

Perhaps the best guaranty that no patents have been suppressed for selfish reasons came during the days of the Temporary National Economic Committee, more familiar as the TNEC. In 1938-39, TNEC held exhaustive hearings on charges that patent rights were being abused; and the make-up of this Committee was not partial to big business. If it could have found evidence of patent sins, it would have been happy. At the same time, a national group of scientists and two national business associations launched the same search, inviting one and all to come and testify. No one did. Not a shred of evidence suggested any suppression of any patent.

International Business Machines has a smoothly functioning method to insure that anything remotely resembling a useful invention gets a fair chance. General Motors has built up for 26 years its New Devices

Section in which it has opened 103,000 files for individuals who have submitted over 145,000 devices. These range from complicated mechanisms and highly technical processes down to a simple suggestion like a light under the hood. Over 3500 persons have suggested directional signals; over 1000 have submitted the idea of headlights that turn with the front wheels.

The company gives every idea careful attention, because you just never can tell. Among the many inventions they have bought since the war are developments in steering linkage, engine-mounting systems, combined starter and accelerator controls, cages for ball bearings and similar highly technical devices.

"We certainly aren't suppressing anything," exclaim the engineers unanimously. They ought to know.

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## GEOLOGY

## Germanium in Washington

► THE richest deposit of the vital war material, germanium, yet found in the United States has been discovered in the earth of parks, playgrounds and other locations in Washington, the nation's capital.

This vein of treasure from the Patuxent formation runs from Baltimore to Richmond, U.S. Geological Survey scientists find.

The deposits contain up to six percent germanium. The highest content previously reported, in the mineral germanite in Africa, was 10%. The District of Columbia deposits also contain vanadium, chromium and gallium.

Discovery of the new germanium deposits is reported by Taisia Stadnichenko, K. J. Murata and J. M. Axelrod in the journal SCIENCE (July 28).

The deposits are in the lignite remains of *Cupressinoxylon wardi*, a tree somewhat

similar to the coniferous family from the Cretaceous era, about 100,000,000 years ago.

Germanium is particularly valuable for electronic instruments. It is a semi-conductor, being intermediate in conductivity between metals and insulators. Photo-electric cells, rectifiers, transmitters and mixers (combination transmitters and amplifiers) are among the important uses for germanium crystals. These crystals are rapidly replacing vacuum tubes for many uses.

Mining operations in such a thickly populated district will make recovery of the germanium in these deposits somewhat of a problem. The germanium and the other elements, however, are recoverable if the need should be great enough. Previous to this discovery, the main source of germanium in the U. S. has been as a by-product recovery.

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when taking aureomycin orally. The patient retains enough aureomycin in this way for it to be effective.

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## On This Week's Cover

► INDUSTRY seeks to harness atomic energy! A dramatic moment was reached as a gas sample was taken following addition of isotopes to molten steel in an experimental foundry.

The metal was made radioactive in order to investigate possible application of tracer technique as an aid to quality control in steel production operations. When a minute amount of radio-isotope is added, the activities and changes of elements in the metal can be more readily traced. It was hoped to determine quantities of elements evolved in the gas and those remaining in the metal.

Research engineer taking the sample (holding long-handled steel rod, padded with asbestos) wears coat, gloves and respirator which comply with safety and health requirements set by the U. S. Atomic Energy Commission to prevent contamination. Respirators are worn in any location where air-borne beta and gamma emitters are present. All operators conducting this experiment wore laboratory coveralls to reduce clothing contamination.

Engineer at left watches as gas enters bottles containing liquid. These instruments are held by floor-type ring stand. The gas-collection apparatus is operated by vacuum pump. Instruments shown on floor measure rate per second gas is received during the evolution period. Funnel-shaped gas intake collector (shown near electric furnace and ladle of molten metal) is held at safe distance by operator. The entire experiment was conducted under a special exhaust hood to prevent spread of air-borne emitters.

Science News Letter, August 5, 1950

## MEDICINE

## Milk with Aureomycin

► MILK, valued as a food, is gathering new laurels for itself in aureomycin treatment, Drs. Lloyd G. Bartholomew and Donald R. Nichols of the Mayo Clinic report. Used as an agent to control vomiting caused by aureomycin treatment, milk, as compared with other nausea-control agents, allows for the best absorption of aureomycin into the blood stream.

Patients receiving aureomycin are often affected by nausea and vomiting. To counteract the vomiting, aluminum hydroxide gels have been used in the past. However, recent studies demonstrated that the aluminum hydroxide hinders the absorption of the aureomycin into the blood stream.

To control vomiting, one glass of milk given with the aureomycin was most effec-

tive. Of the 50 patients receiving this combination, only four experienced significant nausea and vomiting.

Further studies were carried out to see if the use of milk hindered the absorption of the aureomycin into the blood stream. One group received aureomycin alone, one group received aureomycin with aluminum hydroxide, and one group received aureomycin with milk. The levels of aureomycin in the blood serum after the administration of 750 mg. of aureomycin with 200 cc., or one glass, of milk were approximately the same as the levels obtained when 750 mg. of aureomycin was given alone to fasting patients.

Except in an occasional case, vomiting is controlled by drinking one glass of milk

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