CRIMINOLOGY

Rural Crime Increases At Twice Rate of Cities

➤ RURAL crime increased at twice the rate it was going up in the cities during 1949, according to the FBI.

Over the whole year, a serious crime was committed every 18 seconds, the annual "Uniform Crime Reports" of FBI director J. Edgar Hoover reported.

Sheriffs' offices, rural police departments and State police reported an 8.5% jump in country crime, while the larger cities showed a 4.2% increase in serious crimes.

The nation-wide statistical survey showed another twist. "The frequency with which various types of crimes are committed appears to fluctuate with the different seasons of the year," Mr. Hoover reported.

Robberies, burglaries and auto thefts—all crimes against property—tend to occur most often in the winter months, hitting a high in December. For larcenies, rape and aggravated assaults, on the other hand, the summer months seem to be the time the criminal is more liable to attack.

The FBI points out that the long winter nights aid acts of stealth, while warm weather and long daylight hours are more favorable to personal contact.

"During the average day in 1949," Mr. Hoover reported, "there were 293 persons killed or assaulted; 162 robberies were committed; over 1,100 places were burglarized, more than 440 cars were stolen, and there were 2,800 thefts under the general larceny classification."

Strangely, the major types of crimes reported on, all rose during the past year except murder, negligent manslaughter and auto theft.

Science News Letter, April 29, 1950

ENGINEERING

Two New Man-Made Lubricants Available

➤ TWO new synthetic lubricants were made known at the American Chemical Society meeting in Houston, Tex.

A high-quality synthetic lubricant can meet the nation's needs when the premium oil fields of Pennsylvania and the Midcontinent states run dry.

Synthetic lubricants which have antiwear action 18 times better than petroleum oil have given superior service from temperatures well below zero to 300 degrees above.

One new product is made from abundant raw materials such as coal, oil shale, and refinery by-products. It boasts "quality standards not obtainable from petroleum oils without elaborate procedures." It was described by F. M. Seger of Paulsboro, N. J., research chemist for the Socony-Vacuum Oil Company.

In this synthetic process, an intermediate

chemical called 1-decene is produced from coal or one of the other raw materials, and 1-decene in turn is converted into an excellent synthetic lubricant by a simple heat treatment in conventional refinery equipment.

Dr. W. H. Millett of the Union Carbide and Carbon Corporation, New York, described the second new series of synthetic oils, made from natural gas or petroleum hydrocarbons. It has all the other desirable qualities of high-grade lubricants, exerts a solvent and cleansing action on the gums produced by ordinary oils, and can be made in water-soluble as well as insoluble form, Dr. Millett declared.

Through control of the chemical reaction by which these "polyalkylene glycol" lubricants are made, oils of any practical density can be produced, which gives them a wide range of usefulness.

Science News Letter, April 29, 1950

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