FIELD OFFICE FOR THE SHELTERBELT PROJECT

WITH establishment of a central field office at Lincoln, Nebraska, planned for an early date, the Forest Service is making plans for beginning field work on the great shelterbelt of trees to be planted for 1,000 miles across the Plains States, which will be carried out by Fred Morrell, administrative director. In addition to the general headquarters at Lincoln, it is expected that state divisional offices will be established in the capital cities of each of the states traversed by the belt—North Dakota, South Dakota, Nebraska, Kansas, and Oklahoma and Texas.

Active work will be started as soon as the necessary organization is completed. Land leases, seed collection and nursery arrangements to supply planting stock on a large scale will be initiated as soon as possible. The pressing need for emergency relief employment is being taken into consideration. Qualified men are being assigned to the project from the Forest Service rolls and are being hired from other sources to speed up the organization of the field work.

Dr. Raphael Zon, director of the Lake States Forest Experiment Station, has charge of technical phases of the work, including the determination of suitable species to plant in the various soil types, nursery selection and practise, planting practise, etc. The Bureau of Chemistry and Soils will assist in the study and classification of soils within the region, and the Bureau of Plant Industry will cooperate actively in technical service and in the use of its established nurseries and other facilities.

Many inquiries for information in regard to the shelterbelt plans are being received from the region and from adjoining states to the east and west. Criticisms to the effect that thousands of trees planted in the region of the proposed shelterbelt in the past have failed to survive have been received. It is pointed out, however, that other thousands of plantings are still surviving, although the plantings were largely haphazard, in many cases of species not especially suited to the region, and seldom given proper care. The Forest Service is undertaking the shelterbelt planting with the benefit of many years of intensive investigation of methods and cultural practises adapted to the dry land areas. Only trees will be used which have already been tested and have shown their adaptability for use in the region, both in point of survival of climatic conditions and in their protective value.

Approximately two million acres in all will be covered in the forest strips, which will be placed about a mile apart, and the lands will be acquired through lease or purchase, by cooperative agreements with the owners, or by donation. The lands will be classified according to soil and other conditions. In the purchase of land the dominant objective will be to determine valuations with equity both to the landowner and the United States.

THE ELM DISEASE EXHIBIT AT THE NEW YORK BOTANICAL GARDEN

THE "brown streaks in the wood" which people have been asked repeatedly to look for in trees suspected of being afflicted with the Dutch elm disease are clearly illustrated in a new exhibit installed this week in the Museum Building at the New York Botanical Garden. The specimens of wood have been taken from a tree near the grounds which the garden authorities cut and burned, with the owner's permission, as soon as its diseased condition was discovered. Also displayed are some of the beetles which carry the fungus disease from tree to tree, by transporting the spores on their bodies.

Part of a limb, with a bark removed, shows the breeding tunnels and feeding galleries of the beetles, while other limbs show how the beetles escape by boring a hole through the bark. In a part of the exhibit contributed by the U. S. Department of Agriculture, beetles are shown feeding in the crotch of an elm twig —one important means by which the fungus enters the wood. Successive stages in the life of the beetle and of the fungus, as well as different types of dark streaks in the wood caused by the fungus, are likewise shown.

In notes appended to the exhibit, it is pointed out that other diseases possess similar symptoms of yellowing, wilting and dropping of leaves and of dark streaks appearing in the wood. It is therefore necessary for a laboratory to make cultures from the infected wood or from the beetles believed to be carrying the disease, to identify the fungus. But once the Dutch elm disease is discovered, immediate action toward cutting and burning the tree is essential, especially at this season when the beetles are emerging and flying to the other trees. Otherwise, the disease will be widely spread among the elm trees of the east. The New York Botanical Garden is cooperating with federal, state and local authorities in its study and eradication.

AWARD OF THE CHANDLER MEDAL

FOR his work in agricultural chemistry, Dr. Jacob Goodale Lipman, dean of the College of Agriculture at Rutgers University and director of the New Jersey Agricultural Experiment Station, has been awarded the Chandler Medal of Columbia University for 1934. The medal will be conferred formally in November. The announcement of the medal committee, of which Professor A. W. Hixson is chairman, reads:

Dr. Lipman's work on the determination of the nature of the chemical action produced by bacteria in making both organic and inorganic components of soils available for plant food has been of great importance to agriculture all over the world.

He introduced certain conceptions in the field of soil bacteriological chemistry that have been shown to be fundamental in the practical handling of soils.

His researches on the utilization of nitrogen by plants, especially upon the soil reactions that influence the availability of nitrogen to plants, are outstanding contributions. His work in general on soil reactions that influence the availability of chemical elements essential to plant growth has led his researches into the study of the soil chemistry of sulphur, phosphorus, selenium, etc.

Dr. Lipman did noteworthy work on the problem of sweetening salt marshes. His chemical studies of the peat and muck deposits of New Jersey have enabled that state to develop a large commercial humus industry.

Dr. Lipman has stimulated investigations by others, and has made the New Jersey school one of the most important centers of research in the field of soil chemistry.

Dr. Lipman was born in what is now Latvia, in 1874, and came to the United States in 1888. His brother, Dr. Charles B. Lipman, is professor of plant physiology and dean of the Graduate Division of the University of California.

The Chandler Medal, awarded annually by Columbia University for conspicuous work in the field of chemistry, was established in honor of Professor Charles F. Chandler, a professor of chemistry at Columbia for more than half a century, and a founder of the American Chemical Society. The former Chandler medallists are: C. F. Chandler, L. H. Baekeland, W. F. Hillebrand, W. R. Whitney, R. E. Swain, E. F. Smith, E. C. Kendall, S. W. Parr, Moses Gomberg, J. A. Wilson, Irving Langmuir, James Bryant Conant, George O. Curme.

Members of the 1934 medal committee, in addition to Professor A. W. Hixson, are Dr. L. H. Baekeland and Professor Arthur W. Thomas.

SCIENTIFIC NOTES AND NEWS

THE hundredth anniversary of the birth of Samuel Pierpont Langley occurred on August 22. Before becoming secretary of the Smithsonian Institution, a position which he occupied from 1887 until his death in 1906, Dr. Langley had been for twenty years director of the Allegheny Observatory. In honor of the centenary a special volume of selections from Langley's writings, describing his most fundamental discoveries in the fields of aeronautics, astronomy, astrophysics and physics, has been prepared by Dr. Charles G. Abbot, secretary of the Smithsonian Institution, and formerly one of Dr. Langley's assistants.

DR. ISAIAH BOWMAN, secretary of the American Geographical Society and chairman of the National Research Council, gave the address of the president at the opening session of the International Geographic Congress, held at Warsaw, Poland, in August.

SIR RICHARD R. STAWELL, of Melbourne, Australia, was elected president for 1935–36 of the British Medical Association at the recent Bournemouth meeting. He succeeds Dr. Sydney Watson Smith, of Bournemouth. The meeting next year will be held in Melbourne.

DR. JOHN R. MOHLER, chief of the Bureau of Animal Industry of the Department of Agriculture, was elected president of the twelfth International Veterinary Congress, which opened in New York City on August 13. Dr. Mohler is vice-president of the permanent commission of the congress, of which Dr. E. Leclainche, director of the International Bureau of Epizootics at Paris, is president. Other officers elected were: Dr. C. P. Fitch, of St. Paul, Minn., *first vice-president;* Dr. Adolph Eichhorn, of Pearl River, N. Y., *second vice-president;* Dr. C. J. Marshall, of Philadelphia, *third vice-president;* Dr. H. Preston Hoskins, of Chicago, *general secretary.*

THE American Veterinary Medical Association, which held its seventy-first annual convention in conjunction with the international gathering, elected Dr. Robert S. MacKellar, of New York City, president for the ensuing year to succeed Dr. C. P. Fitch, of St. Paul. Drs. G. A. Dick, of Pennsylvania; W. F. Guard, of Ohio; H. E. Curry, of Missouri; A. L. Mason, of the U. S. Army, and W. Wisnicky, of Wisconsin, were elected vice-presidents for one-year terms. Dr. M. Jacob, of Tennessee, was reelected treasurer.

DR. NORBERT KREBS, professor of geography at Berlin, has been elected a member of the Prussian Academy of Sciences.

PROFESSOR LUIGI DEVOTO, professor of industrial diseases at Milan, Professor Giuseppe Muscatello, professor of clinical surgery at Catania, and Professor Giunio Salvi, professor of human anatomy and rector of the University of Naples, have been elected members of the Italian Senate.

AT the ninetieth annual commencement the University of Michigan conferred the honorary degree of