

Bendix engineer who was aboard as an observer picked up a dense concentration of fish just ahead. "It isn't possible," the skipper argued. "Every boat in the fleet has passed over them." But the Bendix man persuaded him to set his net—and he was back home in mid-afternoon with a hold full of herring.

Tuna fishermen cruising into South American waters out of San Diego, Calif., were plagued by a shortage of small bait fish, a variety of anchovy, which they throw into the water to attract tuna to the boat. The exasperated skipper of the tuna clipper American Girl installed a fish-finder on his auxiliary bait-scouting cruiser last season—and immediately found bait where none was supposed to be. The graph revealed that the little fish had become wise to the ways of nets and were simply diving under them. The skipper foiled this stratagem by using nets which scraped the bottom. Now that bait is no problem, he expects to add \$300,000 to his ship's revenue and great quantities of tuna to the nation's food supply this year.

In Cuba tons of fish were discovered and caught in Havana harbor this spring by the first Cuban boat electronically equipped, although no fisherman had suspected they were there. So impressed was the Cuban government that special funds were appropriated to equip the nation's 60 major fishing vessels. Result: the average fishing cruise has been shortened from 25 to 15 days and the average catch has almost doubled.

Industry is adapting the fish-finder to all sorts of work. Four major oil companies

exploring the Gulf of Mexico, and Lake Maracaibo in Venezuela, use Bendix DRs to detect slight variations on the bottom contour to determine the most advantageous drilling locations. At New Orleans a ship-builder uses one to chart the buildup of silt around docks. At San Diego, army engineers use several to maintain checks on the depth of ship channels.

Infinitely more important, military strategists point out that in the event of war, thousands of small craft electronically equipped could constitute a tight ring of never-closing eyes around our sea-coasts, for fish-finders can ferret out mine fields and submarines with the same sureness that radar warns us of the approach of surface vessels and aircraft.

Since DRs cost \$890 to \$2475, depending upon their size and the extent of the range they can "see," they are not yet practicable for the family rowboat, although they can be operated from ordinary automobile batteries. When smaller models are perfected they can be expected to eliminate even for sportsmen that imponderable called fisherman's luck.

Meantime, while there is a tremendous demand from sport fishing craft, Bendix is allocating almost all its output to commercial fishermen because they believe that this amazing device should be concentrated on providing more food for hungry humanity from the almost inexhaustible resources of the sea.

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MEDICINE

Allergy-Drug Reactions

➤ EVIDENCE of serious reactions and even one death due to some widely used anti-allergy drugs is presented in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION (July 23).

Death resulted in a 16-month-old girl who was poisoned by accidentally swallowing an adult dose of a compound with the trade name of Thenylene hydrochloride, according to Drs. Hugh F. Rives, Berl B. Ward, and M. L. Hicks of Dubuque, Iowa.

This drug, and the others which gave severe reactions, are antihistaminic compounds used to check the action of histamine, a poison released by body tissues in allergic reactions. There are many on the market widely used for such allergies as hay fever, hives, and skin inflammation caused by reaction to drugs. Some have even been used to treat colds.

Unfavorable reactions occur in from 25% to 65% of the patients treated with antihistaminics, the physicians stated. Reactions are in the form of drowsiness, vomiting, diarrhea, headaches, nervousness,

fainting spells, severe prostration and mental upsets.

Irritation of the brain seems to be responsible for these reactions, the report indicates. The physicians add that there is no effective antidote for these drugs. If the patient exhibits toxic reaction to the drugs, their administration should be stopped immediately and the individual symptoms should receive treatment.

Science News Letter, July 30, 1949

AERONAUTICS

Photoflash Bulbs on Planes Present no Hazards

➤ PHOTOGRAPHIC flash bulbs in an airplane present practically no hazard, the Civil Aeronautics Board has found, and it sees no reason to require or ask special restrictions in their transportation.

"Although modern photographic flash bulbs have been fired remotely by high frequency radiant energy (radar) under

ideal laboratory conditions," the Board states, "to date it has been impossible to fire one by this means under actual or simulated flight conditions in all-metal aircraft."

A tragic crash of an airliner following fire in the air in October, 1947, raised the question of whether or not photoflash bulbs could be flashed or exploded by radar energy from within or outside the plane. The question was also raised whether they could be flashed by impact, friction, radiant energy, elevated temperatures, electrostatic discharges, changing magnetic and electrical fields and the combustible effect on the standard package containers.

Even under extreme conditions met in air transportation, bulbs are not a hazard from these causes, the Board found. When modern but defective bulbs were flashed and exploded electrically in a combustible atmosphere of gasoline vapor, no ignition occurred. The possibility of firing them by impact and resultant friction is extremely remote, if the bulbs are packed in containers.

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ENTOMOLOGY

Insect Eggs Found on Outside of Airliner

➤ AIRPLANES may have to be DDT'd outside as well as inside, to prevent hitchhiking by insect pests. In the scientific magazine, NATURE, is a report of the discovery of a mass of moth eggs on the wing of an airliner from Brazil that landed at the British airport on Trinidad island.

The discovery was accidental. A customs officer who had leaned against the plane wing found a smudge on his uniform. Investigating, he found the egg mass, which was collected by a malaria control officer and identified as belonging to an insect group embracing several harmful species.

Science News Letter, July 30, 1949

AGRICULTURE

Hay Quality Not Bettered By Use of Fertilizer

➤ FERTILIZING land increases the quantity of a crop that can be grown on it but does not raise its quality, experiments at Michigan State College in East Lansing, Mich., indicate.

Two herds of dairy cows were fed on hay produced on poor soils. One herd received hay raised on untreated soil, the other got hay from soil that had been fertilized. No material differences could be found in either the nutritional condition of the animals themselves or in the quality of their milk, although a much larger area of unfertilized soil had to be mowed to provide enough hay for the cows it was called upon to support.

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