

I have read with such pleasure since the days when I first met with Dr. Salmon's incomparable treatise on conic sections.

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NOTE ON PAGE'S ORDINARY DIFFERENTIAL EQUATIONS.

AN interesting review of this elementary text book was given by Professor Lovett in the *BULLETIN*, April, 1898. As the suggestions offered in the review cited are mainly of a general nature and appeal especially to those teachers familiar with the larger works of Lie, and hence able to make the desirable amplifications, it would seem worth while to address to the average reader or teacher of this text a few critical remarks of detailed character. Since my first acquaintance with Lie's groups and theories of integration, I have had the desire to introduce a class of mature students to the theory of ordinary and partial differential equations through the medium of continuous groups. Having used* the text by Page, I am more than ever convinced that the proper method (and one that will come more and more into vogue) of attacking differential equations is that which employs the powerful machinery—so simple when once mastered—set up and perfected by the illustrious Lie.

Being in full sympathy with the aims of the text, I was glad to find that, on the whole, the task had been well executed. I trust that in a second edition all objections that prove to be well grounded will be eradicated and that the errata, too numerous for an elementary text, will be corrected.

There is a curious mistake on p. 6, where the tangents to every integral curve of an ordinary differential equation are said to pass through the origin! This is indeed the case for the only example given in the paragraph concerned. The answer to Ex. (19), p. 9, should be

* During a year's graduate course in continuous groups, we devoted two months to the reading of Page's text, finding it a very practical supplement to a course of lectures on the general theory.