tronic computing machines will be completed in 1951. But there will not be a sufficient number of mathematicians available to set up problems and feed them to these electronic brains.

Rocket progress and jet developments will be accelerated, but secrecy may withhold reports.

Congress will need to consider the mathematical problem of reapportioning members of the House of Representatives more

equitably among the states in accordance with the results of the 1950 census, but this will be considered more as a political than as a mathematical matter.

This spring may bring some hope that the man with the lawn mower can avoid his Sunday chore. The year should tell whether chemicals that stunt the growth of grass can be used to produce a neat lawn without clipping.

Science News Letter, January 6, 1951

Pounding Stilled by Music

THUMP-thump-thump, pounded the patient for hours and hours, lying on the floor of his room at the Topeka State Hospital.

He was a very sick mental patient, so aggressive that two aides resigned because they were afraid of him.

Then music was piped into his room. At first it was primitive music, with a rhythm that matched his pounding. Then the rhythm was gradually changed to something softer and less exciting. The patient changed his rhythm, soon stopped pounding and was able to discuss music with the music therapist. Later, other personnel of the hospital could approach him. Now

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he is well enough to have freedom of the grounds.

His case is cited as one example of how music is being used along with other kinds of treatment to help mental patients at the hospital in Topeka, Kans.

The music is piped into treatment rooms and wards over an abandoned telephone system. The type of music is varied according to whether something relaxing or something stimulating seems needed. Records play constantly in a remodeled basement tunnel. The ward doctor can call the telephone operator and ask for one of four kinds of music or no music.

The same system serves as the hospital's fire alarm. In case of fire, the operator could cut out all the music and make announcements over the loudspeakers.

Science News Letter, January 6, 1951

MEDICINE

Sterilization Urged For Breast Cancer

➤ STERILIZATION of young women with breast cancer was advocated by two doctors reporting at the meeting of the Radiological Society of North America in Chicago. The doctors are Dr. Rieva Rosh and George G. Green of Bellevue Hospital, New York.

Sterilization, they reported, suppresses female hormone action. In the X-ray method they use, it has a favorable general effect on the body and helps to heal and to check the formation of cancers that have spread to the bones.

Pointing to the high death rate from cancer of the breast each year, 12 per 100,000, the New York doctors said that "every effort to increase the salvage of these patients, whether by operation, irradiation, hormone or combination therapy is worth the greatest consideration."

Sex hormone treatment made about half the patients feel better, but improvement that the doctors could see occurred in only about one-fourth of the 40 patients. X-ray treatment combined with male hormone treatment has given the maximum relief in most cases.

Deep X-ray treatment to the pituitary gland in the head was advocated for cancer

On This Week's Cover

THE photograph on the cover of this week's Science News Letter was not taken in Alaska, but in Chile's Valley of the Moon, where it is now midsummer. The heap is not snow but the famous Chilean nitrate, raw material of fertilizer and explosives. Bulldozers and tractor scoops, like snow removal equipment in this country, handle it in wholesale lots.

Science News Letter, January 6, 1951

of the prostate gland in a report by two other scientists, Drs. Walter T. Murphy and Harry Schwippert of Buffalo, N. Y. Object of this is to decrease male hormone production.

In a series of 30 cases of cancer of the prostate treated by X-rays to the pituitary gland together with castration and the synthetic female hormone, stilbestrol, in most cases, a significant number obtained relief from pain and a temporary let-up of the disease beyond that which could be expected from either castration or stilbestrol alone.

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ENGINEERING

Oak Ridge Scientists Read by Facsimile

➤ BORROWING from the library with the speed of electricity will soon be commonplace at the Oak Ridge National Laboratories.

A high-speed, long-distance facsimile sysstem has been installed to allow scientists at widely-separated laboratories to consult library references without leaving their buildings.

Developed by RCA Laboratories, Princeton, N. J., the system uses a tiny spot of light focused on the page to "read" the copy. This light is converted into electrical signals that are then transmitted over an ordinary telephone line. The recorder reproduces a clear, legible copy at the rate of 128 square inches per minute.

Science News Letter, January 6, 1951

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