

MEDICINE

Dye Locates Brain Tumor

This radioactive spotting method, by which abnormal growths can be detected through skull and skin, has proved diagnostically successful in a dozen cases.

► BRAIN tumor detection by means of a radioactive dye that becomes concentrated in these abnormal growths and can be detected through skull and skin with a Geiger-Muller counter is the newest medical development in the use of atomic-pile byproducts.

It has been tried out successfully in a dozen cases at the University of Minnesota Medical School, and is reported in *Science* (May 28) by Dr. George E. Moore, senior research fellow of the U. S. Public Health Service.

It was already known that a dye called fluorescein has an affinity for tumorous tissue. To render it radioactive, Dr. Moore chemically tacked on some radioactive iodine, converting it into diiodofluorescein. Small, calculated quantities of this were injected into the veins of patients suspected of having brain tu-

mors, who were to undergo operations.

In a short time the blood had been carried to their heads, where the counters detected the presence of the radioactive atoms. Some of the iodine was present all over the brain, but on the patients heads there were certain spots where the counters ticked much more rapidly than they did elsewhere. This was taken as indicating the possible presence of a tumor beneath that spot on the skull.

Subsequent operations proved the radioactive spotting method to have been correct in a large proportion of the cases.

The method is not considered infallible, and is to be used only in connection with other methods of diagnosis. So used, however, it should eventually be helpful.

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GIANT METASEQUOIA — Dr. Ralph W. Chaney, at the foot of the "Dawn Sequoia," examines some of its twigs. With him is the commander of the armed escort provided by local Chinese authorities as protection against bandits.

DENDROLOGY

Find Ancient Tree Species

► A TREE species that flourished on the earth long ago, almost in the days of the dinosaurs, long supposed to be as dead as they are and known only from fossils, turned up alive a short time ago deep in China's almost inaccessible interior. Closely related to the Sequoias of California, it bears the name Metasequoia, testifying to its kinship.

Now the man who first gave the news of its discovery to the Western world, Prof. Ralph W. Chaney of the University of California, has been able to obtain specimens, seeds and photographs. His trip started by trans-Pacific airplane but wound up on foot, for the final 125 miles or so of the journey was over ancient Chinese "roads" that in reality are mere foot trails. Part of the way he was carried in a sedan chair by coolies, but a good deal of it he had to do on his own two feet.

Metasequoia grows in moist mountainous country, but never much above 4,000 feet elevation, for it seems unable to stand winter weather. Its reddish bark is much thinner than the thick, corky covering of its American cousins,

so it would presumably be less resistant to fire. However, the wet habitats in which it grows minimize that danger.

Biggest Metasequoia seen and photographed by Prof. Chaney stands 98 feet high and is nearly six feet in diameter 11 feet above the ground, where its flaring buttresses end. With typical Chinese reverence for all things old, the natives of the region have erected a small temple at its base.

Unlike the American Sequoias, which are evergreen, Metasequoia loses its foliage in autumn, after the fashion of the bald cypress and the American larch or tamarack. When Prof. Chaney visited it, early this spring, it was still bare. The tree is also unlike the American species in that its spreading branches grow upwards, not at a downward slope.

In addition to the venerable "grandfather" tree, which is several centuries old, there are a considerable number of others, ranging in size from finger-thick saplings to mature trees three feet or more in diameter.

Prof. Chaney has planted the seed which he brought back with him in

greenhouses, and with the cooperation of the Save-the-Redwoods League will see that the seedlings are set out in places where they will have best chances for survival. (*See SNL, May 22*).

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ARCHAEOLOGY

Early Natives of Britain Built Greek-Like Temples

► THE religion of early inhabitants of England, 2,500 years ago, was apparently influenced by the culture of far-off Greece at least in the form of its temples. Evidence of this was uncovered during the construction of London's new airport at Hounslow Heath, W. F. Grimes, director of the London Museum, reported in the American journal, *Archaeology* (Summer).

When the site of the new airport was selected, an air survey was made to spot any possible traces of prehistoric occupancy not noticeable from the ground. The photographs clearly picked out the outlines of an earthwork once popularly known as "Caesar's camp," but in recent decades all but obliterated by cultivation.

Skimming off the surface soil with earth-handling machinery, the archaeolo-