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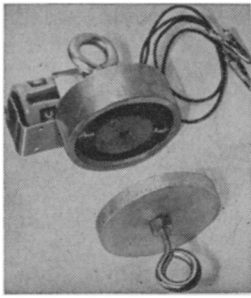
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INVENTION

Patents of the Week

A powerful rat killer that becomes more toxic with the addition of minute amounts of antibiotic, thus increasing the death rate of rodents, earned a patent—By Ann Ewing

➤ A POWERFUL rat killer called Warfarin that can be made even more deadly when tiny amounts of any antibiotic are mixed with the bait was granted a U.S. patent.

Addition of an antibiotic also speeds up the rate of kill and increases the numbers of rodents killed.

Warfarin is a coumarin compound deadly to rats and mice because it causes fatal hemorrhages. As an anti-clotting medicine for humans, it is more effective than the other coumarins.

Warfarin was developed by Dr. Karl Paul Link of the University of Wisconsin, Madison, who discovered years ago that dicumarol is the material in spoiled sweet clover that kills cows by causing fatal bleeding. Following this discovery, dicumarol was made into a medicine that is still used by patients whose blood clots too fast.

Dr. Link, with Phillip H. Derse and Lloyd W. Hein, also of the University of Wisconsin, earned patent 3,113,071 for discovering the extra deadliness of Warfarin when combined with an antibiotic. The scientists assigned patent rights to Wisconsin Alumni Research Foundation, which also holds rights for Warfarin alone.

Any antibiotic can be used. The only requirement is to use enough of the chemical to reduce the activity of organisms in the intestinal tract, including bacteria, that make or produce vitamin K.

delay, the letter whose key has been depressed.

This allows a child to correlate his action with both the written and spoken letter, the inventors claim, thus greatly speeding up his learning and memory processes. They assigned rights to McGraw-Edison Company of Elgin, Ill.

Other Significant Patents

Other patents include:

A grocery cart so equipped that packages it contains are automatically unloaded at the charge-out desk—patent 3,112,832 to Armand A. Lachance, North Oxford, Mass., and Stanley Ciborowski, Worcester, Mass.

A device, powered by an electric motor, for washing and wiping the rear windows of station wagons—patent 3,112,510 to Lothrop M. Forbush of Birmingham, Mich., Gilbert H. Wolf of Milford, Mich., and Keith E. Wood, Armada, Mich.; assigned to General Motors Corporation, Detroit.

A method of separating both the electrical and fluid connections on command when a rocket is ready to be fired—patent 3,112,672 to James E. Webb, Administrator of the National Aeronautics and Space Administration, representing the inventor, Alan K. Forsythe.

• Science News Letter, 84:398 Dec. 21, 1963

Nature Note

➤ WHEN SANTA CLAUS cracks his whip on Christmas Eve, he will be making use of one of man's oldest animal friends—the reindeer. This domesticated member of the deer family lives in the arctic regions of the far north where the hardest of northern ponies could never survive.

Thousands of years ago, the Ice Age drove the reindeer as far south as the Mediterranean coast, but as soon as possible the deer returned north. That is why ancient caves in France and Spain have as many pictures of reindeer on their walls as horses, and why pieces of reindeer bone and antlers have been found buried in the floor.

Cave drawings 3,000 years old in Sweden also show great herds of reindeer. About 30,000 Laplanders today still follow the reindeer herds as they migrate in the spring from the forest and the tundra to the green coasts and back again in the fall. The Lapps have always depended heavily on the reindeer for food, clothing, beasts of burden and transportation.

Just before 1900 it was decided to bring some of the European reindeer to Alaska. The natives were taught to care for the herds, which have multiplied over the years.

• Science News Letter, 84:398 Dec. 21, 1963

Wrist-Supported Flashlight

A flashlight that can be worn on the wrist, leaving both hands free, earned patent 3,112,889 for Michael L. Marmo and Robert F. Walsh, both of Flushing, N. Y.

The outer surface of the wrist strap holding the flashlight is covered with flexible metal strips at spaced intervals. The strips are connected with the flashlight battery and bulb. When the hand is held so that any part of any two of the strips touches metal, the light automatically turns on.

This device would be particularly handy for milk delivery men, the inventors note. Routinely delivering milk in the dark hours of early morning could easily spotlight a note left for them by resting their wrists on the edge of the metallic milk box.

Child's Educational Device

A typewriter-like device with a speaking attachment to help children learn to read, speak, spell and type at an early age was granted patent 3,112,569.

The typewriter, invented by Omar K. Moore of Guilford, Conn., and Richard Kobler of West Orange, N. J., is combined with a sound reproducing machine that pronounces automatically, after any desired