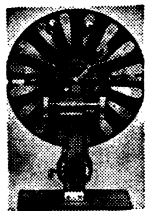


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SPACE

Headquarters for Flight To Moon Being Designed

See Front Cover

➤ ONE OF THE largest buildings in the Free World, now being designed by 200 engineers, will be the base for flights of American astronauts to the moon.

The more than 500 feet tall structure, shown on this week's front cover in the artist's conception of the flight facilities, will be used to match and checkout rockets and spacecraft being developed under Project Apollo. Four vehicles can be built simultaneously in these facilities of the future under preparation for the National Aeronautics and Space Administration at Merritt Island, Fla.

The Launch Operations Center will have the world's highest doors, which will stand 45 stories from the ground. A separate four-story building will be used as the control facilities center.

The design team, a combine of four New York City architectural and engineering firms, known as Urbahn-Roberts-Seelye-Moran, is working on the project under the supervision of the Jacksonville (Fla.) District of the U.S. Army Corps of Engineers.

• Science News Letter, 83:30 January 12, 1963

TECHNOLOGY

Sonic Device Pinpoints Gas Leaks

➤ A NEW SONIC device pinpoints leaks in gas mains from the ground. Developed by the Institute of Gas Technology at Illinois Institute of Technology, the detector, which operates by introducing a constant sonic signal into the pipe, is based upon the discovery that any sound present in the gas stream inside the pipe will issue from a leak with the escaping gas. The use of the new technique will enable utility distribution networks to quickly pinpoint underground leaks.

• Science News Letter, 83:30 January 12, 1963

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TECHNOLOGY

Solar Energy Produces Drinkable Water in India

➤ THE SUN'S HELP is being sought to produce drinkable water in northern India.

Although a considerable amount of research has been done in Algeria, Australia and the United States on demineralizing water using solar energy, the methods so far devised are still expensive.

Solar energy is available in those areas where there is greatest difficulty in obtaining water for drinking but a cheap method of producing pure water is needed. In northern India where the sun shines brightly most of the year, efficient methods for evaporating and distilling water in solar stills are being studied.

The stills are in general airtight glass-roofed enclosures exposed to the sun in which brackish water or sea water is allowed to evaporate and condense along the walls. The distilled water is then collected in troughs along the sides of the still.

Experiments so far have indicated that a low-roof type of solar still is the most practical in the remote arid areas where the only water supply is underground brackish water.

The yield from these stills is fairly constant and installation fairly inexpensive. About 14 to 20 square feet of distilling area is required to produce a gallon of distilled water per day. A daily yield of about 1,500 gallons per acre would be sufficient to maintain a village community of about 250 persons.

The study was reported by Mohan Lal Khanna, National Physical Laboratory, New Delhi, in the Indian Journal of Scientific and Industrial Research.

• Science News Letter, 83:30 January 12, 1963

TECHNOLOGY

"Wurlanizing" May Give Shrink-Proof Wool

➤ SHRINK-PROOF, easy-care woollens that are as machine washable as cottons may soon be a reality.

The U.S. Department of Agriculture has developed a new treatment, "wurlanizing" (named after the Western Utilization Research Laboratory), that prevents wool from shrinking. It is now being evaluated by industry.

Utilization research which changes familiar farm foods and fibers to increase their usefulness has also developed new leather tanning materials, such as glutaraldehyde, which gives leather entirely new properties.

Corn, cotton, wool, wheat, animal fats, edible vegetable oils and many other familiar products are being transformed into new and valuable industrial products.

Industrial use of agricultural products began early in this country's history and was given a big boost when the four USDA Utilization Research Laboratories were established in California, Louisiana, Illinois and Pennsylvania.

• Science News Letter, 83:30 January 12, 1963

Art measures the degree of civilization in any culture.