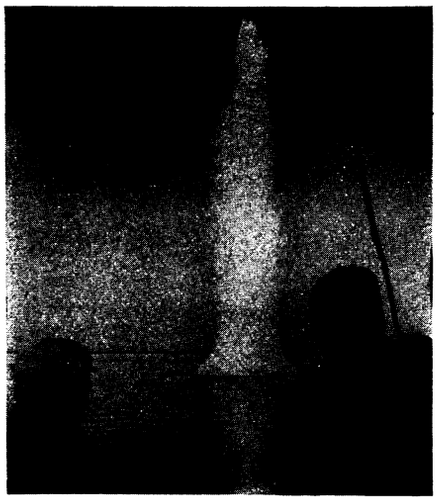

ON THE SEA—A geyser of water shoots 100 feet into the air as the suspended charge is detonated, sending shock waves to be picked up by the string of seismometers along the shot line.

waters around our shores.

In addition there are hundreds of billions of barrels hidden in oil and tar shale, waiting on their need and on more economical methods of getting them out. Progress has been made in extracting liquid fuels from coal. And every year millions of dollars are being spent on research in synthetic fuels.

Farther in the future is the use of atomic power to propel our ships and planes. Research is being done now on the possibilities of providing a submarine with an atomic motor.

Although even a new all-out war may not make necessary our dependence on these new sources of petroleum, these new methods of mobile power, it will bring much closer the day when we will have to produce them and use them in peacetime. There is only so much oil under the ground.

Science News Letter, September 16, 1950

MEDICINE

Med Schools Alerted On A-Bomb Courses

➤ A STRONG hint to the nation's medical schools to consider atomic explosions and other military medical matters promptly if they have not already done so appears in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION (Sept. 9).

The hint comes in the Association's fiftieth annual report on medical education in the United States and Canada. The report was written late in August. At that time, "it was not possible to forecast the impact of the United Nation's police action in Korea on medical education in the United States."

But, the report goes on to state, "it does seem clear that without further delay medical schools will want to review their curricula to determine how increased emphasis can appropriately be placed on such subjects as military medicine, public health and civilian emergency relief, including the prevention and treatment of casualties from atomic explosions.

"Planning for the dispersal and evacuation of medical schools in the event of bombing of American cities is another topic to which the medical schools will undoubtedly address themselves in the months ahead."

More than 7,000 students are expected to enter medical schools as freshmen this fall. Last year's freshmen class was 7,042, an increase of 5.3% over the preceding year and an increase of 17% over the average size of the freshmen class in the 10 years preceding World War II.

Medical schools also now have fewer vacancies in the teaching staffs.

Minimum cost to students of attending medical school for one school year, including tuition, other fees, books, equipment, essential living and travel expenses, ranges from $567 to $2,252.

Fees charged the student for tuition will average $554 during the year 1950-1951. But the students' fees will provide less than one-fourth of the budgets of the medical schools, which for the current year total about $67,500,000.

These budgets have increased by 42% over the last four years. While a number of schools still are having difficult financial problems, the American Medical Association finds that schools have a record of improved support.

Science News Letter, September 16, 1950

PSYCHOLOGY

Thirties Best Years For Creative Work

➤ INCREASING the average length of life will result in a greater creative output on the part of our geniuses. But the most fruitful years of creative work will still be those between 30 and 39.

This is the conclusion of Dr. Harvey C. Lehman, of Ohio University, based on a study of the contributions of large numbers of creative thinkers. His results were reported to the American Psychological Association.

Those who live to be 85 years old and those who die at 50 both do their best work in their thirties, Dr. Lehman told the meeting. But with greater longevity, the average output is somewhat greater, the average age at time of achievement is greater, and a smaller proportion of total production occurs during the best years.

Science News Letter, September 16, 1950

PSYCHOLOGY

Twice-as-Fast Speech Found Intelligible

➤ IT is possible to understand speech at a rate twice as fast as it is ordinarily spoken, the American Psychological Association learned in State College, Pa., from a report by Dr. Richard H. Henneman of the University of Virginia.

Telephone conversations can be shortened and transmission time saved by transmitting a canned, condensed version of the speech, Dr. Henneman reported. In an experiment, a magnetic tape recording was made of separate words and of a sentence intelligibility test. Then by cutting and splicing the tape, various speed-ups were obtained.

For continuous speech the intelligibility did not drop appreciably until the speed was more than double. When the intact tape was run faster so that the frequency, or pitch of the voice was changed, intelligibility dropped to 65% at double the speed.

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