a good term if we want to find one which will win friends and influence people."

My point is, we have a good American word in "radionics," highly descriptive, looked upon with favor by engineers and physicists, and easily understood by the general public. A word that, in my opinion, is fit to describe the miracles now being wrought behind the secret panels of radionic laboratories—wrought for the winning of the war. A word that includes the entire field of radar, electronics and radio in one covering term.

Over the long distance telephone in the past few days I have talked with most of the leaders of the industry, and of the two terms all of them seem to feel the American term "radionics" is more descriptive and will be less confusing to the public.

For the sake of our entire industry I would be deeply interested in the reaction of the press. May I have your opinion?

E. F. MCDONALD, JR.

MAKING MOSQUITO SURVEYS WITH A JEEP AND THE PBY-5

THE Patrol Bomber (PBY-5) and particularly the Jeep have been found indispensable in carrying out mosquito survey work at the U. S. Naval Air Training Center near Corpus Christi, Texas.

The success of the Jeep lies in its ability to go anywhere. She can wade through water that covers the floor boards, or scoot through brush that is higher than the car. Her four-wheel drive mechanism pulls her over sand dunes or through axle-deep mud. Throughout the design of the Jeep all waste space has been eliminated, but two men with collecting and camping equipment can successfully live out of her for days. Many successful reconnoitering survey trips have been made that included four individuals.

For the preparation of the survey map, it was found that a drawing board measuring 20×36 inches could be built into the rear seat. Each end of the board rests on the fender frames. A piece of 2×4 or 2×6 board is attached to the under side of the drawing board where it not only acts as a stop to keep the board from shifting, but raises it up to a more desirable level for drawing. Drawing paper can then be thumb-tacked to the board or sealed with decorator's self-sealing tape.

This type of arrangement has worked successfully in the preparation of maps in which the scale has been 2 or 4 inches equal to 1 mile. Thus, by means of the speedometer readings, compass, protractor and ruler, the location of the ponds, lakes, marshes, roads, creeks, etc., can be accurately plotted. It was found that there was no incorrect degree of deviation of the compass when it was held in the center of the drawing board. The mosquito breeding places have been located and plotted in an area of over 100 square miles in less than a week by the use of this method.

At many times, it is desirable to see the extent of the mosquito breeding area from the air, and for this the PBY-5 has been most frequently used. This ship is equipped with so-called "glass blisters" in the fuselage. This has the advantage of permitting one to see the ground in all directions. The PBY-5 is capable of flying at low speeds and from an altitude of 100 feet, detailed examination of the ground can be made and sketch maps prepared.

WILLIAM M. GORDON

U. S. NAVAL AIR STATION,
CORPUS CHRISTI, TEXAS

DR. A. W. GRABAU IN CHINA

THE following communication from Mrs. Amadeus W. Grabau (Mary Antin) will be of interest to many geologists. Dr. Grabau, who has long been engaged in paleontological work for the Chinese government, is still living in Peking.

In November I received a very short letter dated August 4, 1942, in my husband's own hand. He stated briefly that he and his household were getting along tolerably well with the help of a subsistence allowance from our State Department which, as you probably know, all American nationals in enemy territory receive through the nearest Swiss representative. This letter was brought out of Peking by a friend, Dr. A. B. D. Fortuyn, who came out with the first lot of various nationals to be exchanged.

Later I called upon Dr. and Mrs. Fortuyn in New York. They gave me a reassuring picture of my husband. When they last saw him in August (1942), he was in no worse health than he had known for years past and was able to concentrate in his usual energetic fashion on his writing. Publication is of course very doubtful now, but at least there is no interference with his writing. His current secretary-housekeeper, a German lady—one of a succession of refugees whom Dr. Grabau has sheltered in his compound from time to time—seemed to be efficient and devoted. Some of his Chinese friends are still at hand to look after him as in years past. Also Dr. Hoeppli, formerly on the staff of Peking Union Medical College, now representing the Swiss government to look after American citizens in Peking, is well acquainted with my husband and sure to look after him.

General conditions in Peking were not too bad. The food situation was tolerable as of early August. American citizens, with the exception of two or three administrative officers of P.U.M.C., had the freedom of the city and were carrying on pretty much as in former days. My husband was left undisturbed in his own compound with a sufficient domestic staff.

A significant item was relayed to me by Dr. Roger S. Greene. In a news letter from Chungking dated November 10, 1942, was the following reference to my husband: "Professor Grabau has been given $6.00 local currency a month by the Japanese in token of their recognition

and appreciation of his scientific contribution to the theory of Pulsation.''

In the opinion of Dr. and Mrs. Fortuyn, my husband would not be able to make the journey under present traveling conditions, if he were offered the opportunity to be exchanged.

HERVEY W. SHIMER
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SCIENTIFIC BOOKS

TEXT-BOOKS OF PHYSICS

A Laboratory Manual of Experiments in Physics. By L. R. INGERSOLL and M. J. MARTIN. 5th edition. xi + 342 pp. McGraw-Hill Book Company. 1942. $2.50.

General Physics for the Laboratory. By L. W. TAYLOR, W. W. WATSON and C. E. HOWE. Revised edition. vii + 184 pp. + 107 record sheets. Ginn and Co. 1942. $2.00.

A Laboratory Manual of Electricity and Magnetism. By LEONARD L. LOEB. Revised edition. xii + 121 pp. + experiment data sheets. Stanford University Press. 1941. $1.90.

University Physics, Part III, Light. By F. C. CHAMPION. 172 pp. London and Glasgow: Blackie and Son, Ltd. New York: Interscience Publishers, Inc. 1941. $1.50.

College Physics. By A. W. DUFF and MORTON MASIUS. x + 588 pp. Longmans, Green and Co., Inc. 1941. $3.80.

College Physics. By HENRY A. PERKINS. Revised edition. xi + 802 pp. Prentice-Hall, Inc. 1943. $4.50.

A Survey of Physics for College Students. By FREDERICK A. SAUNDERS. Third edition. xii + 724 pp. Henry Holt and Co., Inc. 1943. $4.00.

Physics. By FRANK L. ROBESON. ix + 819 pp. The Macmillan Company. 1942. $4.50.

Introduction to Physics. By HARLEY HOWE. xii + 559 pp. The McGraw-Hill Book Company. 1942. $3.75.

Analytical Experimental Physics. By H. B. LEMON and MICHAEL FERENCE, JR. xvi + 584 pp. 66 plates. 584 zincs. University of Chicago Press. 1943. $7.00.

THE first three books on the list are laboratory manuals of real merit.

Ingersoll's "Experiments" appeared in a modest first edition almost two decades ago. It established a clientele. Professor Martin joined in preparing the third edition. Through successive editions the manual has been enlarged and enriched and now ranks with the best available.

"Taylor, Watson and Howe" appears in a revised edition after sixteen years of successful use. New experiments have been added; old ones have been brought up-to-date. The M-K-S units are now used throughout. One hundred and seven pages of "Record Sheets" have been added. These innovations will encounter warm friends and ardent foes.

For years the reviewer has recommended a short list of "manuals" to his pupils in general physics. "Ingersoll and Martin" and "Taylor, Watson and Howe" have been on the list. Could not an effective course in general physics be offered with a manual like either of these, perhaps reshaped a little, as the core text-book with a shelf of the usual texts in general physics at hand for collateral reading?

Professor Loeb's "Manual of Electricity and Magnetism" presents in 120 pages twelve admirable experiments chosen to supplement the author's course, each presented in great detail. There follow at least 200 pages of "Experiment Data Sheets." The treatment follows conservative and classical lines proceeding from magnets and magnetic fields to current, potential difference, resistance and so on.

The "soul of the book" is revealed in its twelve pages of "preface" and "announcement." The reviewer pauses to salute the loyal teacher who wrote them. The manual has been written, says the author, in an attempt "to put into practice certain ideals of laboratory instruction gleaned from his years as a student teacher." The author proposes so to plan and to conduct his laboratory instruction that the work of his pupils will automatically rise to a high level of laboratory ethics. May the author's kind increase! And may his ideals motivate all instruction everywhere!

Up from mighty London comes Part III, "Light," of Professor Champion's "University Physics." Packed into thirteen chapters and 172 pages are the essentials of optics. Numerous illustrations, well drawn and aptly chosen, illuminate the text. Questions and numerical exercises follow each chapter. A list of seventy-five examples closes the book. This text should receive serious consideration for a one-semester course at the second-course level.

The rest of the books, six in all, are texts for the general college course. Each author has written the "Thing as he sees it for the God of Things as They Are," for teachers as they are and for students as they are supposed to be. What an array of boundary conditions! Small wonder that the solutions are so varied.

Perhaps never before have texts been so critically scrutinized, for are not most of these on the list of texts recommended for the "basic courses" of the