general conversazione in Hart House, to which all members of the association and associated societies are invited. Many of the athletic activities of Hart House may be seen, such as boxing, diving, water polo and indoor base-ball. There will be band music and bag-pipe music, and a concert in the music room. A program will be staged in the Hart House theater. Refreshments will be served in the Great Dining Hall of Hart House. Hart House will be open to visitors also on the evenings of Tuesday, Wednesday and Friday.

An exhibit of artistic skating by the Toronto Skating Club, followed by an ice-hockey match, will be given, under cover, on Friday afternoon. All in attendance at the meeting are invited.

The general program of the Toronto meeting, including programs for the sections and for the twenty-one associated societies meeting with the association at Toronto, will be ready for distribution on Tuesday, December 27, at the registration room.

> BURTON E. LIVINGSTON, Permanent Secretary

SCIENTIFIC EVENTS FOREST EXPERIMENT STATIONS

A RECENT circular by the Forest Service of the Department of Agriculture, entitled "Forest Experiment Stations," outlines what forest experiment stations have done, what they need to do, why they are needed, where they are needed, and what they would cost.

Six stations were established in the West between 1908 and 1913, with a small technical staff at each. In spite of limitations in funds and personnel valuable results have been secured in showing how to plant the Nebraska sand hills, in planting on the western National Forests, in the development of methods of cutting Douglas fir forests, in a study of the relation between forests and streamflow, and many other questions.

The field of forest experiment stations includes forest botany; forest distribution; forestation, from the production, collection, extraction, cleaning, testing and storage of seed, to nursery practise, direct seeding and field planting; silviculture; forest protection; utilization of products, such as naval stores and forage; forest management, or the regulation of the cut with its basis of data on volume, growth, and yield; the effect of forests on streamflow, erosion, and climate; and, underlying these, studies of the fundamental natural laws governing tree growth and the life histories of the individual species and types.

To meet present forestry needs, a program is outlined which includes ten forest experiment stations, each with a technical staff of from 6 to 12 men, and distributed, 5 in the East, 3 in the Rocky Mountains, and 2 on the Pacific Coast. Specifically, they would cover the Southern Pine belt in the Atlantic and Gulf States, the Lake States, the Northeast, including New England and New York, the Allegheny region, the Southern Appalachian Mountain region, the northern, central, and southern parts of the Rocky Mountain system, and the northern and southern parts of the Pacific Coast region.

THE U. S. PATENT OFFICE

WHEN Commissioner Newton was in charge of the Patent Office in July, 1919, he testified before a committee of Congress to the effect that the situation in his bureau was deplorable and that it was in a worse condition at that time than at any other time since he had been in service. His service began in 1891. The present commissioner of patents in his report to the Congress points out that the degeneration has continued steadily since the testimony of Commissioner Newton was given. Between July, 1919, and June 30, 1921, the Patent Office lost 163 of its examiners. The report states that

These men were scientifically trained and also members of the bar. They have been replaced by inexperienced men, fresh from college, without any knowledge of patent law and without legal training.

During the time the Patent Office has been losing the 163 men aforesaid, the number of applications received in this office has increased by leaps and bounds. The number of applications for patents has increased 34 per cent. during the period under discussion, while the trade-mark applications increased eighty-five and a half per cent. In July, 1919, when Commissioner Newton testified, there were 18,000 patent applications awaiting action. There are now about 50,000 applications awaiting examination. It is further shown that a number of divisions are over 11 months behind in their work, and to illustrate the large turnover in the personnel there is cited one of the chemical divisions where five out of the nine examiners have been appointed in the last few months. At the close of the fiscal year, one of these had been in the office only 1 week, another 3 weeks, another 7 weeks and another 2 months. One out of every four examiners has resigned in 16 months and more than half have resigned in 32 months. Relief is, therefore, imperative.

Reference is made to the entrance salaries of the assistant examiners, who are a highly educated and picked corps of scientific men, who receive the same initial salary as clerks who perform routine duties in other branches of the government service. Note is made of the inadequacy of the salaries paid to these technical men as compared to their qualifications and the requirements of their position, showing the necessity of correcting the disparity of conditions.

The receipts of money for the fiscal year just closed increased from \$2,615,297.33 of the previous fiscal year to \$2,712,119.69, or almost \$100,000. A net surplus of \$284,342.93 was earned and if the bonus be subtracted therefrom, the surplus amounted to \$71,743.73, making the total net surplus to date—that is, the excess of receipts over expenditures during the history of the Patent Office -\$8,376,769.92.

SCIENTIFIC JOURNALS PUBLISHED BY THE GOVERNMENT

PRACTICALLY all the technical and scientific periodicals which the Government is issuing have been suspended. These include the *Journal of Agricultural Research* and the *Experiment Station Record*, issued by the Department of Agriculture.

The matter goes back two years or more to a time when Senator Smoot secured the adoption of a resolution terminating the issue within a specified period of all periodicals not authorized by the Congress. Hearings were held and assurance was given that the committee was not concerned with scientific journals, but was particularly interested in certain war-time periodicals which had sprung up. The time for action was extended once or twice, and, as the committee had failed to decide what should and what should not be printed, an item was inserted in the Sundry Civil Bill last March, extending the time to December 1, 1921, and providing that such publications as were not approved prior to that time should be discontinued.

Near the close of the last Congress, Senator Moses, the present chairman of the joint committee on printing, secured the passage of a measure in the Senate placing the matter of continuance or discontinuance in the hands of the joint committee on printing. The resolution went to the House in the closing days of the session, where it was amended by the House committee to provide for a further extension of time to March 1. 1922, in order that the committee might have further time for consideration. No action was taken on the resolution and the periodicials in question ceased publication with December 1. The latest proposal is not to give any further authorization for the continuance of any of them. Discussion of the matter will be found in the Congressional *Record* for December 7.

THE AMERICAN SOCIETY OF ZOOLOGISTS

THE Toronto meeting of the American Society of Zoologists will convene on Wednesday, December 28, in the biological building of the University of Toronto. The sessions will continue until Friday night. The program of contributed papers numbers 109, the largest in the history of the society. The tentative program follows:

WEDNESDAY, DECEMBER 28

A.M.

Section A. Embryology, Cytology and Comparative Anatomy.

Section B. Genetics.

Genetics.