



The New Bern Public Library
NEW BERN

MIRROR

WEEKLY OF
Public Library
407 New St.
EA-CA- St.
5¢ Per Copy

VOLUME 4

NEW BERN, N. C., FRIDAY, APRIL 6, 1962

NUMBER 48

Because this town of ours is hardly more than a stone's throw away from the broad and often turbulent Atlantic, the idea of mining minerals from the sea should hold at least mild fascination for industry-conscious New Bernians.

All streams and rivers, including our own Neuse and Trent, carry with them to the ocean an assortment of minerals in solution. As a matter of fact, we are told by those who ought to know that virtually all of the minerals important to mankind are present in soluble form.

Science has figured out through exhaustive tests that a cubic mile of seawater contains 166 million tons of dissolved salts. Admittedly, 85 percent of this tonnage is common salt, but included also are 26 million tons of magnesium salts, four million tons of potassium sulphate, and lesser amounts of copper, zinc, tin, iodine, uranium and gold. The last named minerals are in rather small concentrations, but they can't be disregarded.

Evaporation of water taken from the sea already makes it possible to mine many minerals, but the problem is how to do this economically. Obviously, no commercial concern is interested in spending more money to extract the minerals than the harvest will bring on the market. Undoubtedly, when ores now available on land become depleted, the value of sea minerals will soar.

Dame Nature has pointed the way with her gigantic natural evaporation basins in the Dead Sea. No other spot in all the world provides as much common salt for man's use. And it is an established fact that the basins, with sound industrial methods used, could furnish us with countless millions of tons of magnesium, potash and bromine.

Heaven only knows how many minerals in huge quantities are at the bottom of the Atlantic and other oceans. We are told that the sea floor is cluttered up with lumps described as "nodules." Said to have been formed by natural chemical processes, they are loaded with considerable quantities of copper, iron, nickel, manganese and cobalt. Plant and animal life show mineral concentrations too, and may eventually be the answer to profitable sea mining. Seaweeds, as most of us know, are already a commercial source of iodine.

At the present time, man hasn't developed sufficient know how to meet the challenge, and he may never meet it in our life span. Experts have said that a plant handling approximately a million gallons of water a minute is just about as large a unit as you could operate profitably, or conveniently. Technical problems not yet mastered make a larger project impractical.

Thinking in such terms, they say, we could get by on the basis of our present needs with one factory for magnesium, two for potash, and perhaps three for sulphur. However, if we relied solely on minerals from the sea, we would require 427,000 factories for nickel, 800,000 for copper, and 10 million for iron.

Even someone as poorly versed in science and economics as this editor knows that we'll never have this many plants operating. The answer, of course, will be amazing methods of mineral extraction that mortals haven't dreamed of yet in their wildest imagination. Make no mistake about it, the miracles will come, as surely as the day follows the night.

No one cognizant of the astounding things that have happened in our space age is apt to regard profitable sea mining impractical if not impossible. Although the
(Continued on back page)

MAY EACH OF YOU REMAIN HALE and HEARTY



UNTIL MARCH 1963