

MEDICINE-NEUROLOGY

Trigger Mechanism in Brain Trips Epileptic Convulsions

Discovery by Harvard Experimenters May Cause Change In Epilepsy Diagnosis—Not a Diseased Condition

MEDICINE has discovered the part of the brain believed to cause convulsions like those occurring in epilepsy. The convulsion-causing brain center acts like a "trigger" which, when stimulated, sets off a neurological "explosion" throughout the whole brain.

Drs. F. A. and E. L. Gibbs of Harvard Medical School described before the meeting of the International Neurological Congress at London experiments leading to the discovery of the brain trigger.

The trigger is a short fiber system running between the frontal cortex basal ganglion and the thalamus.

Parallel research on brain tumors of cats and in man indicate, the scientists reported, that the same part of the brain is responsible for convulsions in each.

Studies on four hundred cats in which the trigger mechanism was stimulated by means of an electrode inserted through a small hole in the skull served to determine finally the location of the convulsion-causing brain fibers.

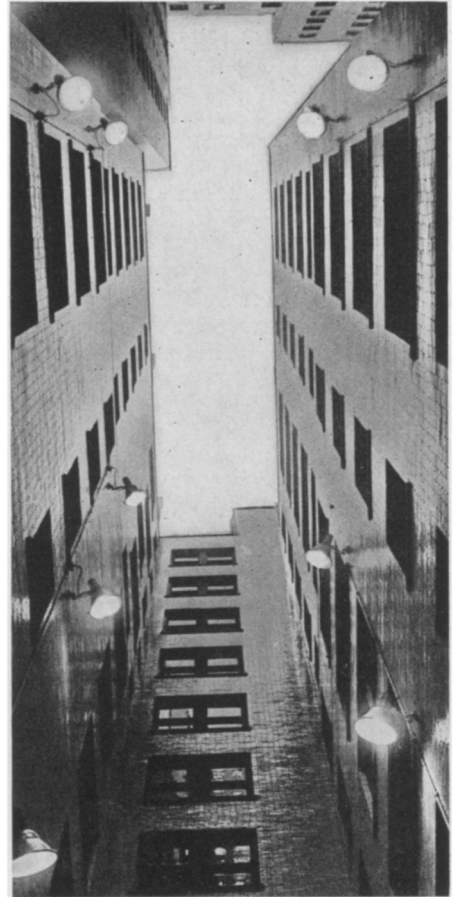
It is not believed that the trigger is a pathological mechanism. Dr. Gibbs believes it is present in all brains, normal or otherwise, but that in epilepsy the mechanism is disordered.

The position of the mechanism, the scientist said, is now located as well as are the brain fibers controlling the dilatation of the eye's pupil.

The Harvard experiments provide strong evidence that former ideas about the cause of convulsions were wrong. It had been suggested that convulsions came about because of stimulation of the blood vessels or of certain other parts of the brain.

The new discovery may change the diagnosis of epileptic convulsions. Dr. Gibbs explained that physicians formerly sought a diseased condition responsible for epilepsy but that as a result of his research they will now have to seek a disorder in the neurological mechanism which he believes is present normally as a safety valve in the brain.

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ARTIFICIAL SUNLIGHT

Looking up a ventilating shaft in a New York City apartment house where lights have been installed to simulate the radiance of the sun.

ENGINEERING

Electricity Brings "Sun" To Low Level Apartments

NEW YORK'S "cliff-dwellers" who live on lower level apartments facing ventilating shafts can now get up in the morning, raise the window shades and be flooded in the glow of artificial sunlight.

Electrical engineers have installed in the court of an apartment on Central Park South a system of powerful electric lights which shine down the dark central shaft and simulate sunlight.

And so that the dawn does not "come up like thunder," as Kipling has it in the Far East, the wiring circuit is so arranged that the glow comes on gradually in the morning for "sunrise" and dies away slowly for "sunset."

Engineers of the General Electric Company, which installed the system, have adjusted the device so that it takes the lamps 15 minutes to come up to full intensity. (*General Electric Review*, July.)

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POPULATION

Migration To Poor Farm Land Seen As National Danger

OUT OF the frying pan, into the fire. This is the predicament of the many thousands of Americans who have been forced by unemployment to desert the city and go "back to the land."

The Government's policy should be to discourage these people from taking roots and settling down permanently in the poor farm areas to which the depression has driven them, in the opinion of Prof. Carter Goodrich of Columbia University, who with his associates, Dr. Bushrod W. Allin and Miss Marion Hayes, has just completed a survey of the migrations of Americans and the planes of living in various parts of the United States.

The unemployed of the present de-

pression were not able to follow the example of those of the past century. They could not "go west" and take up fertile lands in the Government's public domain. Instead they were forced to settle on cheap or abandoned farms in submarginal areas—perhaps returning to the very lands which they or others had deserted as worthless in good times.

These bad lands, including the Cut-over Country of the Great Lakes States, the Old Cotton Belt, and counties in the mountains of the Southern Appalachians, are the parts of the country that normally are deserted in good times by those who can move to the city and find jobs.

In these areas the plane of living is