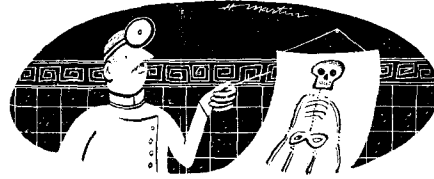


Cerebral Mechanics



"The Human Brain," by John Pfeiffer (Harper, 273 pp. \$3.75), is an exposition for the layman of what scientists have thus far learned about the mechanical operations of the brain. Dr. Henry Viets, who reviews it here, is the editor of "Neurology and Psychiatry in General Practice," and other works.

By Henry Viets, M.D.

ALTHOUGH the article on "brain" occupies only a little over two inches of space in the Columbia Encyclopedia, it and all the rest of the information compiled there could not have been written or even envisaged without that "mass of the nervous tissue in the cranium" we call the human brain. How this complex structure developed in man from a single cell, how (in part) it works, and what can be done to set it right when the mechanism goes wrong is the theme of "The Human Brain," an important and timely book by John Pfeiffer.

This trained observer, among the best of the science news writers, has written a comprehensive summary of the structure and function of the brain in a readable and understandable style. Even more important, he has sketched in the modern treatments by chemical and surgical means of disorders of the "cerebral jungle," as carried out in the laboratories and clinics of the most advanced research centers. No important aspect of the physical treatment of brain disorders has been missed. All, including psychotherapy, electro-shock, and drug treatment, are competently evaluated. Indeed, a surprising amount of information is set forth, without deviation from the narrow line of scientific truth. This worthy accomplishment lends force to the book, which should have the wholehearted endorsement of men of science, as well as the discriminating readers with non-scientific leanings.

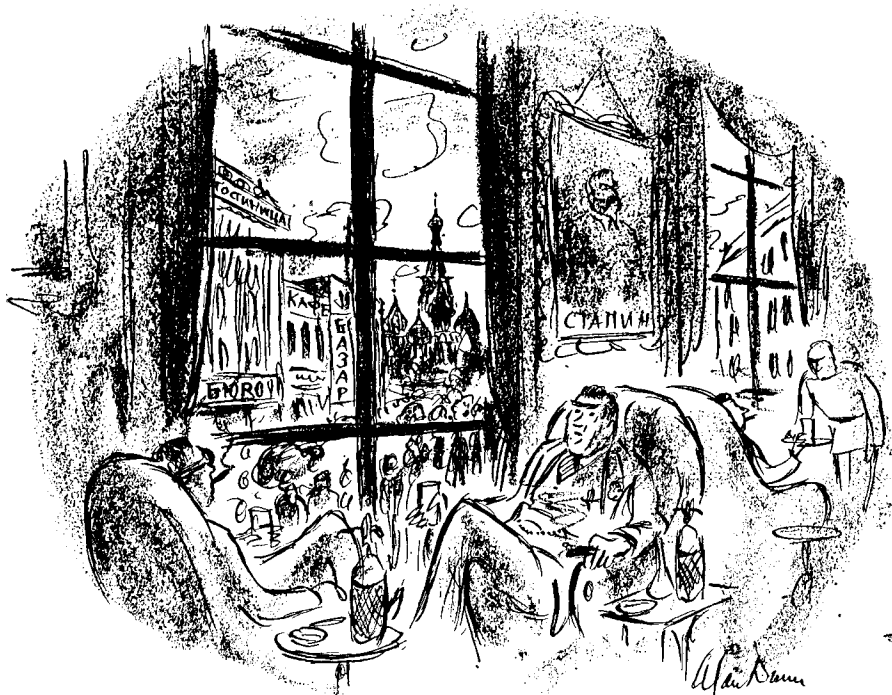
If you want to know the basic reason for Joe Louis's decreased efficiency in the ring, for Joe DiMaggio's retirement from the Yankees, why John Barrymore once gave "Hamlet" in a night club, why George Kell forgot that he threw out his man at third base, why Jack Sharkey failed to remember his fight with Dempsey, why

boxers in New York have to pass a brain-wave test, why Ted Williams is stoical, or why the lady dropped her pocketbook in the Union Station in Washington when she walked past the tall stone columns along the corridor on a sunny day, you will find the answers in "The Human Brain." To gather his facts the author traveled widely from Old Lyme to Manteno and we can trace him into hospitals and laboratories where he politely introduces the reader to the leading researchers in brain studies—the electroencephalographers, the psychiatrists, and neurosurgeons—who report their findings on psychosurgery, pseudo-psychology, juvenile delinquency, shock treatment for the mentally ill, "hypnopedagogy," and other topics of particular pertinency. To all of us who have a natural tendency to "know how it works," the basic instinct of the inquiring mind, the book gives a full quota of information.

The functions of the brain are so complicated, as is the structure itself, with its billions of cells and tangle of connecting fibers, that fundamental concepts such as "mind," "consciousness," "memory," and "emotion" elude us in our present state of

knowledge. Only the mechanical part of cerebration is slowly being disclosed. Even as I write the pathway along which the impulse travels, the signals which guide, the terminal points and turnabouts can only be partly indicated. What starts the evolution of an idea, directs, diverts, terminates, or transmutes it to another form is completely unknown.

The seat of the mind, in "The Human Brain," is hardly considered; the level of exposition is largely anatomical and physiological, not psychological or mental. Descriptions tend toward the mechanical, the robotry of the automaton dealing with thinking machines rather than with thought. Nothing here helps us to understand the mind of Keats or Shakespeare, Dostoevsky or Santayana. "Eddies of electricity" or "circular reflex circuits" do not enlighten us or help to explain the genius of Newton or Einstein. Pfeiffer gives us all that is known at present; only by future endeavors can the mechanisms (if such they be) behind memory, prediction, and other mental activities be disclosed. The author believes that this knowledge is coming and perhaps in the not too distant future. With this we can agree.



"Trouble is you can't really tell a hidden capitalist—he may look like us—dress like us—act like us . . ."

Climate for Everyone

"Our American Weather," by George H. T. Kimble (McGraw-Hill, 332 pp. \$4.75), is a popular volume tracing the weather of the United States through the cycle of a year; "Sun, Sea, and Sky," by Irving P. Krick and Roscoe Fleming (Lippincott, 248 pp. \$3.95) describes some of the main features of weather throughout the world, and considers methods of predicting and controlling it. Below the books are reviewed by Ivan Ray Tannehill, author of several books on meteorology, who recently retired after forty years of service in the Weather Bureau.

By Ivan Ray Tannehill

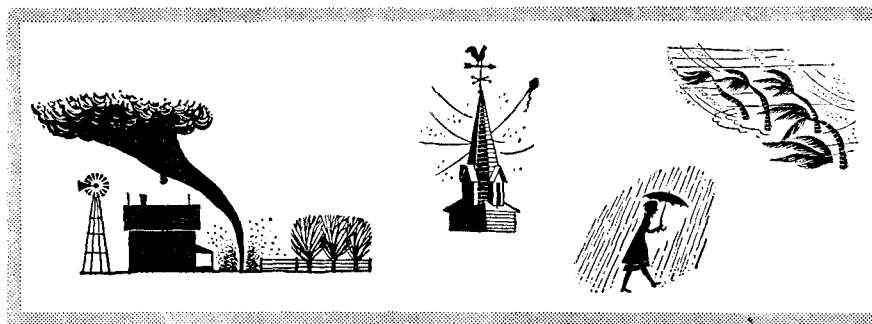
SIX years ago the American Meteorological Society undertook a survey of the present state of meteorology and three years later published the "Compendium of Meteorology." This excellent work contains 1,334 pages, probably more than a million words (I didn't count them), and weighs seven and one-half pounds. It could not and did not pretend to be complete. Meteorology, even without climate, is now far from being a one-book science.

Latest of a long line of recent books on this subject are George H. T. Kimble's "Our American Weather" and Irving P. Krick's and Roscoe Fleming's "Sun, Sea, and Sky." So vast is the field of weather that at no point do they overlap, and neither of them contains much that was in the "Compendium of Meteorology."

It has been nearly twenty years since a popular book devoted to the weather of our continent and the why and how of it has been offered to the man in the street. And it is in the street where most of us have to put up with the weather! "Why the Weather?" by Dr. Charles F. Brooks, attained top rank as a popular weather book in its second edition in the mid-Thirties.

Now Dr. Kimble faithfully preserves the panoramic character of the weather around the year, the grand sweep of the air masses, the ebb and flow of the seasons across the continent, the onslaught of storms and other violent disturbances, and the amazing extremes that are found within our borders. The how and why of it, in answer to hundreds of possible questions, are inserted within the appropriate months without unduly straining the casual reader.

Here and there Dr. Kimble wanders



—From "Our American Weather"

among fascinating diversions but always comes back quickly to get in step with the march of the weather. This is weather of the down-to-earth kind that affects us when we shovel snow, spade the garden, mow the lawn, or rake the leaves, to say nothing of golf, fishing, or visiting Aunt Emma. But it is not a treatise on climate. There are neat graphs harboring details for reference but the picture is in words and not in columns of figures.

Instead of being down to earth, Krick's and Fleming's "Sun, Sea, and Sky" takes its viewpoint in space, seeing the earth as a spinning planet, the sun dominant, the continents and oceans as influential bystanders, and man trying to predict the changes in the circulation of the atmosphere and foresee the major trends in weather and climate. There is no other book like it simply because it presents the theories and methods of the senior author and there is no other meteorologist like Dr. Krick. The panorama here, when there is one, stretches across the decades, the centuries, the ages of geology. From this point of view the authors tell us about the importance of fitting human activities to the limitations placed on us by the atmosphere, of working in partnership with nature. They find much hope in the current efforts to modify the weather, especially rainfall, by artificial means.

When the book is on its main track it deals with the giants among the air streams, the vast sweep of weather processes around the earth, and the tremendous energies involved in storms and other atmospheric disturbances, dwarfing the power of the atom bomb. And when it is off the track it is equally interesting. Without any apparent relation to the main theme, the authors turn their attention to weather in war and lead up to the predictions for D-day in June 1944. It is a good story. The senior author was there—a member of the team of forecasters. Almost everywhere in the book there is evidence of the magic touch of the expert newspaperman, doubtless the junior author. Altogether it is an absorbing book.

The World of Wood

"Timber in Your Life," by Arthur H. Carhart (Lippincott, 317 pp. \$4, surveys for the layman the problem now facing the nation in the effective conservation and use of our forest resources. Paul B. Sears, who reviews here, is chairman of the Yale University Conservation Program and the author of "Deserts on the March."

By Paul B. Sears

IT IS one of the ironies of the age of metal (no pun intended) and plastics that it has brought no let-up in the demand for wood and other forest products. One should add also by-products, to include the part which forests play in regulating the movement of water, the tempering of climate, the production of wild-life and the general contribution to those amenities which make for better living on our crowded planet.

It is another curious fact that one of the most ancient uses of wood—fuel—is still the heaviest. And, while we are at it, a still more curious fact is that humanity is thoroughly schizophrenic so far as forests are concerned. We cannot make up our minds whether to cherish them for their benefits or to destroy them as our rivals for space. There is no longer any doubt that the forest was our cradle and that we owe to its selective influence some of our most valuable qualities: grasping hands, free-moving shoulders, an stereoscopic vision. Yet credit agencies speak of cleared land as "improved," and Spaniards homesick for the sheep-devastated lands of Castile destroyed beautiful trees in the Vale of Mexico for no other reason.

Paradox follows paradox. The bulk of our timber land is in small wood lots, not in great Government reserves or corporate holdings. And it is big business, so often pictured as ruthless, which is today taking the most effective measures to insure continuing supply of wood for the future. It is the little fellow who has