for their light to have started on its way to us not more than 200,000,000 years ago. As many as 70,000,000 starry universes exist within 450,000,000 light years of us.

Science News Letter, November 3, 1951

METEOROLOGY

## Forecast Severe Winter with Prompt Spring Following

➤ A RATHER severe winter will be followed by a fairly prompt spring about mid-March for the eastern half of the nation. With this pattern, it usually works out that the Southwest has an "open" winter and the Pacific Northwest an average winter.

This is the prediction for the 1951-1952 winter by Dr. H. C. Willett, professor of meteorology at the Massachusetts Institute of Technology, Cambridge, Mass.

Dr. Willett told Science Service that the cold in the Northeast will be severe from mid-November through December. January will be relatively mild, while February will be cold again. Along about mid-March, he said, there will be a definite change in the weather and spring will be upon us.

Through the mid-Atlantic states and the Southeast, the pattern will be the same, although, of course, not quite as cold.

Snow will follow the weather. Heavy snows, Dr. Willett predicts, will hit the Northeast soon after mid-November, the middle Atlantic states a little bit later, and continue to the end of December. January will be relatively free of snow, but it will be back for February. Snow will be heavier in the mid-Atlantic states than farther north, Dr. Willett said.

Dr. Willett, known for his work in extended forecasting, has more courage than the Weather Bureau's Extended Forecast Section. Jerome Namias, head of that section, refuses to predict the weather for any period longer than a month ahead.

Science News Letter, November 3, 1951

TECHNOLOGY

## Combat Footwear Keeps Toes Warm at 45 Below

➤ U. S. MARINES and Army troops in Korea this winter will be wearing new insulated rubber boots that operate on the Thermos bottle principle and protect against frostbite even at 45 below zero.

Developed by the Hood Rubber Company, Watertown, Mass., and the Naval Clothing Depot, Brooklyn, N. Y., they will replace the shoe-pac in time to prevent a repetition of last winter's cases of frostbite.

The new boot consists of two layers of rubber with two plies of knitted wool insulation between them. It is designed to be worn with just one pair of socks. The innermost layer of rubber is faced with nylon film to help prevent friction on the inside of the boot.

Science News Letter, November 3, 1951

MEDICINE

## Adverse Krebiozen Report

➤ AN AMERICAN Medical Association committee has reported that trial of Krebiozen, announced last March as a promising remedy for cancer, "fails to confirm the beneficial effects" claimed for it. (J.A.M.A., Oct. 27.)

Of 100 patients given this drug, 44 have died. Only two showed temporary signs of improvement. In one of these it is considered that a period of temporary improvement, such as the patient had been having off and on, happened to come at the time Krebiozen was being given. The patient has since died. In the other patient, now near death, the main cancers continued to grow rapidly, though some small ones showed regression.

Krebiozen is described as a white powder which dissolves in water. It is said to be extracted from the blood serum of a horse after the horse has been inoculated with a substance said to stimulate its reticuloendothelial system, which includes the spleen and lymph glands and certain cells of the bone marrow and liver.

The drug was allegedly discovered by Dr. Stevan Durovic, former Yugoslavian



"THERMOS" BOOTS — Two Korean veterans, 1st Lt. Joseph R. Owen, USMC, of Syracuse, N. Y., and S/Sgt. Thomas Davies, Jr., of Dover, N. J., inspect a new insulated rubber boot now being issued in Korea. The boot operates on the same principle as a Thermos bottle and will protect feet against frostbite even at 45 below zero Fahrenheit.

physician now living in a Chicago suburb with his brother, Marko. Dr. Durovic came to this country from Argentina. A preliminary announcement of trials of the drug was made to a group of doctors and researchers in Chicago last March by Dr. A. C. Ivy, vice-president in charge of the professional schools of the University of Illinois.

The A. M. A. committee still classes Krebiozen as a "secret remedy," because not enough details of its composition and preparation have been given. Investigation of the drug was made as a public service to physicians and the public.

The 100 patients whose clinical histories were reviewed had been given the drug by physicians who had been invited to evaluate the drug by Dr. Ivy and his associates of the Krebiozen Research Foundation. Reports on these 100 patients came from seven sources in four widely separated parts of the country, including the tumor clinic, department of surgery, University of Illinois.

"The public may wonder," the committee points out, "at the wide divergence of opinion between the original report and these published results (in the 100 patients)."

The cancer specialist, it is explained, knows that certain types of cancer often run a long course with marked changes in the patient's condition. The public, not knowing this, may be surprised by unexpected improvement in the patient and if it coincides with some new treatment, thinks the treatment is proving the hoped-for cure.

Relief of pain, improvement in appetite, ability to be up out of bed and speech are all affected by the patient's feeling about the new treatment, but are "notoriously unreliable" as signs of improvement due to treatment.

Science News Letter, November 3, 1951

BIOCHEMISTRY

## Mold Chemical Treats Disfiguring Tropical Ills

FOR THE war against yaws and tropical ulcer, two of man's oldest and most disfiguring diseases, doctors now have a new weapon in the mold chemical, chloromycetin.

Good results with this chemical, which is also made synthetically, were obtained in trials in Haiti by Dr. Eugene H. Payne of Parke, Davis and Company, Detroit, which supplied the drug. Cooperating with Dr. Payne in the trials in Haiti were Dr. Athemas Bellerive of the Haiti Department of Health and Dr. LaFont Jean of Fort Liberty, Haiti.

Science News Letter, November 3, 1951