should send titles and abstracts before May 1 to Professor James E. Lynch, School of Fisheries, University of Washington, Seattle, Washington.

THE School of Forestry of Yale University celebrated its fortieth anniversary on February 23. The speakers included Gifford Pinchot, formerly governor of Pennsylvania, and Henry S. Graves, dean emeritus, both members of the original faculty of the school. Other speakers were Professor H. H. Chapman. Professor G. A. Garratt, Dean Samuel J. Record, of the School of Forestry; Dean Charles H. Warren, of the Sheffield Scientific School; Austin F. Hawes, state forester of Connecticut and president of the School of Forestry Alumni Association, and Samuel T. Dana, a member of the class of '07 and dean of the School of Forestry and Conservation of the University of Michigan. Samuel N. Spring, dean of the New York State College of Forestry, was toastmaster at a dinner at the New Haven Lawn Club in the evening. The principal speaker was Dr. James Rowland Angell, president emeritus of the university.

AT Kansas State College a department of chemical engineering has been organized with Dr. W. L. Faith as head. The personnel and equipment, hitherto included in the department of chemistry, have been transferred to the Division of Engineering and Architecture and are housed in a remodeled building formerly used by the department of dairy husbandry.

A BOARD of inquiry for the Great Lakes Fisheries was established on February 9 by Canada and the United States through an exchange of notes for the purpose of making a study and recommending methods of preserving and developing the fisheries. It will hold hearings in the Great Lakes area for that purpose. The American members of the board are Hubert R. Gallagher, of Chicago, assistant director of the Council of State Governments, and Dr. John R. van Oosten, of Ann Arbor, who is in charge of Great Lakes fisheries investigations for the U.S. Bureau of Fisheries. The Canadian members are Professor A. G. Huntsman, consulting director of the Biological Board of Canada, and D. J. Taylor, deputy minister of the Department of Game and Fisheries of Ontario.

Nature states that the Bureau of Human Heredity,

London, is carrying on, with reduced activity, during the war. Although the bureau has lost several workers, it has enlisted the support of Professor F. A. E. Crew as honorary medical secretary. Correspondence with men of science in other countries continues, but in diminished volume, which may give time for other projects, including (1) surveys of the genetic background in tuberculosis, (2) the human analogue of the transmission of cancer in animals, (3) certain immunological problems. It is hoped also to compile a preliminary list of inherited disorders and defects based on recent research for the use of practitioners and teachers. The address of the bureau is 115 Gower Street, London, W.C.1.

A GIFT of \$42,200 has been made to the Tufts College Medical School by Dr. and Mrs. George G. Averill, of Waterville, Maine. The fund, to be turned over to the school during the years of 1940 and 1941, will be devoted to the establishment of the "Dr. and Mrs. George G. Averill Department of Anatomy in memory of Professor Charles P. Thaver." Known as an industrialist. Dr. Averill was one of the first physicians graduated from Tufts College Medical School nearly a half-century ago. The new Medical School Building, of which the gift will provide the entire top floor, will be situated in downtown Boston at the New England Medical Center, convenient to the Boston City Hospital and the other clinical teaching centers. It will be erected as soon as the entire \$750,000 needed has been obtained. Dr. Charles P. Thayer, in whose memory the gift was made, was one of the "original seven" founders of the school in 1893 and the first head of the department of anatomy. A fund for dermatological research has also been established by the Ernest Bischoff Company, Inc., of Ivoryton, Conn., manufacturers of pharmaceuticals.

THE important entomological collections, manuscripts, etc., bequeathed by the late William Miller Christy, have been received at the British Museum (Natural History). There are 21,312 specimens of British Lepidoptera, many specimens which are additions to the existing British collection. Mrs. Brownlow, who inherited the collections, has also presented to the museum a number of important entomological books from Mr. Christy's library.

## DISCUSSION

## SCIENCE IN CHINA

A LETTER has recently come from a former student of mine, Dr. Pei-sung Tang, now working at Kunming, China, addressed to a number of scientists in this country with whom Dr. Tang worked. It has been suggested that the letter might be of general interest, showing, as it does, the indomitable spirit which animates the scientific workers of China in their present

tragic situation. A selection of those portions which seem appropriate is here presented.

WILLIAM S. COOPER

University of Minnesota

TSING HUA UNIVERSITY, KUNMING, YUNNAN PROV., CHINA, AUG. 16, '39.

If you will look into the map of China, I am at the present hiding in the farthest corner from the war. I left Wuchang soon after the fall of Nanking, and destroyed

the furnace and machine works with which we had been making gas masks there. The masks were only very primitive affairs so that I am glad the Japs did not force us to use them. For a while we were in a loss of what to do, for it looked as though the Japs were at our heels, and everything was in turmoil. At this time there was established in the interior of China, at Kweiyang, a medical school for the training of physicians who were to be sent to the front. I was asked to be on the scientific staff, and be responsible for the preclinical courses, and to establish laboratories. This I took up, and went through all kinds of hardships to get there. You may never be able to imagine what we went through: 16 days on the crowded deck of an overloaded steamer on the treacherous Yangtze during the coldest part of the year. Up the rapids the boats had to be pulled by man power or steam capstan, and several times the cable broke, and it was only by the best of good fortune that we escaped death. There was standing room only on deck, and at night we did the best we could to get some sleep, with clothes on. Two days of motoring on staircase highways to Kweiyang-with robbery and road accidents to make the trip colorful, and sleeping in vermin-infested beds next to pig pens and cattle.

Six months in Kweiyang to start a medical school from nothing-absolutely nothing, except a "hospital" of four beds and a group of determined men. But those months were the happiest of my life. The medical school has been in full swing for over a year, with four terms a year (Chicago plan-on my suggestion), with a good staff, and now a hospital of over 100 beds. And laboratories which may well compare with any school in China in equipment. And if there is anything more satisfactory to a pioneer, the furniture and the laboratory benches of that school are a source of joy to me, even when I am away from them. I designed everything, from a three-legged stool (after the principle of the tripod, for the floors are uneven) to the actually hand-made pneumothorax machine which was rigged up from parts gotten from junk shops all by myself, in order that a very serious case of tuberculosis might be treated. And since then that machine, crude as it may be, has served over 200 patients.

Went to Hongkong for two months to buy equipment for the college, and in doing so, I traveled all over the southwest of China on bus, pushing the bus most of the time; and sometimes in the dark, when no lights were available, I had two hand-torches in my hands and ran before the bus so that we might reach the city for the night.

Now that the medical school was going on prosperously, I decided to do something useful again. At the invitation of the president of Tsing Hua, my alma mater, I came to Kunming to establish a laboratory of plant physiology in the Institute of Agricultural Research. I hope you will not blame me for being a coward retreating to the rear, but the fight from now on is not in actual warfare, but in economic affairs. Already the Japs are trying to drain us and choke us from a financial standpoint. It is our aim here to prepare for a prolonged blockade. This is perhaps more deadly than the killing of a few thousand men, or the taking of a few cities. We are trying to exploit

our native materials for the industries. For instance, in the last year we have spent a good deal of our "physiological time" in investigations on castor oil. We have succeeded in substituting castor oil for imported mineral oil, and are now working on the substitution of sumac wax for paraffin. Of course we are not so much concerned with whether our biologists have materials for their slides, but are more concerned about candles and shoe polish and vaseline, for which last we have a substitute. I am known in southwest China as the Castor Oil Man now, whether you believe it or not, and in spite of myself.

We are incidentally doing work on plant hormones and on colchicine. We are synthesizing hormones for the rest of the country, and trying to persuade people the use of colchicine in agriculture. You may not believe that we still have time and money to do such things on such a scale, but we actually are doing them, in spite of occasional bombings.

May be with a year or so more of this war, we shall all turn to be cave-dwelling savages because of the aerial attacks of the Japs. But I really do not believe that they can do anything more. Industrial cooperatives are springing up like mushrooms, and handicraft industries are being developed in the interior. You should visit the interior of China to see the utmost ingenuity that we have for our industrial development.

You may be interested to know how the whole population feels towards the war. Well, there is only one answer: the more we fight, the more confident we become, and the more we suffer, and heaven knows we are suffering enough (no milk, not even a decent bath), but the more we suffer, the more determined we are. We play bridge every Saturday night, and have fun looking into the old copies of Life and wonder if Life is real. Incidentally, any old magazines such as Life, Look, Click, are welcome, just as a contrast between our actual life here and abroad. Of course we are missing a great deal-the fine things that science and industry can give us, the music, the arts and the theater, but I can sincerely say that we are having an experience that you all may envy, for as in a foot ball game, we are the players, and you are the spectators. We are the ones that get the real fun. On the other hand, as long as you (in abstract form) give us a hand once in a while and will not let us down, we shall play the game much better. (I am not pleading for help.)

PEI-SUNG TANG

## INJURY TO TREES FROM SULFUR DIOXIDE FUMES OF ELECTRIC REFRIGERATORS<sup>1</sup>

On September 11, 1939, the writers found that plants exposed to gas fumes from a disabled electric refrigerator in a local household showed considerable injury following exposure to sunlight. A report from eastern Massachusetts last year indicated that foliage of trees had wilted suddenly near an electric refrigeration plant which was out of order. Gas fumes were not mentioned in this report, but specimens from the

<sup>1</sup> Contribution Number 358 of the Massachusetts Agricultural Experiment Station.