

## PUBLIC HEALTH

**Happy Home Makes For Fewer Accidents**

➤ ACCIDENTS ARE the leading cause of death among children from one to 15 years of age, killing some 10,000 in this age group each year.

A good many thousand more children are permanently disabled through accidental injuries. Preventing such accidents to children depends on many factors. An important one, which many parents may not know about, is the atmosphere of the home.

Medical scientists have been learning in recent years that a person's feelings have a lot to do with accidents. You have probably read about accident-prone workers and accident-prone drivers and how this proneness to get involved in accidents is related to the person's feeling unhappy or frustrated or resentful.

Such feelings lead some to get into accidents deliberately, while others are so engulfed in their feelings that they do not pay enough attention to what they are doing.

Children have feelings, just as grown-ups do. A child's unhappiness or lack of self-confidence may be the underlying cause of a series of what seem to be simple accidents or mishaps.

Parents should make sure their children are free from undue worry or tension, advise safety experts of the Metropolitan Life Insurance Company. If a child seems to be getting more than his share of cuts and burns and scrapes, the reason should be sought. The family doctor or pediatrician can give you advice on the causes of frequent accidents. It may be awkwardness from poor muscle coordination or a physical handicap. Training can be given to overcome that. But if the cause is a state of tension, the remedy lies in changing the atmosphere of the home.

A happy home where parents and children love and respect one another should be a safe home and one in which children will grow up with confidence that will help them to go through life safely.

Science News Letter, December 1, 1951

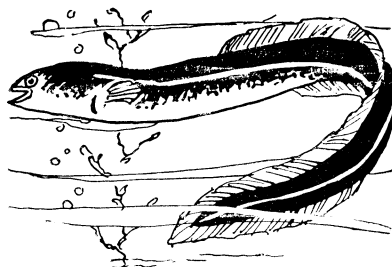
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**An Astonishing Wanderer**

➤ THE MOST unlikely-looking creatures sometimes astonish us with feats of which we would imagine them to be the last in the world to be capable.

Who would think, for example, that the dachshund, that mildest and most comical looking of dogs, was bred originally as a fighter, to follow the badger into his den and assail him in his own citadel?

And who would think of the long, slippery, lazy, sluggish eel, reposing slothfully in the mud, as one of the world's champion travelers?

Yet so it is. The eels in both European and American waters have swum many

thousands of miles and braved many dangers of the deep to come to the snug berths from which they are at last hooked or pronged to make a Friday feast.

Completely contrary to the famous trip of the salmon, which crowds the rivers and creeks in spring with fish eager to spawn, the hegira of the eel is toward the sea. Mature eels go down to the sea in vast numbers. All the eels from western Europe congregate in the southern part of the North Atlantic, produce their eggs and die.

The young eels—elvers, they are called—find their way back home without guides, and re-stock the waters. Our own North American eels make a similar migration, their breeding ground being somewhat to the north of that of their European brethren.

The young eels do not look at all eel-like when they are hatched, nor for many a moon thereafter. They are flat, thin, almost transparent things, about the size and shape of a penknife blade. These weird little fish slowly make the long return journey, and no one has yet figured out exactly how they do this unguided. At last they reach the ancestral fresh-waters, and settle down into the mud of their forefathers.

It is rather a pity that we Americans have not cultivated more of a taste for eel, for it is really very good eating. Our cousins "in the Old Country" appreciate it better. In some parts of Europe, smoked eel is in high favor, and anybody who has ever tried it will tell you that smoked eel is just about all that could be desired in the way of hors d'oeuvres.

Science News Letter, December 1, 1951

## TECHNOLOGY

**Recover Manganese Ore**

➤ AMERICA'S ABILITY to produce manganese commercially from its own plentiful low-grade ore is a step forward with the development of a process which uses nitric acid as a reduction agent but in which most of the acid is recovered for reuse.

While manganese has many uses, the most important one is in steel making. Nothing else has been found that can take its place. For every ton of steel produced, 13 pounds of manganese are used. About 90% of the manganese ore now used in this country is imported from countries where high-grade ore is found.

Russia was once the principal source but in these Iron Curtain days most of the ore is coming from India and Africa. American consumption in the steel industry is about 1,500,000 tons a year of ore which averages 48% manganese.

The new process is called the Nossen Nitric Acid Cycle because it was developed by E. S. Nossen Laboratories, Inc., of Paterson, N. J. It is described by Ernest S. Nossen in *INDUSTRIAL AND ENGINEERING CHEM-*

*ISTRY* (July), a publication of the American Chemical Society whose headquarters are in Washington. Several methods have been developed to reduce America's manganese ore, which is mostly all low-grade, but most of them are too costly for commercial applications.

As described by Mr. Nossen, the process is applicable to carbonate and oxide ores and to several types of silicate ores. It permits the separation of manganese from iron, silica and other impurities, and produces a 60% concentration of manganese.

The process starts with grinding the ore to a fine size, then treating it in a reducing atmosphere. The greater part of the manganese goes to manganous oxide, and the iron oxide is reduced to ferrosiferrous oxide. Nitric acid is used to leach out the manganese which becomes manganese nitrate. In the presence of air at a temperature of 200 degrees Centigrade, the manganese nitrate becomes manganese oxide and nitric acid.

Science News Letter, December 1, 1951