

MEDICINE

Bacitracin Saves Patient When Penicillin Fails

➤ BACITRACIN, antibiotic drug obtained originally from germs in an infected wound, is credited with saving the life of a patient ill with a serious heart ailment.

The case, said to be the first in which bacitracin was "largely if not entirely" responsible for the patient's recovery, is reported by Drs. Charles K. Friedberg and Mortimer E. Bader of New York in the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* (Sept. 1).

The patient, a 28-year-old diamond cutter, had a staphylococcus infection of the lining membrane of his heart. Acute bacterial endocarditis is the medical term for this condition.

"Huge doses" of penicillin, aureomycin and chloromycetin were given over a period of 12 days. But the patient was still critically ill. So the doctors decided to try bacitracin.

Laboratory tests had shown that the germs causing the trouble were very sensitive to the action of bacitracin. This antibiotic was given together with penicillin and aureomycin, so it is not possible to say that bacitracin alone was responsible for the cure. The doctors think it was, however, since the fever went down rapidly and the patient began to get well promptly after bacitracin was added to the other antibiotics.

Bacitracin seems likely to become more important in the future because doctors are finding more and more strains of staphylococcus and other germs that are resistant to penicillin.

Science News Letter, September 8, 1951

METEOROLOGY

Hotter than Usual Weather Predicted for Half of Nation

➤ SEPTEMBER IS going to be hotter than usual for just about half the nation, east of a line extending from the Wisconsin-Minnesota area down to the New Mexico-Texas area. West of the continental divide and in the western portions of the northern plains area, September will be cooler than normal. In between the two areas, about normal temperatures will prevail.

This is what the Weather Bureau's Extended Forecast Section predicts in its regular, twice-a-month 30-day forecast.

Plains and Rocky Mountain states can expect more than the usual amounts of rain during September. East coastal areas will have moderate to locally heavy amounts of rain. Less than normal rainfall can be expected in a strip extending from the Gulf States to New England. Elsewhere near normal amounts are expected.

Science News Letter, September 8, 1951



BEDROCK SURVEY—Going over the side to start a day's work is the transmitter of a standard *Bludworth* depthfinder, used as a check in shallow waters of the more powerful apparatus with which the Bay of Fundy was recently surveyed. The scene is aboard the *David C. MacNichol*, a coastal freighter pressed into service as a research vessel.

NATURAL RESOURCES

Tide Power Project

Survey bottom of Passamaquoddy Bay with view to taking advantage of tides of Bay of Fundy. Sonar equipment shows it to be mostly rock, not mud and silt.

➤ THE PASSAMAQUODDY electric project to make electricity with the high tides of the Bay of Fundy off the Maine coast is a long step nearer realization as a result of a survey of the bottom of Passamaquoddy Bay.

The survey, made by a new method, showed that the bottom of the bay is mostly solid rock rather than the mud and silt engineers had previously believed it to be. This means that it is feasible from an engineering point of view to build a dam to harness the tides.

The survey, done jointly by the U. S. Geological Survey and the Army Engineers, used Navy sonar equipment which bounces a sound signal off the bottom. The signal reveals not only how far down the bottom is, but also what kind of a bottom it is—silt, gravel or rock. In addition, if the bottom is silt or gravel, the sonar signals tell how deep it is and at what level the solid rock starts.

The survey took only a few weeks and cost only \$50,000 as compared with much more time and an estimated \$2,000,000 for the old method. Previously engineers had to use the coring method in which the bottom was plugged—like a watermelon.

The old method was used in 1935-1936 in another test area at Passamaquoddy. At this time, a great deal of sediment was found and it was deduced that the rest of the coastal area also was covered with sediment. This would have made building a dam extremely difficult and costly. However, the new sonar survey showed, according to the Geological Survey, that the upper two-thirds of the coastal area contains almost no sediment.

Last fall a joint Canadian-American commission reported that it would take \$3,900,000 to determine whether the Passamaquoddy project was feasible. Of this, \$2,000,000 was to be spent in finding out what kind of a bottom there was in Passama-