

branches, but, although spreading in direction at their bases, are more or less curved upwards in a second manner, presenting a nearly uniform flattened brush-like surface of foliage. The cones vary in absolute size, according to vigour of tree, etc., but are always of much greater length and usually more slender than those of the other species, being nearly cylindrical, not sensibly thickened in the middle as in *nigra*, nor below the middle as in *rubra*. Dr. Bell well expresses their form as finger-shaped. The scales are also more numerous than in the allied species, and the spiral arrangement is different. The cones are green at first, the individual scales being sometimes clouded with a slight brown band-like patch on the exposed part, but not extending to the edge. In ripening, the green color mellows into a more or less decided straw color, but the cones when mature are never either dark or decidedly reddish. When of a lively straw-color, and profusely produced all over the tree, as we often see them along the shore, hanging down from the drooping tips of the young branchlets, the contrast with the bright silver-frosted needle foliage is very pleasing, so that the white spruce is one of the most ornamental of our native trees, and admirably adapted for sea-side shelter. The edges of the cone scales are always quite entire.

Prof. Bell, M.D., President of the Fourth Section of the Royal Society, has very kindly made careful observations, and communicated them to me, on the several points of difference between the white and black spruces. Through his kindness, also, I have had opportunity of examining specimens from widely separated localities throughout the Dominion. His opportunities of travel, for observation and collection of specimens, during his long connection with the Geological Survey of Canada, have been exceptionally favorable. Dr. Bell points out that the most obvious distinctions between the black and white spruce are (1) that the latter is a larger tree than the black, coarser, lighter in general color, as well as in color of bark, twigs, etc.; (2) that, in the white spruce, the boughs are stiffer, more vigorous, and flatter than in the black; (3) that the cones differ in many ways; in the white, they are scattered all over the tree, although most abundant near the top, and drop off every year, whereas the black spruce cones adhere for two, three, four or five years—the current year's crop being at the top (mostly), the previous year's next