

historical note before the reimpression of the *Traité du triangle arithmétique* (volume 3, pages 435–444) never mention the name of one of the greatest European mathematicians of the sixteenth century.

GENOA, ITALY,  
June, 1909.

---

### DARWIN'S SCIENTIFIC PAPERS.

*Scientific Papers.* By SIR GEORGE HOWARD DARWIN, K.C.B., F.R.S., Plumian Professor in the University of Cambridge. Vol. I, *Oceanic Tides and Lunar Disturbance of Gravity*, xiv + 463 pp.; Vol. II, *Tidal Friction and Cosmogony*, xvi + 516 pp. Cambridge University Press, 1907, 8. Royal 8vo.

IF one were in need of an example to illustrate the English use of the term “applied mathematics,” it would hardly be possible to find a better one than that furnished by the scientific papers of Sir George Darwin. Many investigations ranging from the purest of pure mathematics to the observational portions of the phenomena of nature have at times been placed under this title in our journals and treatises, and after all our language is governed by general usage and not by arbitrary rules. But in the use of an imported term it would seem better, in spite of the customs of late years, to take the foreign value rather than the domestic as the basis of definition. This definition implies an actual or suggested relation between a problem set forth on arbitrary hypotheses and the observed phenomena of matter in space. The course which the argument follows — the laying down of hypothetical laws approximating as nearly as may be to those of nature, the translation into and development of those laws by means of symbols, and the final transference from the symbols back to the phenomena, is well known. The skill of the applied mathematician is chiefly shown in his management of the second of these stages so as to produce as much as possible in the third.

One cannot read any of Professor Darwin's papers without noting this attitude towards his work, and it is markedly shown in the excellent prefaces with which he introduces the papers contained in the two volumes under consideration. In them he gives a clear synopsis of each memoir, with observations on the results obtained. These observations are almost always on