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William Palin Elderton and Norman Lloyd Johnson
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AND

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Preface

Sir William Elderton's *Frequency Curves and Correlation* was originally published in 1906. It has remained a widely used book for upwards of sixty years, and has appeared in four editions. With each new edition the author took the opportunity to up-date the material in his book. With the passage of time, however, it became clear that further, and substantial, revision would be needed to include an adequate treatment of some more recent developments, and remove some material which was no longer of the same relative importance under present-day conditions.

The present work is the result of this revision of the fourth edition. The revision has been sufficiently drastic to warrant it being regarded as a new book, but much of the original material is still included, so that one might also consider it as a kind of 'fifth edition'.

Although there are substantial changes from the fourth edition of *Frequency Curves and Correlation*, especial attention has been given to retaining the original character of the work. The new discussion of curves other than those in the Pearson system has been presented in a form as similar as possible to that in the earlier editions. Further, the level of treatment is as close as possible to that in the original work.

Practically all the material on correlation has been removed. This subject is now covered quite adequately in many textbooks. Of recent years it is the lucid description of Pearson system curves (in particular) which has underlain the continued popularity of Sir William Elderton's book. For this reason, the space freed by omission of material on correlation has been used in an attempt to provide comparable treatment of other distributions, including some multi-variate distributions.

While care has been taken to retain, as far as possible, the tone of the original—and even extend it to the newly introduced material—historical changes over more than sixty years have rendered some amendment of the original text desirable. Such amendments have been applied sparingly, without altering the original meaning in matters of opinion except where later research has changed the

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data on which opinion is formed. Sir William Elderton wrote, occasionally, in the first person. Where such sentences remain, it is to be understood that the personal pronoun does not apply to the present author. (In the newly added material the first person is not used.)

The methods of calculation adumbrated in the original work are those appropriate to desk calculators. With the advent of much more efficient forms of calculating assistance these methods may be found less important. They are still, however, of interest and can be useful on occasion. Their general description has, therefore, been retained, though detailed discussion of operations with arithmometers has been omitted.

Chapel Hill, North Carolina

N. L. J.