total number of ties used, was, nevertheless, an indication of the increase in this particular form of conservation. In 1912 1,818,189 ties were chemically treated. This number of ties purchased. Steam railways used 1,798,189 of these treated ties and electric roads used 20,000.

The treated ties were mostly hardwoods, as it has been found more economical to treat the heavier, stronger woods than those which are liable to fail from mechanical wear before they have time to decay. The greatest actual saving by preservative treatment is found in the use of the so-called 'inferior woods,' provided that these are properly protected from mechanical wear. Until the price of the durable woods become excessive the railway companies will not resort to expensive treatment of inferior woods on account of this cost of protecting them from mechanical wear.

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## ALPINE CLUB OF CANADA.

The extent to which the work of the Alpine Club of Canada has grown is shown in the issue of a hundred page special issue of the Canadian Alpine Journal, the organ of the Club. The Club, of which Mr. Arthur O. Wheeler, F.R.G.S., is the energetic director, has its headquarters at Banff, Alberta, and the permanent address of the Secretary, Mr. S. H. Mitchell, from whom further information may be obtained, is Sidney, B.C. This issue contains the reports of the party from the Smithsonian Institute of Washington, D.C., which collaborated with the Club in its 1911 expedition to the Mt. Robson region of Britanian and the collaborated with the Club in its 1911 expedition to the Mt. Robson region of Britanian and the collaboration of the collaborati ish Columbia and Alberta in the vicinity of the transcontinental line of the Grand Trunk Pacific Railway. Those who represented the Smithsonian Institute were Mr. N. Hollister, who studied the mammals; Mr. J. H. Riley, who reported on the birds; and Mr. Paul C. Standley, who was the botanist of the expedition. The issue conbotanist of the expedition. tains a large number of half tone engravings of photographs of scenes and specimens and a map by Mr. Wheeler of the region traversed. Every year the work of the Alpine Club extends and Canadians are thus being made better acquainted with their great mountain heritage.

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