

$$y = - \int_a^b G(x, \xi) p(\xi) d\xi.$$

A special case deserves mention on account of its simplicity, viz., the case where conditions (b) reduced to

$$G(a, \xi) = G'(a, \xi) = \dots = G^{(k-1)}(a, \xi) = 0$$

and conditions (c) to

$$G(b, \xi) = G'(b, \xi) = \dots = G^{(n-k-1)}(b, \xi) = 0,$$

accents denoting differentiation with regard to x . One of the simplifications introduced by this specialization is that when x and ξ are now interchanged, the effect is to interchange a and b in conditions (b) and (c). It will be seen that for a given equation (1) and a given interval (J) there are $n - 1$ Green's functions of this special sort, obtained by giving to k the values 1, 2, ..., $n - 1$. These functions might properly be called Green's functions of the first kind, since when $n = 2$ there is only one of them, namely the Green's function, which vanishes at both ends of (J).

GÖTTINGEN, GERMANY,
February 8, 1901.

ON A SYSTEM OF PLANE CURVES HAVING FACTORABLE PARALLELS.

BY DR. VIRGIL SNYDER.

(Read before the American Mathematical Society, December 28, 1900.)

THE type of scrolls contained in a linear congruence, and having factorable asymptotic lines, gives rise to a class of plane curves whose parallels have a similar property.

It has been shown* that the spherical images of such scrolls have factorable lines of curvature and a method was given by means of which a scroll of this type could be transformed into an annular surface having only plane lines of curvature, the curve of each section breaking up into two factors. The planes of the system all belong to the same axial pencil, and the locus of centers of the generating spheres lies in the bisecting plane of the angle between the two plane directors.

* V. Snyder, "On a special form of annular surface." *Amer. Jour. of Math.*, vol. 23.