

Austria and to vote for the Führer's list of candidates for the Reichstag. There is no means of separating his opinions on these two issues without voiding his ballot.

Moreover, since there is no other legitimate political party in Germany or Austria today except the Nazi party, the voter has no effective opportunity to dissent. His "nein" is a vote for nothing, and, in the voter's mind, may be accompanied with a certain risk.

In these circumstances the psychological line between coercion and persuasion becomes extremely thin.

The forthcoming plebiscite will again raise the question of what happened to the 18,000,000 persons who voted against Hitler in the last orthodox German election, in March, 1933.

At that time the Hitler-Hugenberg bloc polled a bare majority of a total vote of 39,000,000. The remainder went to candidates of the Communist, Socialist, Centrist and Democratic parties.

Eight months later, when Hitler conducted his plebiscite on the League of Nations, this large dissenting vote had all but melted away. It amounted to only 6.6 per cent. of the total vote.

Since all Germans go to the polls, as well as Austrians, on April 10, observers will be watching for further signs of opposition. A vote of 5,000,000 or more against Hitler might indicate that an opposition is gathering its voice.

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MEDICINE

Brain's Electrical Waves Aid in Diagnosing Tumors

THE BRAIN'S electrical waves are being used to diagnose the presence of cerebral lesions such as tumors and scars by Dr. Theodore J. Case, University of Chicago neurophysiologist. Eleven cases have shown that a diagnostic procedure has been perfected that uses brain waves just as the electrocardiograph is used in diagnosing heart disease. Dr. Case emphasized, in reporting to the Chicago Neurological Society, that the brain wave method could not yet be used as the sole guide for the physician in his diagnosis and had to be used in conjunction with other means such as X-rays or drilling a hole into the skull.

Dr. Case said his technique had important advantages of not causing the patient any pain or discomfort and of detecting lesions in the so-called silent areas of the brain. These lesions can not be detected by neurological symptoms as are those in the motor areas.

Research workers have known for some time that the brain's nerve cells pulsed electrically at a regular cadence all the time and they perfected methods for amplifying these pulsations and recording them. Normal brains show fre-

quencies between eight and forty waves per second, the most common being the ten per second alpha wave.

In the cases reported by Dr. Case and verified either by operation or autopsy it was found that lesions are denoted by localized regular waves with a frequency of one to three per second, by very slow waves varying from one in five to one in two seconds, and by irregular spike or sawtooth waves. The most common indication of a lesion was the localized regular wave with a frequency of one to three per second. The abnormal waves were localized with respect to the lesion which could be closely defined by shifting the electrodes until the characteristic waves were strongest. The research was supported by a grant from the Otho S. A. Sprague Memorial Institute.

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GEOGRAPHY

Replica of Polar Camp Exhibited in Moscow

AN EXACT replica of the ice floe camp in which Dr. Ivan D. Papanin and three companions lived while drifting from the North Pole to a point off the Greenland coast during the nine-month Polar expedition recently ended is on exhibition in the Gorky Park of Culture and Rest, in Moscow, it is learned from Tass.

The exhibition, located on an enormous ice field, shows the winterers' tent and its entire equipment. The light duralumin pipe framework of the tent is covered by two layers of heavy tarpaulin between which a padding made of silk eiderdown blankets is placed. The floor is covered with inflated rubber cushions; cots hang one above another from the light metal pipes.

Through the open door fur clothing, kitchen utensils, a table with the instruments used by the hydrobiologist Shirshov and other equipment can be seen. The inscription, "USSR Drifting Expedition of the Chief Administration of the Northern Sea Route," is on the roof.

Near the tent is the winch used for lifting samples of ocean bottom, and the radio mast.

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VOYAGERS OF THE FLOE

First picture to reach this country of the four Russians of the Polar party, after the strangest voyage in history—a long drift on an ice floe from the North Pole to the east coast of Greenland.