MEDICINE

# Reverse Nerve Disease

**Disabling symptoms of degenerative disease of brain and liver reversed by treatment with BAL, the British antilewisite war gas chemical.**

➤ A DEGENERATIVE disease of the brain and liver, disabling and hitherto considered incurable, can now be controlled and the disabling symptoms reversed by BAL, the British antilewisite war gas chemical.

The disease is known as hepatolenticular degeneration, or Wilson's disease. It tends to run in families. Good results with BAL treatment in five cases of this "uncommon but not rare" disease are reported by Drs. D. Denny-Brown and Huntington Porter of Boston.

Hope for ultimate conquest of all such degenerative nervous diseases is now offered, the doctors state, through solution of the problem of this one. BAL may not be the remedy for other nervous disorders, such as multiple sclerosis. But all of them may have the same kind of cause. There may, in all of them, be an inborn mistake in the body's handling of chemicals from foods. By-products of such mistakes may pile up on the nervous system in such a way as to cause it to break down at one or more points.

That seems to be what happens in the case of Wilson's disease. Copper compounds accumulate abnormally in the liver and brain. This causes the symptoms which make the patients bed-ridden, unable to walk or stand alone, unable to feed themselves, sometimes unable to turn in bed. It also causes the bronze coloring of the skin in some of these patients, and the smoky-brown color of the usually gray corneal ring in the eyes.

BAL mobilizes the copper that has been deposited abnormally in body tissues and causes increased excretion of it. The idea of using BAL for treatment of Wilson's disease came partly from knowledge that it could remove other metals, such as gold and mercury, from the body.

BAL is given by injection deep into the muscles twice a day for 10 days every second month. Improvement of symptoms does not start until 14 days after the first course of injections. The improvement lasts only two to three months, which is why the doctors settled on repeating the course of BAL injections every second month.

Drs. Denny-Brown and Porter made public their success in a report to the Massachusetts Medical Society's NEW ENGLAND JOURNAL OF MEDICINE.

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METEOROLOGY

# Aluminum Output Saved

**Pinpoint predictions of amounts of rain, much greater than normal, that would fall in Pacific Northwest helped to save area's defense contracts.**

➤ PINPOINT PREDICTIONS, which came true, of a month's rainfall in the Pacific Northwest helped save that area's defense contracts for aluminum last October.

The predictions called for, by amounts, much greater than normal rain during October. They were made by the Weather Bureau's Extended Forecast Section and sent by Secretary of Commerce Sawyer to Defense Mobilizer Charles E. Wilson.

Ordinarily, forecasts for a month ahead are couched in somewhat vague terms and cover large areas. But these specified the number of inches of rain to be expected at seven weather stations in Oregon and Washington. For instance, at Seattle, normal rainfall for October is 2.69 inches. The weathermen predicted four to seven inches and 4.71 inches actually fell. At Portland, 2.85 inches is normal for October; five to eight inches was predicted for that city during the month and 6.9 inches actually fell in the prescribed time.

The rain cut short attempts to make rain artificially under a contract between the Department of the Interior and Dr. Irving Krick's Water Resources Development Corp. He seeded clouds with silver iodide for only ten days in late September and early October. His results are being evaluated by the Interior Department in cooperation with the Weather Bureau.

Jerome Namias, chief of the bureau's extended forecast section, emphasized that he can very rarely turn a trick like this. Exceptional circumstances, he said, made the predictions possible. These included a cyclonic movement in the Gulf of Alaska, many cold fronts moving in and unstable polar Pacific air masses.

Other predictions included: Boise, Idaho, 1.15, normal; 1.5 to two predicted, and 1.60 observed. Burns, Ore., 0.66 normal; one to 1.5 predicted, and 1.71 observed. Roseburg, Ore., 2.41, normal; four to seven inches predicted, and 5.38 observed. Spokane, Wash., 1.06 normal; two to four inches predicted, and 3.26 observed. Tatoosh Island, Wash., 8.11 normal; ten to 14 predicted, and 9.49 observed.

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PALEONTOLOGY

## Find Fossil Remains of Long Extinct Sharks

➤ FOSSIL REMAINS of two kinds of long-extinct sharks, previously known only from the rocks of France and North Africa, have now been found on this side of the Atlantic.

The long-snouted, predatory sea creatures are believed to be roughly like present-day sawfishes. They swam in seas as long as 100,000,000 years ago, about the time the huge dinosaurs were going into decline and mammals were bidding for supremacy on land.

What apparently were the spines of one of these extinct fishes were obtained by U. S. Geological Survey explorers Joseph H. Sinclair and Theron Wasson in Ecuador. Another kind, represented by the teeth of its "saw," came from the Georgia Kaolin Company and was found in Twiggs County, Ga.

The fossil remains have been added to the Smithsonian Institution's collections. They are significant, Institution scientists say, because they show the wide distribution of these fishlike creatures. Present-day sharks retain many of the oldest structural characters of this species.

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RADIO

## Short-Wave Radio Reception Disturbed One Third of Year

➤ STORMY WEATHER has dogged short-wave radio reception throughout the past year. On 124 days foreign broadcasts have been disturbed by weak signals and fading, frequently accompanied by blackouts.

A total of 53% of the storms in the ionosphere, which resulted in bad reception of short-wave broadcasts, were predicted. Likewise 53% of the storms predicted actually materialized, radio forecasters at the National Bureau of Standards in Washington stated.

Of all of the Bureau's twice-a-week forecasts of good or bad reception, 68% were correct. The more frequently reception is disrupted, the more difficult predicting becomes, the forecasters point out. Not only must a storm be predicted but radio users should be warned in advance as to the exact day on which it will arrive.

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