NOTES AND ERRATA: VOLUMES 1 AND 2

VOLUME 1.

O. BOLZA: *The elliptic σ-functions* $\cdots$.

P. 54, l. 8 up. *For* J' *read* T'.

W. F. OSGOOD: *On the existence of the Green's function* $\cdots$.

Pp. 310–314. I desire to point out the relation of my paper "On the existence of the Green's function for the most general simply connected plane region" to the analysis contained in HARNACK'S *Logarithm. Potential* (1887), § 39. HARNACK there proposes the problem of showing the existence of a Green's function corresponding to an arbitrary simply or multiply connected continuum, i. e., precisely the problem that I have solved for a simply connected continuum, the extension of my results to multiply connected continua being obvious. (The extension is, namely, this: A Green's function for a multiply connected continuum will always exist when the boundary of the region does not contain isolated points, but is such that with each point of the boundary may be associated two other points so chosen that the three points lie on a Jordan curve.) In the solution which follows he restricts himself to a simply connected continuum F bounded by a Jordan curve C (cf. footnote, p. 310 of my article) and by an arbitrary set of curves (Einschnitte), finite in number, which lie within C, meet C each in a single point, and do not cut themselves or each other. In order to solve the problem, he constructs a set of nested polygons lying within F and having the boundary points of F as their points of condensation. The Green's functions belonging to these polygons are shown to converge toward a limit g, corresponding to the function u of my paper, which is a function similar in character to the Green's functions just considered. Up to this point both HARNACK'S methods and mine are substantially the same as those of POINCARÉ, Bulletin de la Société mathématique de France, vol. 11 (1883), p. 112; cf. also HARNACK'S