



## The Reich Regulates!

GERMAN whaling ships have recently joined those of Norway, Great Britain, the United States and other nations on the seas. German economic policy is seeking new sources of the all-necessary fats and oils, to cut down the amount of imports now needed for food and technical purposes.

Concern was at first expressed by some conservationists, lest the new whalers ignore the principles of sound wild-life management and enter upon a ruthless campaign of get-all-you-can. Publication of the new whaling law of the Reich should go far to allay such anxiety. Indeed, if anything, the Germans would seem to be leaning over backwards in their efforts to preserve the living foundation of their industry.

"Protected" species, which it is forbidden to kill, include the following kinds of whales: whalebone whales, right whales, blue, gray, finback, humpback, and sperm whales. Minimum sizes are defined, and certain sea areas are permanently closed to whaling at all times.

Detailed records of all captures must be kept on the floating factories, as well as records of personnel and property. At the end of the voyage, full report must be made to the Reich authorities.

To make sure of the correctness of the whalers' conduct, every floating factory must carry at least one government-paid inspector. He enjoys prestige and authority equivalent to those of the ship's officers, and must be permitted to observe all activities and inspect all property.

Whaling operations of any kind by German citizens, even those living in a foreign country and under foreign jurisdiction, can be forbidden them un-

less they apply to their home authorities for permission. German citizens may also be forbidden to take part in any whaling operations conducted under foreign colors, unless such operations are subject to the same regulations as those prescribed in German law.

If whales can be protected by a bristling array of *verbotens*, surely there should be sanctuary for them here!

Science News Letter, January 15, 1938

ENGINEERING

## Radio Is Latest Aid in Battle Against Snow

See Front Cover

RADIO is the latest innovation in the battle between science and snow. Twenty fixed radio stations and 16 portable units are being operated by the Washington State Department of Highways at Olympia in the effort to keep winter traffic on the move.

Because plowing must be carried on in remote mountain regions where wire communication is unavailable or unreliable, all rotary plows have been equipped with two-way radio installations in order that they may keep in constant touch with the maintenance offices of the Highway Department, receiving instructions and broadcasting weather reports or calls for help. Shop clerks and plowmen are licensed radio operators.

The radio-equipped plow sends word of weather and road conditions at regular intervals, and the base stations, open every minute of the day and night, keep close check on the snow situation throughout the entire State.

Maps are kept to show the location of all snow-fighting apparatus and the progress of storms and removal operations. Trucks equipped with short-wave receiving sets pick up these reports and alter their scheduled runs accordingly, while the general motoring public is informed of snow conditions by regular broadcasting stations which relay messages from the plows.

Since modern winter warfare on the highways has come to be a matter of keeping ahead of the storm, radio communication makes possible rapid concentration of equipment where it is most needed.

Plows which were formerly stranded for days in deep mountain passes can now call for additional supplies and equipment, thus saving time and money and increasing their effectiveness. Dangerous snow slides reported to headquarters permit greater safety for winter travelers, and many marooned motorists can be rescued by radio.

The radio-equipped plows are powerful Diesel trucks with four-wheel drives, having auger-type rotary units which hurl the snow into the air and back from the highway as far as 150 feet. In bad seasons they operate continually. A small truck travels back and forth from the plow, bringing Diesel oil, supplies, and transporting the operators.

In the illustration on the front cover of this week's Science News Letter, Washington's Diesel Snogo, Station KGHA, radios to headquarters that Snoqualmie Pass is open to traffic. Note the triangular antenna installed over the engine, back of the driver's cab, and the "wall comber" projecting ahead of the rotary equipment to knock down overhanging snow walls.

Science News Letter, January 15, 1938

## From Page 39

magazine QST a control method of using a lightweight radio receiver aboard model airplanes. Hull is associate editor of QST while Bourne is employed by the Maxim Silencer Company at Hartford. Such controlled model planes would be useful for anti-aircraft target practice without risk to pilots.

So far control has only been achieved on the rudder of a 13-foot wingspan craft, but progress is being made on radio control of the elevators and ailerons of the craft.

The problems the amateurs have tackled are those which England has accomplished with her radio robot airplane which gave demonstrations last year. The details of operation of the largesized British plane have never been announced because of military secrecy and wartime usefulness.

But Hull and Bourne's methods are no secret. Any enthusiastic radio amateur can build a similar controlling mechanism. And because all radio transmission must be in charge of a licensed radio operator it looks as though the radio "hams" and the airplane "hams" would form a permanent alliance.

Science News Letter, January 15, 1938

