

"Now, after several years of research," Dr. Cochardt said, "we have discovered how to design needed mechanical behavior into certain alloys by control of their magnetic structure. This enables us to predict the behavior we will get by combining certain metals in different proportions, and we can do this without preparing and testing hundreds of thousands of potential combinations of two or more alloying metals.

Science News Letter, July 7, 1956

MEDICINE

Low Protein Diets for Kidney Ills Questioned

➤ IS THE current medical practice of keeping many kidney disease patients on a low protein diet advisable?

Perhaps not, it is suggested in research at the Long Beach Veterans Administration Center by Dr. Nathaniel B. Kurnick of the University of California Medical School, Los Angeles. The work is being supported by the American Cancer Society.

The findings apply particularly to patients whose kidneys are under-functioning and to those who have had one kidney removed. Dr. Kurnick has shown that when one kidney is removed, the other grows and increases its function to compensate for the loss of the organ.

Kidney growth took place not by cell multiplication but by cell enlargement. This was determined by measuring the amount of a nucleic acid, DNA, the substance genes are made of, in the tissue. The DNA remained constant during kidney growth, indicating that the cells did not multiply. But other measurements indicated that the cells were expanding to do more work.

Dr. Kurnick has found that while a low protein diet does spare kidney function it does not provide enough protein to promote expansion of kidney cells. He has shown in rats and in humans that a kidney functions best when the diet includes ample protein to provide for kidney growth but not so much protein that the kidney cannot excrete it all.

Science News Letter, July 7, 1956

INVENTION

Typewriter Invention Replaces Morse Code Key

➤ A WIRELESS operator can now typewrite Morse code to other stations. A device that makes this possible has been invented by Leif Evensen of Larvik, Norway.

The invention is designed to replace the familiar Morse code telegraph-key with a standard typewriter keyboard. When a key on the typewriter is hit, an impulse is instantaneously converted to Morse code and transmitted by radio.

The Morse code typewriter can be used by anyone and is capable of transmitting up to 240 letters and figures per minute.

Science News Letter, July 7, 1956