of cancer of the buccal cavity, especially with relation to the irritations produced by teeth but the condition of the bone dental plates. They can also help by referring cases of cancer which they discover to physicians skilled in the treatment of cancer in this location. It may be doubted whether some dentists fully realize the help which can be obtained from X-ray photographs which reveal not only the state of the teeth but the conditions of the bone surrounding them.

Medical students should be taught about cancer by the aid of actual demonstration of cancer patients, and this to a sufficient extent to give them a good working knowledge of the subject.

The most reliable forms of treatment and, in fact, the only ones thus far justified by experience and observation depend upon surgery, radium and X-rays.

Emphasis should be placed upon the value of the dissemination of the definite, useful and practical knowledge about cancer, and this knowledge should not be confused nor hidden by what is merely theoretical and experimental.

Efforts towards the control of cancer should be made in two principal directions, the promotion of research in order to increase the existing knowledge of the subject, and the practical employment of the information which is at hand.

Even with our present knowledge many lives could be saved which are sacrificed to unnecessary delays.

A proposal by Claude Regaud, director of the Pasteur Laboratory of the Radium Institute, Paris, for the establishment of an international federation of cancer control societies and a bibliographic index was referred to the various organizations for study and further consideration.

THE FIRST INTERNATIONAL CONGRESS OF SOIL SCIENCE

IN accordance with the decision of the Fourth International Conference of Soil Science that met in Rome in May, 1924, the First Congress of the International Association of Soil Science, then organized, will convene on June 13, 1927, in Washington, D. C. The congress will be followed by a field excursion to visit the various important soil belts in the country. Opportunity will also be given to the delegates to acquaint themselves with various agricultural industries, some of the leading agricultural experiment stations and in general with the agricultural resources of the United States.

The association is made up of the following six international commissions:

I. *Commission on Soil Physics*

Chairman—Dr. V. Novak, Chef de l'Institut Pedologique, Kvetna 19, Brno, Czechoslovakia.

II. *Commission on Soil Chemistry*

Chairman—Professor Dr. A. deSigmond, Technische Hochschule, Szent-Gallertter, 4, Budapest, Hungary.

III. *Commission on Soil Bacteriology*

Chairman—Professor Dr. Julius Stocklasa, Professor an der Böhmischen, Technischen Hochschule und Direktor der Staatlichen Versuchsstation, Vinohrady, Prague, Czechoslovakia.

IV. *Commission on Soil Fertility*

Chairman—Professor Dr. E. A. Mitscherlich, Pflanzenbau-Institute der Universitat, Tragheimerkirchenstrasse 83, Königsberg, Germany.

V. *Commission on Nomenclature, Classification and Cartography*

Chairman—Professor C. F. Marbut, Bureau of Soils, Department of Agriculture, Washington, D. C.

Sub-Commission on the preparation of the Cartography of Europe

Professor Dr. H. Stremme, Mineralogisch-Geologisch Institut der Technischen Hochschule, Neptunstrasse 14, Danzig, Germany.

VI. *Commission on the Application of Soil Science to Land Cultivation*

Chairman—Dr. J. Girsberger, Kultur-Ingenieur des Kantons Zürich, Kaspar Escherhaus, Zürich, Switzerland.

The American representatives of these commissions are:

I. Dr. C. Davis, Bureau of Soils, Washington, D. C.
II. Dr. M. M. McCool, East Lansing, Michigan.
III. Dr. S. A. Waksman, New Brunswick, N. J.
IV. Professor D. R. Hoagland, Berkeley, California.
V. Dr. C. F. Marbut, Bureau of Soils, Washington, D. C.
VI. Dr. S. H. McCrory, Bureau of Agricultural Engineering, Washington, D. C.

Each commission is now working on the preparation of its own program. Some of the sessions will be devoted to the congress as a whole or to combined meetings of more than one commission, while a number of sessions (5 to 8) will be devoted to the special sessions of each commission.

The program of each commission will consist of papers presented by invitation by outstanding investigators in the respective fields, and of papers presented by various workers in the different branches of soil science, by members or non-members of the association. Titles of the papers to be presented and brief abstracts in English, French and German should be sent on or before December 1, either to the respective chairman or to the American representative of the commission, where the paper is to be presented, or to the president of the association, who will have the paper forwarded to the chairman of the corresponding commission.

This congress will bring together in this country, for the first time in its history, all those that are in-

terested in the different problems of soil classification, soil analysis, fertilization and treatment, as well as the relation of the soil to plant growth. Extensive exhibits of various soil types (monolithic columns, in respective horizons) from Europe and America, apparatus used in soil analyses, of the soil microflora and microfauna, etc., will be held during the congress.

DR. J. G. LIPMAN,
President International Society of Soil Science, New Brunswick, N. J.
DR. D. J. HISSINK,
Secretary, Groningen, Holland

PARASITES IN CENTRAL AMERICAN TROPICS

UNEXPECTED findings concerning animal parasites in Central American countries are reported by Dr. Maurice C. Hall, chief of the zoological division of the Bureau of Animal Industry, who returned on September 15 from a research expedition in the tropics. In representing the United States Department of Agriculture, Dr. Hall made a survey of the animal-parasite situation in Panama, Nicaragua and Salvador. The expedition was organized by and directed by the Johns Hopkins School of Hygiene and Public Health and conducted under the auspices of the International Health Board of the Rockefeller Foundation. The staff included also Drs. Cort, Stoll, Sweet, Riley, Augustine and Brown. Dr. Cort was the director.

Besides gathering extensive information concerning parasites and parasitic diseases in the countries mentioned, the scientists brought back about 150 bottles of prevailing parasites, some of them apparently new and of economic and scientific importance.

"The trip has furnished a valuable background of tropical conditions as regards factors in parasitic development," according to Dr. Hall. "In the extent and nature of diseases of livestock caused by parasites in the countries visited, the findings were unexpected and reassuring in many respects. The range cattle of those countries proved to be practically free from gastro-intestinal parasites, and in many cases appeared to be entirely so. While there is an abundance of moisture and warmth in the tropics, things which themselves are favorable to parasites, the seasonal distribution of rain is highly unfavorable to parasite eggs and larvae.

"In the countries visited—Panama, Nicaragua, Salvador and Guatemala—there are from two to six months, as a rule, and more in exceptional seasons such as this year, when there is no rain whatever. In the absence of moisture the hot tropical sun has a desiccating effect which is fatal to parasite eggs and larvae and which must have a decided sterilizing action on bacteria. Furthermore, the rains themselves are torrential and in the mountainous countries must have a washing effect which serves to sweep worm eggs and larvae into the many water courses and out of contact with livestock. Finally, there is little overstocking on these ranges and a resulting lack of concentrated infection."

One important object of the expedition was to determine what tropical diseases are likely to be carried northward by shipments of livestock. The survey has given a satisfactory answer to that question.

Cattle in the countries visited suffer from ticks and tick fever. Tuberculosis appears to be rare among the range cattle; the bacterial diseases of importance were anthrax, blackleg and tetanus. In contrast to the relative freedom of range livestock from parasites, household animals in the countries visited showed fairly extensive infestation. Swine especially suffer from kidney worms which cause considerable loss of meat and lard. Another common swine parasite causes the disease known as swine measles or cysticercosis, due to bladderworms in the meat. These bladderworms are the larval stages of a large and dangerous human tapeworm.

The results of the expedition show that in shipping livestock from Central America to the United States the only diseases of livestock that appear to warrant serious consideration are tick fever, anthrax, blackleg and tetanus, though final conclusions depend on the identification of the parasites collected and also on further studies in Central America. Dr. Hall made his examinations of animal parasites largely at local abattoirs in collaboration with Dr. Augustine.

Revolutions in Nicaragua in May and August interfered considerably with the project on the study of drugs for the removal of worms in which the International Health Board was especially interested and in which Dr. Hall also collaborated. The most interesting development of this work was the discovery that almost 40 per cent. of the soldiers examined and treated by the scientists were infected by one of the dog and cat hookworms not known to be present in man in Central America. The new findings are an important aid to public-health work in the regions visited. The scientists collaborating in this project were Dr. D. L. Augustine, Dr. D. M. Malloy, Don Bernabe Rosales and Dr. Hall.

The trip resulted also in numerous other findings of a specialized and highly technical character, including the efficacy of several new drugs.

THE PORTO RICAN SCHOOL OF TROPICAL MEDICINE

THE School of Tropical Medicine of the University of Porto Rico, founded under the auspices of Colum-