

the sprung seams—and Davy Jones finds lodging for some more brave sailors.

The submarine's concussion woes began during the World War, but explosions did not become Number One enemy of airplanes until quite recently. World War anti-aircraft ammunition was shrapnel that threw showers of leaden pellets at the attacked plane, and practically had to hit the pilot to bring it down. But with the improvement of both anti-aircraft guns in range, accuracy and rapidity of fire, and especially with the change from the old undependable powder-train fuse to the much surer clockwork variety, bursts of high-explosive shell fairly close to the target became possible.

A direct hit on a plane is not necessary. If a shell bursts within 60 yards, and the flying cloud of steel fragments fails to disable the crew, the burst may disable the plane mechanically. Then all the crew can do is take to their parachutes and watch their good ship plummet to earth and crash.

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PUBLIC HEALTH

Nutrition Problems Topic Of Meeting Of Experts

DR. Hazel K. Stiebeling, one of the United States' best known nutrition experts, who has said, "Ill-fed people are unhappy and suspicious," is the United States' representative to Buenos Aires conferring with Latin American nutritionists on food problems of this half of the world.

Dr. Stiebeling loaded her 77-pound airplane baggage allowance with farmers' bulletins, pictorial charts, and other educational devices found effective in teaching people in this country to buy and eat wisely for good nutrition.

The meeting is an outgrowth of the League of Nations' Mixed Committee on the Problem of Nutrition, which back in 1937 appalled the world by a report declaring malnutrition was world wide. The League's committee recommended that individual countries follow up this evidence, forming their own committees and conferring.

Very little is known about Latin American countries' nutrition problems, Dr. Stiebeling says. They have not figured prominently in the data the League of Nations has been able to gather.

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Machinery for harvesting sugar beets is being tried out in the West.



LISTEN, LOOK, SHOOT!

Listening devices (see cover illustration) first pick up the distant rumor of the planes' approach. Searchlights are held in leash until the last practicable moment, because when they flash out, it's a warning to the bomber that he's been detected. A few seconds after the searchlights find him, the guns blaze into action.

ENGINEERING

Rivers Are Mined To Produce Anthracite Coal For Power

SOME AMERICAN communities are being supplied with heat, power and light through use of anthracite coal that in previous years was sluiced into rivers in order to get rid of it, William Lloyd, engineer of the Combustion Engineering Co. of New York, told a joint meeting of the American Institute of Mining and Metallurgical Engineers and the American Society of Mechanical Engineers at Columbus, Ohio.

"The advent of the traveling-grate stoker opened up a commercial demand for small sizes of anthracite coal that were formerly discarded as waste," said Mr. Lloyd. "As a result large culm banks are reclaimed and rivers dredged for the so-called river coal which in the early days had been sluiced to the rivers as a convenient means of disposal.

"Rivers and small streams, especially during flood conditions, become very efficient in separating the slate and other

refuse inherent in the mining process from the coal, and the pockets in the stream beds 50 to 100 miles downstream from the mines are likely to contain clean coal. The streams can justly be termed very efficient jigs or flotation coal separators. Millions of tons of excellent coal have been reclaimed from rivers in the last thirty years.

"In the City of Harrisburg, Pa., alone, the central steam heating, as well as the steam power generating stations, operate entirely on river anthracite reclaimed within a few miles of the city.

"Several years ago, however, laws were passed and quite rigidly enforced, prohibiting the pollution of streams and coal mining operations adjacent to all streams were compelled to dam up and prevent any further sluicing of fines into the rivers. Despite this, the reclaiming plants continue to find sufficient material to keep operating."

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