

THE
THEORY OF
DETERMINANTS
in the
HISTORICAL ORDER
OF DEVELOPMENT

VOLUME THREE
THE PERIOD 1861 TO 1880.

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IN MEMORY OF
M. (B.) M.



PREFACE.

SAVE to a minute extent the present volume, unlike the two preceding it, has not had the advantage of appearing in a preliminary form under the auspices of the Royal Society of Edinburgh. This change of procedure has in no wise been due to a falling off in good will on the part of the Society, to whose helping and encouraging hand I am lastingly indebted, but to the widespread untoward circumstances of the years 1914-18. On the other hand, the delay brought about by the same cause has made repeated revision possible, so that there has been practically an equal opportunity for securing that fullness and accuracy of treatment which have been aimed at from the outset.

The bibliographical groundwork is of course still the five 'Lists of Writings' previously referred to. A sixth that was published in 1916,* containing the results of a final gleaning, has also been fully taken advantage of.

During the period dealt with there has been a still further increase in the number of specialized determinant forms, and of these there has been a proportionate number that have attracted a considerable amount of general attention. Forms of the latter character have each been given separate consideration, and as a consequence the number of chapters in the volume has suffered a corresponding increase. By this course the inevitable scrappiness of a chronologically arranged report of isolated papers is somewhat diminished,

* *Quart. Journ. of Math.*, xlvii. pp. 344-384.

an improvement in readableness is secured, and the book made more readily useful as a work of reference. It is hoped, for example, that the specialist in *skew* determinants who takes up in succession the fourteenth, ninth, tenth chapters of volumes I., II., III. respectively, will find a fairly connected and interesting account of the development of his particular branch of the subject, and also that the general student will obtain with increased ease any information he may desire on some single point of passing interest to him.

The fourth volume, bringing the record up to the end of the nineteenth century, is nearly complete in manuscript. My hope is to complete it and to include in it a detailed index to the whole work.

RONDEBOSCH, SOUTH AFRICA,

23rd June, 1918.

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