

## SOCIOLOGY

## Family Ties and Housing

► PUBLIC HOUSING can be a contributing factor in the family breakdown that often leads to juvenile delinquency.

This was found in a study of families in Puerto Rico that moved from a shack town to public housing, anthropologist Helen M. Icken of Jamaica, N.Y., reported to the American Anthropological Association meeting in Philadelphia.

The status of father, which in shack town surroundings is relatively low and mainly that of the breadwinner, becomes even lower in the public housing environment. Women, who in slum areas generally dominate the family, become even more prominent in the public housing situation because there is less economic need for the man. Rents are very low and repairs and maintenance normally done by the male are now taken over by management.

With the decrease of the male's authority in the family, young boys do not have the strong father-image they can respect and need to set a pattern for themselves. There-

fore they turn to their own age group for leadership and authority, which can be beneficial, but often leads to juvenile gangs.

She said the study of 100 families and interviews with 474 persons both from shack town and public housing dwellings showed that many families in the public housing areas were entirely without men. Although the housing project was built to foster a North American middle class environment for the slum population, one result was to increase the importance of the women in the family to the detriment of the man.

In shack town the father was sort of a "supreme court" to whom the women appealed when they could not cope with the situation. In the public housing situation, he was all but pushed out of the picture.

The scientist did the research for the Urban Renewal and Housing Administration of the Commonwealth of Puerto Rico.

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## INVENTION

## Patents of the Week

► A READING MACHINE that translates print into sound signals that blind persons can understand has been patented.

The reading device was developed by John S. Abma of Columbus, Ohio, Lawrence J. Mason of Worthington, Ohio, and David Reagan Rice of Chatham, N.J., who assigned rights of patent No. 3,007,259 to Battelle Memorial Institute, Columbus.

The device, called an optophone, scans a line of printed material and translates the print into a sound signal. It will give the same sound, even for different sizes of print, the inventors claim, thus allowing the blind person to learn to use the instrument more rapidly and to have a wide choice of reading material.

A method of preserving oysters by freezing them in their shell and then separating the meat from the shell won patent No. 3,007,801 for Fernand S. Lapeyre, James M. Lapeyre, Leroy E. Demarest and Robert F. Couret, all of New Orleans, La. After freezing, the oysters are tumbled about until they begin to thaw slightly, in order to break the hinge ligament, to detach the abductor muscle that usually holds the shell tightly shut and to force the shells apart.

The loose frozen meat is then separated from the empty shell. One advantage of this processing, the inventors state, is that individually frozen meat, rather than a frozen block of oyster meat, is available.

A semi-artificial tree with a water supply won patent No. 3,007,282 for Leonard T. Galesky of Stamford, Conn. The method is particularly applicable during the Christmas season, the inventor claims.

His device consists of a hollow base and stand on which tree branches can be

mounted. They are watered by osmosis from a saturated wick.

Special dilutions of dithiophosphates as systemic insecticides in mammals won patent No. 3,007,845 for Redginal Irving Hewitt of Nanuet, N.Y., and Emanuel Waletzky of Westwood, N.J. Rights were assigned to American Cyanamid Company, New York.

The carbamoyl alkyl phosphates, administered internally, kill insects and other parasites that feed on or in domestic animals. They are rapidly metabolized in the body of the animal so that the flesh is soon safe for human consumption.

A toothbrush to clean the teeth and massage the gums of domestic animals has been invented by Bird A. Eyer of Seattle, Wash. He received patent No. 3,007,441.

The plastic brush consists of two rows of cylindrical teeth, alternately conical and concave at the tip.

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## METEOROLOGY

## Nuclear Bombs May Weaken Hurricanes

► NUCLEAR BOMBS may be used to take the fury out of hurricanes.

Although the energy of the largest of hydrogen bombs is a fraction of that released by a storm, it may be possible to "damp the storm effects or alter its path" with multiple nuclear blasts, Jack W. Reed of Sandia Corporation, Albuquerque, N. Mex., told the American Meteorological Society meeting in Tallahassee, Fla.

Another way that appears more promis-

ing, however, is to explode a bomb of high megaton yield in the eye of the storm. This, theoretically, would push the hot dry air up into the high stratosphere, out of the storm circulation. The colder air, which would then replace the hot air, would weaken the storm intensity.

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## TECHNOLOGY

## Research Stellarator Made of Stainless Steel

See Front Cover

► HALF A MILLION pounds of stainless steel, like that used in kitchens, make up the vault of the C-Stellarator, shown on the cover of this week's SCIENCE NEWS LETTER.

The research device is being used by Princeton University scientists in experiments with hydrogen gas to learn more about thermonuclear reactions similar to those taking place in the sun. Within the vault, ionized gas reaches temperatures of more than one million degrees.

The device was designed by C-Stellarator Associates, an engineering group made up of Allis-Chalmers and Radio Corporation of America personnel.

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**EARTH PROBER**—Dr. Froelich G. Rainey, director of the University of Pennsylvania Museum, watches progress made by a new high speed drill, originally designed for drilling holes on the moon. It permitted archaeologists to look into buried tombs and buildings in Italy and determine whether excavation was warranted.