

## MEDICINE

## Epilepsy Death Reports Wrong by Nearly 100%

► EPILEPSY DEATH reports are almost 100% too high. The total epileptic deaths in one state, Wisconsin, are actually less than one per 1,000 deaths instead of the two per 1,000 shown by death reports, Drs. Edward D. Schwade and Owen Otto of Milwaukee, Wis., found in an analysis of Wisconsin State Board of Health mortality figures.

In this state and presumably others, many deaths attributed to epilepsy are the result of accident or some other illness, the two doctors point out in the *Journal of the American Medical Association* (Dec. 18).

The Wisconsin statistics showed that 70 deaths, of an annual total of 34,839, were attributed to epilepsy, or about two per 1,000 deaths. However, an analysis indicated that 44 of the cases were caused by lung, heart and circulatory disease, or a variety of other conditions, including influenza and rheumatoid arthritis.

The two physicians said this would cut the total of "epileptic deaths" to 26, or less than one per 1,000 deaths.

A number of these, they said, were accidental deaths following seizures, such as falls and drownings, and could be prevented by careful guidance. Only 14 of 70 deaths actually occurred during status epilepticus (a series of rapid convulsions between which there are no periods of consciousness).

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## FORESTRY

## Red Trees, 100% U. S., Worked Over in Russia

► PURE, 100% American trees, that ironically are already red, are now being subjected to Russian scientific experimentation.

The giant American redwood is being hybridized and transplanted by Russian foresters and botanists.

In *Vokz* (Sept.-Oct.), the bulletin of the U.S.S.R. Society for Cultural Relations with Foreign Countries, the Russians report that "one can already see three-year-old sequoias around Moscow."

They go on to state that this original native of North America is being grown for planting by the U.S.S.R. Forestry Research Institute and, at the same time, the Institute is conducting research in the hybridization of the giant tree, crossing it with larch, cypress and others.

Apparently, the first redwoods were brought to Russia in the 1860's but in "tsarist Russia," the article states, they were grown exclusively to decorate parks on the southern coast of the Crimea and the Caucasus.

Now, however, Soviet scientists have tried introducing the sequoia into the forests of the Crimea and other parts of the Soviet Union.

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Snowbirds

► WHEN ICICLES hang from their tailfeathers, the tiny tumbling birds of winter are in their element.

Let the big, honking geese, the toothsome mallard, the strutting robin fly far to the south to palmlands under tropical suns. Snowbirds do not flee the wintry blasts. They revel in blizzards, sing in sleet, sweep snow-covered fields in open defiance of the coldest weather.

The name snowbird has been applied rather indiscriminately to a large number of small winter birds of gray, brown and white. Sparrows and finches, chickadees

and nuthatches stay with us from the time of red leaves until the first white flowers of spring.

From polar islands north of Alaska and Hudson Bay come the snow buntings, or snowflakes, to haunt snow-swept hillsides or bleak and ice-covered shores.

Wherever are cool summers and freezing winters, there are slate-colored juncos, true birds of winter and one of the most common sparrows in America.

These hardy Vikings will spend the coldest months of the year flying over white-coated fields and lawns or clinging to weed stalks which stick up through the snow.

It is the weed stalks which give clue to the snowbirds' presence. Without such remnants of harvest crop and garden, ditches and field-corners, the birds could not live through the winter.

Their appetites are highly beneficial to the farmer, for they consume vast quantities of weed seeds. They also gobble harmful insects, eating caterpillars by the droves. The amazing acrobatics of the nuthatch and chickadee are performed as they search inch by inch over bark and twigs for the sleeping eggs and pupae of the next summer's borers and biters.

Any and all snowbirds are glad for occasional human assistance, however, in warding off winter's hunger. Crumbs from feast-day tables or lumps of suet are banquets for them.

Given an occasional helping hand when the snow is deep and even the thermometer shivers, the little snowbirds will ride your outdoor Christmas trees all winter.

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## AERONAUTICS

## Preventing Fuel Fires

► A GAS tank that is expected to save many airplane crash victims from a fiery death has passed its first public tests before officials of the Civil Aeronautics Administration, rubber companies and the press.

The tank, which is made of tough, rubberized nylon, is designed not to rupture and spew forth its contents at high crash speeds.

In the tests, the cell, filled with water and encased in an airplane wing section, is hurled at a sandbag barricade. A Navy Mark IV catapult, used on aircraft carriers to launch planes, shoots the missile at the barrier.

High-speed cameras and pressure-sensing devices inside the cell record the results.

The tests, conducted at Weir Cook Municipal Airport, Indianapolis, Ind., were designed to show that the tank can withstand direct impacts of up to 75 miles an hour.

"Adoption of the cell will mean the saving of many lives in commercial and military flying," said Dr. H. J. Osterhof, director of research for the Goodyear Tire and Rubber Co., which, along with the CAA and the U. S. Rubber Co., developed the tank.

When a plane plunges into the ground, passengers who survive the impact are often killed when fuel flowing from torn gas tanks catches fire and explodes. The new fuel cell would remain intact during many of these crashes, thus preventing fires from this source.

Dr. Osterhof explained that fire is the greatest hazard in many accidents that occur at take-offs and landings.

The tanks are expected to be ready for production by June and should find immediate use in civilian and military aircraft.

During an earlier phase of the experiments scientists doubted that a sufficiently light, rupture-resistant material could be developed. They tried rubberized rayon, cotton and glass fabrics, then finally settled on nylon.

The cell bodies range in weight from one-tenth to six-tenths of a pound per square foot. Ordinarily, sturdier cells are needed in the wing section nearest the fuselage, while lighter tanks can be used near the wing tip. The tanks are designed to remain intact in a crashing plane until enough force is built up to rip the wing off.

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