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SCIENTIFIC EVENTS

THE PULPWOOD RESOURCES OF CANADA

A ROYAL commission to investigate Canada's pulpwood resources and the advisability of prohibiting the export of this product has been appointed by the Canadian Government. The commission is headed by Joseph Picard, Quebec, a manufacturer and business man, and includes in its personnel two lawyers, one lumberman and one contractor. Instructions have been issued to the commission to inquire into the report upon the forest resources, with particular regard to the extent in each province of woods of various kinds available for the manufacture of pulp. Other directions to the commission follow:

1. To inquire into the quantity of pulp available, owned by the provincial governments and subject under provincial laws and regulations to restrictions requiring the partial or total manufacture of such wood in Canada.
2. To inquire into the quantity of wood so available on lands owned by the Canadian Government and subject under federal laws and regulations to restrictions requiring partial or total manufacture in Canada.
3. The quantity of wood on other lands and the conditions under which such lands are held, whether by ownership or lease, whether by corporations or individuals, whether by citizens of Canada or citizens of other countries.
4. The quantity of pulpwood produced in each province during the past ten years, showing the portion used in Canada and the portion exported.
5. To investigate the question of the restriction of the export of pulpwood from Canada, and any other matter touching upon the production, manufacture or sale of pulpwood essential to a comprehensive consideration of the question of the restriction of export.

The commission is to make recommendations that may be deemed expedient for the better conservation of the supply of pulpwood for present and future use. The pulpwood investigation was promised at the last session of Parliament, when the Government was given power to prohibit the export of pulpwood at that time. The Minister of Finance promised that the Government would not exercise its authority in this respect until after a searching review of the whole situation.

Chemical and Metallurgical Engineering states that the situation brought about by the proposed embargo "has given rise to much speculation as to Canada's ability to continue supplying the United States with pulpwood. It is estimated that Canada has 250,000,000 acres of forest growth of merchantable size, and 600,000,000 forested acres of young timber suitable for pulpwood. It is assumed that the 600,000,000 forested acres of young timber would yield 1,250,000,000 cords of pulpwood. The present consumption is 4,000,000 cords per annum. On that basis the supply would last for over 300 years, without allowing for from two to three per cent. of regrowth; but at that point the authorities differ. It is stoutly maintained by some experts that Canada has not as much pulpwood in sight as is supposed, and that on the basis of consumption during the past twenty years in particular, the resources would be exhausted in 60 years, or reduced to a volume which would mean exceedingly high cost for pulp."

THE FOSSIL FIELD IN MONGOLIA

THE Peking correspondent of the *London Times* writes that the researches of Mr. Roy Chapman Andrews, who for some years has been exploring the less-known regions of China and adjacent territory in the interest of the Natural History Museum of New York, are likely to add considerably to scientific understanding of prehistoric times.

Mr. Andrews concludes that Mongolia is one of the greatest fossil fields in the world, and his discoveries in this respect go far to confirm the theory that Central Asia was the center of the dispersal of the mammalian life of Europe and America. He says that the existence of a land connection between Asia and North America has been unquestionably established.

With reference to the work of the Third Asiatic Expedition under his leadership, now busy in the Gobi Desert at a point about four hundred miles northwest of Peking, Mr. Andrews says:

The first month of the expedition's work is far beyond our hopes. Where we expected only fragments we have discovered an immense deposit of large and small dinosaur bones. It will require many months to exhaust this region, but we have removed two partially complete skeletons and parts of several others. This includes herbivorous dinosaurs 30 feet long of the *iguanodon* type and smaller carnivorous species. These bones are at least five million years old, but beautifully preserved. They probably are related to European types and, with our former work, indicate that Central Asia is the ancestral home of the dinosaurs, which migrated to Europe and America.

The expedition is now divided into two parts. One is working in the dinosaur beds and the other exploring later geological strata. The second group, camped 24

miles south of the first, is working in eocene deposits, the dawn period of mammalian life. The strata are extraordinarily rich in fossil remains. We have discovered the skull of a giant rhinoceros—like the beast known as the titanotheres, which, although it has been buried for three million years, is almost as perfect as though the animal had died a week ago. The titanotheres were previously only known in America. Finding this particular stage in their development shows that they crossed from America by way of a former land bridge to Asia.

We have found, also, remains of a giant dog-like carnivore, as well as many teeth and jaws of an ancestral tapir-like animal. We could spend easily a year's work in these great deposits, but will give them only enough time to get a few of the choicest things.

THE GODMAN AND SALVIN MEMORIAL

A TABLET in memory of Frederick Du Cane Godman, F.R.S., and Osbert Salvin, F.R.S., has been unveiled by Lord Rothschild, chairman of the memorial committee, at the Natural History Museum, South Kensington, and accepted on behalf of the trustees of the British Museum by the Archbishop of Canterbury.

The London *Times* notes that these two distinguished men of science were intimately associated in research and the results of their labors form an important part of the treasures of the Natural History Museum. The friendship between them dated from the fifties of the last century, when they were both undergraduates at Cambridge, and lasted until the death in 1898 of Salvin, who was survived twenty-one years by Godman, the latter dying in 1919, in his eighty-sixth year. In 1876 the two friends conceived the idea of the monumental work entitled *Biologia Centrali-Americana*, which has been described as without doubt the greatest work of the kind ever planned and carried out by private individuals.

As completed, the *Biologia* consists of sixty-three volumes, of which one forms the introduction, fifty-one are devoted to zoology, five to botany, and six to archeology. The work was edited by Salvin and Godman, and after Salvin's death by Godman alone. The three volumes on the birds and three others on the diurnal lepidoptera were prepared by Godman and Salvin themselves, while the others were written by various specialists. The volumes contain 1,677 plates, of which more than nine hundred are colored, and the total number of species is 50,263, of which 19,263 are described for the first time.

In 1885 Godman and Salvin resolved to present their wonderful neo-tropical collections to the British Museum. Of birds' skins alone over 520,000 were contained in this magnificent donation, which included not only the collections made by Salvin and Godman themselves, chiefly in Guatemala, but many others from various parts of South America, the Mexican collections obtained by Godman himself and his col-

lectors, made in that country in 1887, and the great Henshaw collection of the birds of the United States containing over 13,000 specimens, which was secured by Godman in order to provide a thoroughly authentic series of North American birds for comparison with those of Mexico and Central America.

The commemorative tablet, with portraits in relief of Salvin and Godman, is placed on the wall of the central hall of the museum, near and behind the statue of Darwin.

Lord Rothschild, in presenting the tablet on behalf of the subscribers, explained that the committee had decided that any subscriptions left over after the memorial had been paid for should be devoted to a collecting fellowship. Shortly after that decision Dame Alice Godman and the Misses Godman devoted a further sum of £5,000 to the Godman Exploration Fund, to which others had given further donations.

The Archbishop of Canterbury, in accepting the tablet, expressed the cordial welcome given by the trustees to gifts of that kind. Mr. Godman was one with whom it had been his privilege to sit for years as one of the trustees on the committee of management of museum affairs. Those who shared that privilege knew well how wide was the range of his knowledge and how applicable it was to almost anything that might arise. The Archbishop commended the setting up of memorials of great representatives of science and great benefactors to the museum. In Mr. Godman they had not only one of the donors to whom they owed so much, but also a valued trustee. He wanted to emphasize the importance which seemed to him to attach to taking care that such names, such acts, such memories and such lives should not be forgotten by those who looked at the specimens and collections the museum contained. He believed that in thus recording the services rendered by men such as Mr. Godman and Mr. Salvin they were serving the best interests of the museum.

SIR WILLIAM THISELTON-DYER

THE following letter, printed in *Nature*, has been addressed by British botanists to Sir William Thiselton-Dyer, who celebrated his eightieth birthday on July 28:

The occasion of your eightieth birthday affords us the opportunity of which we gladly avail ourselves, not only of offering you our congratulations upon having attained so venerable an age, but also of assuring you of our continued regard and esteem. In doing so we who sign this letter do but acknowledge our indebtedness to you for the inspiration and guidance which we, both as teachers and researchers, have derived directly or indirectly from your own early work as a professor of botany. We regard that work, and more especially the courses of practical instruction conducted by you at South Kensington