

series are suddenly disrupted and partly overturned, where they come in contact with a belt of brick-red feldspar porphyry which separates them from an older and more highly metamorphosed series occupying the country inland. In the immediate vicinity of this disturbing element the lower red and green shales and red sandstones are seen, in a low outcrop, striking along the shore. One band of impure, reddish limestone occurs, evidently lower down than any in the section at Smith's Point. At the immediate contact with the porphyry the sandstones become altered to dull-white quartzites and lose much of their original character. One other small, narrow trough of reddish and greenish shales, with a thin bed of limestone was seen in the valley of Shoal Harbor River a short distance inland, apparently of Cambrian age. No other rocks which could be identified either lithologically or otherwise, as referable to the same period were met with anywhere further north or west during the season. The great metamorphosed series occupying the country in the rear of Smith's Sound appear to be spread out over an enormous extent of country. Their contact with the belt of porphyry which separates them from the Cambrian, is not well seen, as the land is low and no rock is exposed for some distance. The first outcrops seen at the head of the Sound and in the railway cuttings present an amorphous mass of more or less dull, greenish colour and fine, close texture. No lines of stratification are visible, but some purplish, irregular bands seem to indicate a sedimentary origin. By far the greater bulk of these rocks have a more or less slaty structure. They vary in color from dark bottle-green to gray and purplish. Sometimes they partake of a brecciated character. The dark-green portion of the mass is more or less chloritic. P.e., yellowish epidote in strings and patches, often resembling lines of stratification, occur at frequent intervals, while some of the purplish bands approach jaspers in hardness. Intermixed with these more slaty rocks in a most confused manner are numerous belts or masses of graywacke, trap, greenstones, felsites, quartz porphyries, volcanic ash-beds or tuffs, &c. A short distance up the valley of Shoal Harbor River a massive, coarsely crystalline gabbro, forming a belt about 100 feet wide, strikes across the railroad track, running in a N. E. and S. W. direction. It appears to be chiefly constituted of dark, bottle-green hornblende with a considerable admixture of feldspar, usual-