

First Trans-Atlantic Phone Cable Due Late Next Year

New York—(U.P.)—The first trans-Atlantic telephone cable is now being constructed and its installation should be completed next year. It is scheduled to be in operation by Christmas, 1956.

The aim is trans-Atlantic telephone calls of clear and constant quality, instead of the present "hit-or-miss" system dependent on good radio conditions. More than twice as many simultaneous conversations will be possible under the new system.

Need for the cable is evidenced by the increasing traffic. In 1927 there were only 2,000 calls; in 1951 there were nearly 100,000.

The new communications system is a cooperative project of Britain's General Post Office, the American Telephone and Telegraph Co. and the Canadian Overseas Telecommunications Corp. It will provide 36 telephone circuits between Oban, Scotland, and Clarenville, Nfld., with Sydney Mines as the terminal on the Canadian mainland.

It will require the laying of two undersea cables, each 1,950 (nautical) miles long, and of a 335-mile single cable, part on land and part under water. One hundred and eighteen repeaters, or boosters, containing 300 valves and 6,000 other electrical components, will amplify the sound at regular stages along the route so the voice will be as clear at the outcoming as at the incoming end.

Costs Divided
The discovery by Imperial Chemical Industries in 1933 of a substance named polythene, and the application of this as an insulator, helped pave the way. Polythene has certain advantages over gutta percha and paraffin, formerly used to insulate submarine cables, and is considered to be ideal for this purpose.

The cable now being made will use 1,400 tons of polythene. It also will require, for its 1,950-mile length, some 2,700 tons of copper, 11,000 tons of steel wire, 1,800 tons of jute yarn, and 2.4 million yards of cotton cloth.

Britain will pay 41 per cent of the cost of the \$35,000,000 project, the United States 50 per cent and Canada 9 per cent.

The cable will weigh three tons per nautical mile, and must be sufficiently strong and flexible to withstand pressure of up to three tons per square inch, and the pounding of breakers at the short line.

Plant Built on Thames
To construct such a cable, a new five-acre plant had to be built in England on the Thames at Erith. It will employ over 200 technicians and workers, and will be capable of producing 4,000 miles of cable a year. The present contract, which is for the greater part of the

Scotland-Newfoundland trans-Atlantic stretch, is worth \$14,000,000.

Another problem that had to be solved before the telephone hook-up could be planned was the development of suitable boosters to amplify the sound at regular intervals along the line.

Here, the partnership between the United States and Britain proved its value. The British, who had experimented for years with co-axial cables and had laid them successfully between the Isle of Man and Anglesey and across the North Sea to Norway, had concentrated on shallow-water repeaters.

Only One Ship
These had the advantage of being large enough to carry two-way speech transmitters but the disadvantage of being housed in large, rigid steel containers.

The Americans, on the other hand, had turned their energies to the development of deep-water repeater housings, and Bell Telephone Laboratories had evolved and laid between the United States and Havana cables with boosters housed in an ingenious type of flexible container resembling a steel snake, which may be coiled inside storage tank drums.

At shore ends, and on the shorter, shallower stretch between Newfoundland and Canada, the British repeaters are to be used; elsewhere, the American type. A voltage of about 3,900 volts will be required to feed the boosters on the main crossing.

There is only one ship in the world capable of laying such a length of cable, HMS Monarch, the General Post Office's cable-layer. Even this vessel has had to have the bow and stern sheaves enlarged for the job to a diameter of seven feet.

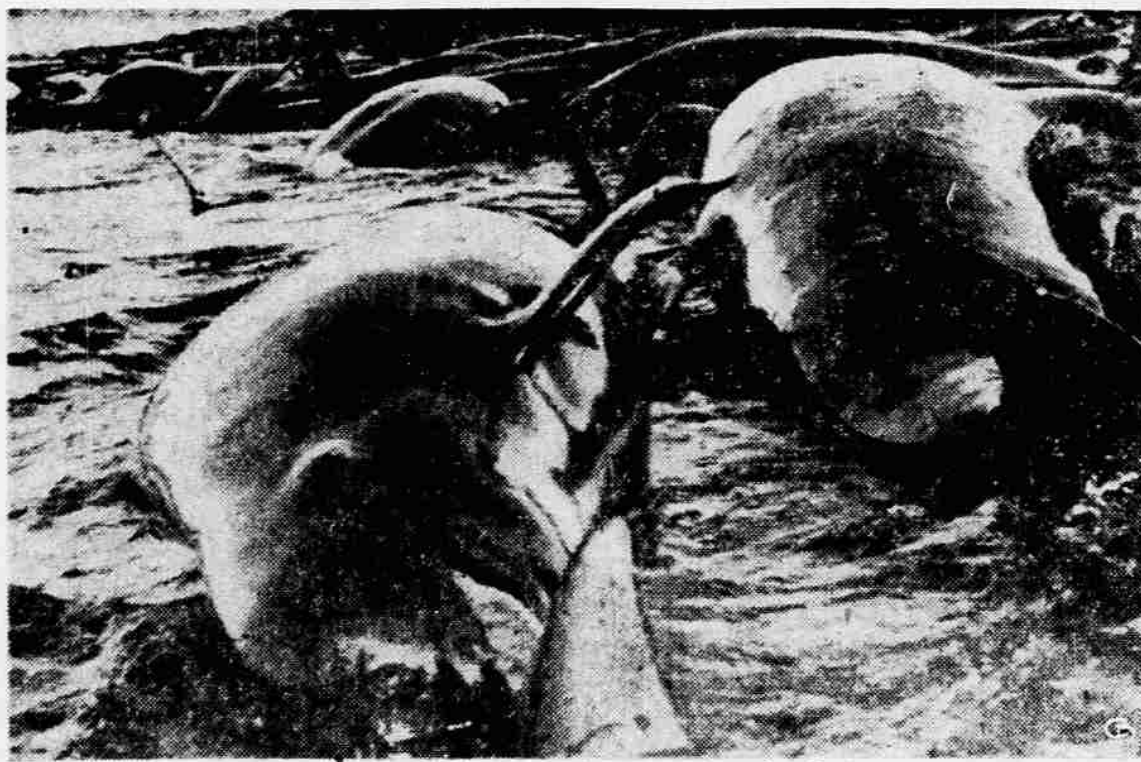
Single Operation
The whole of the first 1,500-mile deep-water section will have to be laid in a single operation without pause, for the cable may buckle if the cable ship has to stop during the laying. For this reason it must be done in summer, when a two-week stretch of consecutively good weather is a possibility.

The first cable will, therefore, be laid this coming summer; the second in the summer of 1956.

Rancher Surprised By Finding Watch in Cow

Wilcox, Ariz. — (U.P.)—Ranchman Lencho Hurtado said he got quite a jolt while butchering cattle on a ranch near here.

A watch that had disappeared last week when cattle had mutilated a jacked he'd left on a fence post turned up between the lungs of one of the animals he was butchering. He said it was still running, and right on time.



SWIMMING ONTO BEACH in Westray Bay, Orkney Islands, a herd of 63 whales commits mass suicide, littering half-mile stretch of rocky shore with carcasses. Mystery of why huge mammals decided to end lives puzzles scientists as residents debate removal problem. (International)

Penologist To Talk For SOC Assembly Multiple Sclerosis Organism Isolated

Ashland—Kenyon J. Scudder, superintendent of the California Institution for Men at Chino, Calif., will speak at a Southern Oregon college assembly tomorrow at 10 a.m.

"Prisoners are People" will be the title of his talk, which is open to the public. He is an authority on experiments in changing the manner in which convicted prisoners have been imprisoned, which started in 1940 at Chino.

The noted criminologist has told the story of the prison without bars in his book, "Prisoners Are People." Chino is what is called a minimum-security institution. No one is looked up; guards carry neither guns nor billy-clubs. Inmates are treated as ordinary human beings who have made a mistake. Each prisoner is given a great deal of trust and responsibility.

His family is permitted to visit him and picnic with him on Sundays. Each inmate must make up his own mind whether to try to escape from this open

institution. Others have said that it is a tribute to Scudder's wise leadership that in the 15 years of its existence—with about 14,000 inmates during that period—there have been only two cases of violence. Chino has been the subject of study of penologists from many countries.

UAW Convenes; Plans Wage Guarantee Fight

Cleveland, O.—(U.P.)—The CIO United Auto Workers union opened the business sessions of its 15th constitutional convention Monday, prepared to approve a \$25,000,000 strike fund to support demands of the auto industry for a guaranteed annual wage.

Secretary-Treasurer Emil Mazey, in a report prepared for delivery to the 3,000 delegates, said the fund was necessary "in order to minimize possible sacrifice on the part of members who may be engaged in economic struggles."

Philadelphia—(U.P.)—The isolation of an organism believed to be the cause of multiple sclerosis has been reported by a Russian-born woman research worker.

Rose Ichelson, director of research on the disease at St. Luke's and Children Medical Center, said she had succeeded for the first time in growing and propagating an organism identified as spirocheta myelophthera.

Miss Ichelson, graduate of the bacteriological institute of Poltava, Russia, said she believed her work will provide a definite means of diagnosing the disease. However, Miss Ichelson said it will not be used as a basis for treatment at present.

Almost one-third of the entire labor force of the U.S. is composed of women, according to Department of Labor studies. The ratio has been increasing steadily over the years.

Oregon's 'Maverick' History In Politics Cited by Speaker

By OLIVE STARCHER
Mail Tribune Society Editor

Salem—Oregonians should not have been surprised at the election of Sen. Richard Neuberger, for the state has a history of political "maverickism," Robert H. Schulman, chief of the northwest bureau of Time, Life and Fortune at Seattle told members of the Oregon Presswomen at a spring workshop meeting here last week end.

After coordinating material for Time's recent article on the two Oregon senators, Schulman said he better understood why Neuberger had been elected, and that it followed the pattern of political history in Oregon. He cited several instances to prove that politics in Oregon are seldom "as usual."

Schulman said writers for news magazines operate under a different set of concepts than those on daily papers, and that "group reporting" produces a "distillation" from the "cream of the news crop."

Schulman told how extensive is the background work and material needed on such lead articles as the Neuberger-Morse story, and made some "off the record" comments on the adverse editorial reaction to the story which appeared in Oregon papers. Public reaction on the article ran about 50-50 he told a reporter later, with half of those who wrote in blasting Time for having given so much space to two such political figures, and the other half saying "thanks for the story but how could you be so snide."

Schulman praised Editor Charles A. Sprague of the Salem Statesman, saying "he is one of the most sagacious editors in the country," and also had kind words for Frances Blakely, feature writer for the Oregon Journal, and Wilma Morrison, education editor of the Oregonian.

Commenting on other westerners in the news he repeated a remark which Interior Secretary Douglas McKay had made in Alaska about Alaskans and then added that while many people think Mrs. McKay just bakes cakes, "make no mistake about the role played by Mrs. McKay in the secretary's political life."

State Sen. Mark Hatfield told the women at noon that instead of setting up a board of censorship to decide what type of magazines and comic books could be sold in Oregon, perhaps a tax should be levied on the sale of comic books and the money used to put educational programs on television.

Such a censorship board has been proposed in a bill introduced during the current session of the legislature, but Hatfield reminded his audience that Oregon already has a law which, if public sentiment would help to enforce, is adequate to prevent the sale of lewd literature.

Discusses Libel Bill
The senator also discussed a bill which would protect publishers against unscrupulous libel suits, measures which would force all state bureaus and commissions to hold open meetings, and a bill outlawing advertising by the chiropractic profession.

The senator said that the last bill goes deeper than it appears, and added, "What distresses me is the growing tendency on the part of professions to belittle advertising as an evil by suggesting it is beneath the dignity of a given profession. We may be going from the closed shop in labor organizations to the

Alarm Increases Car's Gasoline Mileage

Portland — (U.P.)—Richard J. Andrus of Portland told police he had designed a device to increase the gasoline mileage of his car.

Andrus said his mileage had more than doubled since he rigged up a warning system connected with his gas tank that sets off an alarm in his house.

closed mouth in advertising by professional groups as they attempt to restrict freedom of expression."

"The senator also made reference to professional men who 'abuse the legislative processes by attempting to get the legislators to do for them what the profession should do for itself.'"

The whole story of the Leopold-Loeb murder

Here, with Nathan Leopold's co-operation, is the full story of the famous "thrill killing" — and its grim 30-year aftermath.

Both Leopold and Loeb were found guilty of a sadistic murder after one of the most sensational trials of the century. Leopold was murdered in prison. But Leopold still hopes for freedom. This is the story of his life, his career as a prisoner, and his efforts to atone for his crime.

Author John Bartlow Martin had the full co-operation of Leopold's family and of Leopold himself. The result is one of the frankest stories of crime and prison life ever printed. Be sure to read *Murder on His Conscience* by John Bartlow Martin.

And don't miss Cameron Shipps' revealing close-up of Judy Garland—"The Star Who Thinks Nobody Loves Her." Out today—on all newsstands 25¢.

The Saturday Evening POST April 2, 1955 - 75¢ A CURTIS MAGAZINE

Hotpoint Water Heaters

All the HOT WATER You Want Whenever You Want It
No Down Payment on Approved Credit
Only \$3.20 A Month

"Medford's Exclusive Hotpoint Dealer"
City Appliance, Inc.
127 North Central—Phone 3-5743
Across From Penney's



What's the biggest difference in today's gasolines?

"Detergent-Action"

...because it ends carburetor deposits—the biggest single cause of engine trouble—to give you smooth idling, stall-proof action in traffic, extra power, longer mileage...plus balanced performance! You get not 1, not 2, but all 10* features needed in a gasoline for today's high-compression engines as well as older cars—under all road and climate conditions! Try Chevron Supreme or Chevron—prove the difference for yourself!



*Balanced for:

- Detergent-Action**
- Quick starting
- Area blending
- Vapor-lock prevention
- Full power
- Smooth acceleration
- Anti-knock
- Economy mileage
- Fast warm-up
- Rust and corrosion protection



We take better care of your car.

STANDARD OIL COMPANY OF CALIFORNIA

Look! We'll Glamour-Stitch Your Pillow Case or Towel FREE ON THE AUTOMATIC "DOES EVERYTHING"

NECCHI



or the "magic brain" ELNA portable



Factory Demonstrator will be at our store Wednesday and Thursday, March 30 and 31st, to show you these amazing machines.

DAVENPORT APPLIANCE SHOP

2101 W. Main — 21 Blocks Out West Main