by series to the Legendre, Bessel, and hypergeometric equations
will be useful to the student.

The last of the important Zusätze (see pages 637–663) is
devoted to an exposition of the theory of systems of simul-
taneous differential equations of the first order.

Having thus passed in quick review the contents of the book,
it is now apparent that the translator has certainly accom-
plished his purpose of making it more useful to the student of
pure mathematics.   There remains the question whether
there are not other additions which would have been desirable
in accomplishing this purpose.   There is at least one which,
in the reviewer's opinion, should have been inserted.

In connection with the theory of formal integration by series
it would have been easy to insert a proof of the convergence
in general of the series for the case of second order equations;
and one can but regret that this was not done.   Such a treat-
ment would have required only a half-dozen pages; and it
would have added greatly to the value of this already valuable
section.   The translator's reason for omitting it is obvious;
he was making no use of function-theoretic considerations,
and such a proof would have required the introduction of
these notions.   But the great value to the student of having at
hand this proof, for the relatively simple case of second order
equations, seems to be more than a justification for departing
in this case from the general plan of the book; it seems indeed
to be a demand for it.

On the whole the translator has rendered a distinct service
to beginners in the modern theory of differential equations.
The Zusätze which he has inserted in this volume have to do
with well-selected topics and the treatment is for the most
part very satisfactory.   The careful arrangement of material
and the numerous and convenient cross-references given
throughout the Zusätze and the Auflösungen are especially
to be commended as contributing to the reader's comfort.
The usefulness of such mechanical conveniences is often over-
looked by authors.   R. D. CARMICHAEL.

Calcul des Probabilités.   Par H. POINCARÉ.   Rédaction de
   A. QUIQUET.   Deuxième edition, revue et augmentée.
   Paris, Gauthier-Villars, 1912.   335 pp.

THE first edition of Poincaré's Calcul des Probabilités was
published in 1896; thus it has been before the public for sixteen