

MEDICINE

Drugs Help Oldsters

➤ HOPE for rescuing troublesome, miserable old people from "back wards" of mental hospitals or back rooms at home appears from results of treatment with two modern drugs.

A report by Drs. John T. Ferguson and William H. Funderburk of Traverse City State Hospital, Mich., appears in the *Journal of the American Medical Association* (Jan. 28).

The two drugs used are reserpine, trade-named Serpasil, and methyl phenylpiperidylacetate, trade-named Ritalin.

Reserpine is a tranquilizing drug widely used to reduce high blood pressure. Ritalin is a stimulating drug.

Some of the 215 patients in the study were noisy, aggressive, restless and overactive. Some were too quiet, refusing to do anything but lie in bed or on the floor, or sit in a chair. Many could not or would not keep themselves clean. Many were problem eaters, either refusing to eat, eating messily or eating only certain foods that were not necessarily the most nourishing.

All were over 60 years old and had been in the mental hospital for from one to 53 years.

"A marked mental awakening of the patients" to the degree that they were better able to take part in activities from feeding

and washing themselves to going on picnics followed treatment with the two drugs.

However, unless the patient was helped into new situations, improvement was very slight. Attendants and nurses had in most cases to restrain the patients to improved behavior but the drugs made this possible.

Reserpine, the tranquilizing drug, was given alone at first to the 131 patients who were overactive. The 62 who were negativistic and underactive were started on Ritalin, the stimulating drug.

After some experimenting with various doses, a total of 195 were given both. After four to eight months of this, 67 of the 215 could get along without any of the drugs without going back to their original troublesome behavior.

Most of the improvement, the doctors think, is secondary to a lessening of confusion in the patients and an increase in their understanding of where they are and what goes on around them. The doctors call this "a mental awakening toward reality."

The drugs were given by mouth and caused no harmful effects.

The doctors hope that these drugs might make it possible for many senile older people to be cared for at home instead of having to go to institutions.

Science News Letter, February 4, 1956

GEOPHYSICS

New Bird-Watching Crew

➤ A NEW KIND of bird-watcher to track earth satellites being launched next year would be of "unparalleled" value to science, the director of the Smithsonian Astrophysical Observatory said in New York.

"Most important" will be the first sightings made as the satellites start their earth-circling path and the last before the man-made moonlets spiral to earth.

Dr. Fred L. Whipple told the Institute of Aeronautical Sciences meeting in New York that a world-wide corps of amateur astronomers and other qualified sky watchers would be needed to establish initial paths of the satellites.

Not until these tracks have been plotted, he said, can "the precise tracking and timing of satellites through specially designed telescopes" be started at 12 or more observatories around the world. Extremely rapid changes in path during the satellites' last hours likewise cannot be followed with the precise instruments.

The job of planning observations on the planet-girdling satellites to be launched during the International Geophysical Year has been assigned by the National Academy of Sciences to the Smithsonian Astrophysical Observatory.

Dr. J. Allen Hynek will be associate director of the Satellite Tracking Program, Dr. Whipple announced at the meeting.

He said much information could be obtained from precise photographic measurements of the satellite's position as it passes over various observing sites.

Dr. Whipple said the moonlets would be just visible to the naked eye and easily observed by binoculars or small telescopes if the objects are white, somewhat larger than a basketball, have an orbit making an angle of 30 degrees to 50 degrees with the earth's equator, and vary in height from 200 to 800 miles above the earth's surface.

Such satellites would circle the earth in about one and a half hours. Their orbital planes, Dr. Whipple said, will twist around completely in a westward direction in less than two months.

Density of the upper atmosphere can be accurately told by the rate at which the orbit shrinks as air resistance gradually drags the satellites back to earth.

Although the satellites will circle far above the earth, they will yield information not only about conditions in their paths, but about the earth's surface and its interior.

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GENERAL SCIENCE

AAAS Council Favors Avoiding Segregation

➤ THE COUNCIL of the American Association for the Advancement of Science has voted nearly eight to one to avoid holding AAAS meetings in the future in any city where there is racial segregation.

The mail ballot through Jan. 23 was 219 in favor, 28 opposed, with three abstentions. (See SNL, Jan. 14, p. 24.)

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