# THE MATHEMATICAL GAZETTE

EDITED BY T. A. A. BROADBENT, M.A. Wills Hall, Bristol, 9.

LONDON

G. BELL AND SONS, LTD., PORTUGAL STREET, KINGSWAY

Vol. XXVI.	FEBRUARY, 1942.	No. 26	38
			=

#### CHARLES PENDLEBURY, 1854-1941.

I.

In an old number of the *Cornhill* there is an article in which the habits and character of C. Pendlebury are deduced from the examples in the famous Arithmetic. This number was among Pendlebury's treasured possessions and perhaps few best-sellers have evoked so delicate a compliment, for it is not always easy to remember that behind the overwhelming figures of millions of sales there is some real human being. Nor is it always easy to remember that behind the steady growth of our Association, from the few sturdy heretics who met under J. M. Wilson's chairmanship at Rugby in 1871 to the 1700 members of to-day, there has been the driving force of some outstanding personalities. Pendlebury joined the Association in 1885, became a Secretary in 1886 and held this office till his resignation in 1936. During that fifty years, the Association dethroned Euclid and reformed the teaching of geometry, threw out Branches in Great Britain and Australia, published a long series of authoritative reports on the teaching of mathematics and a journal which is now not far from its three-hundredth number. In all these activities, as well as in the routine of his official duties, Pendlebury played a part, if often a part in the background. He abhorred that efficiency which cannot proceed without ostentation. But if you could persuade him that some course of action should be taken, you might safely leave it to him to carry out. You would go to him with a suggestion for some change or other; he would listen to you with the courteous care of the deaf (in later years he was very deaf), and always with that benevolent smile which seemed to say : "Dear me, these young folk are really growing up "; he would point out

the weak places in your plan, perhaps even tell you how such a scheme had been tried and had failed thirty years ago. But in a short time you would discover that the good points in your idea had been quietly and efficiently put into operation.

Pendlebury filled a long life with many activities. In this place it is particularly our duty and pride to record the long connection between our Association and one who, both as teacher and as writer, exercised so powerful an influence on the teaching of our subject.

T. A. A. B.

### п.

My personal acquaintance with Charles Pendlebury began some thirty years ago when I joined the Council of the Mathematical Association. The meetings were then held in the Staff Room of my own college in Southampton Row, around what was normally our tea-table. Pendlebury sat at the President's elbow with his colleague (and my colleague) Miss Punnett by his side—the ideal secretary, quiet and unobtrusive, but keeping a sharp eye upon whatever was proposed or transacted, and omniscient about the Association's business affairs. These were close, lively and multiplex associations, yet somehow they did not enable me to identify the secretary of the Mathematical Association with the author of Pendlebury's *Arithmetic*; these two conceptions maintained in my mind a distinctness which was, I think, never wholly overcome.

As rumination over old times awakens this strange suspicion, I seem to understand, better than before, the success of the famous book. The elements that go to the making of some books are so intimately fused that one can hardly think of them as separable; they compose entities endowed with a unity that defies bifurcation into a writer and something he has written. For most people Boswell's *Johnson* is one of these, and, for thousands of boys and girls at school—perhaps even for their teachers—Pendlebury's *Arithmetic* must have been another. It never occurred to them that a man once sat down before a pile of blank paper and began slowly to make the book; for them it was just one of the wonders of creation that one accepts without inquiry about its genesis.

When this kind of thing happens it must be because the author puts so much of himself into his book that it acquires an active personality of its own, reflecting the author's, yet in a queer way independent of it. This miracle is, I think, visible in Pendlebury's *Arithmetic*; for its unromantic pages express in a curiously living way the lineaments of his clear and orderly mind, his gentle firmness of purpose, his quiet steadiness of character.

But when Pendlebury started out to make his book he was undoubtedly favoured by the *Zeitgeist*. In the mid-Victorian years Isaac Todhunter had created a series of mathematical textbooks which are, one fears, remembered now only by old-stagers, but ought to be reckoned among the soundest achievements of English education. He dealt memorably with Euclid, algebra and trigonometry, to say nothing of higher studies, but, except for a work on mensuration, left arithmetic alone. The old-stagers among us must often have gained their knowledge of arithmetic (as I did) from a textbook written, probably, by an itinerant teacher of its mysteries. one who was in a position to impart valuable tips to many kinds of commercial and professional people-" mixtures" for the grocer, "tare and tret" for the transport clerk, "duodecimals" for the architect and builder, rules for a timber merchant to use in sizing up timber, and so forth. But towards the end of the reign the propaganda of the Society for the Improvement of Geometrical Teaching and other innovating influences had made that kind of thing obsolete; mathematics had won a well-assured place in the secondary school curriculum, and it was seen that arithmetic, freed from its compromising connections and treated scientifically, should be taught as an essential part of it. Notwithstanding meritorious efforts which need not be mentioned here, the "Todhunter" in arithmetic had not yet emerged. It was to appear in 1886 under Pendlebury's name—a work endowed with all the Todhunter virtues. but with what was then a refreshing modernity of treatment, and with experience of the needs and capabilities of boys embodied in every page.

Tout passe, and Pendlebury's work may some day be superseded. But if that day comes to it, as it came to Todhunter's, its successors will for many generations owe a great and, one hopes, not unacknowledged debt to one of the most honest, capable and thorough textbooks of an earlier time. T. P. NUNN.

#### III.

In trying to give an impression of the work done by Mr. Pendlebury in his fifty years as honorary secretary of the Mathematical Association, I find myself seriously handicapped by the fact that. during the earlier and most important part of that work, I had no contacts with him or with the Association. During my many years of collaboration with him, however, I came to know him well enough to be able to form a fairly vivid idea of his activities during those earlier years, when the Association was still young and some of its most characteristic features were in process of development. I can picture him, quiet, imperturbable, efficient, always ready to produce from the unfailing storehouse of his memory helpful facts and figures. together with wise comments and suggestions and timely warnings. And there was nothing colourless about his contributions to discussion : everyone who ever worked with him knows how deeply he had the interests of the Association at heart, and what definite views he held as to its proper position and functions. He took a keenly interested part in the first formation and subsequent development of the Teaching Committees and kept careful and conscientious watch over the carrying out of the details of their constitution. Throughout the whole of his long period of office he was untiring in his efforts to take every opportunity of founding new Branches.

and, in general, of increasing the membership of the Association. It was, I remember, a red-letter day for him on which the number of members reached a thousand. He was, for once, really excited.

It was his unfailing attention to the details of the business of the Association that led to that smooth running of its affairs that everyone learned to take for granted, often, perhaps, without fully realising the efficiency that was behind it. In this connection it may be worth recalling that for a large part of his period of office the whole work of arranging the programme of the Annual Meeting was in his hands. It was only when the meeting overflowed into two days, at a time when the increased membership added greatly to his other work, that he felt the task too much for him and asked to have a programme committee appointed to take that business off his hands. I must confess that when I first became his fellow secretary, it was with much trepidation lest I should prove wanting and the efficiency of the Association's "secretariat "should be lowered. But his steady support and kindly, good-humoured reminders made things easy: "İsn't it about time the notices about " so-and-so " went out?" "Don't forget that" such-and-such a report "should be in the printers' hands " by such a date, and so on.

Mr. Pendlebury was for so long an integral part of the Association that for many people it was hard to imagine it without his guidance or to realise the fact of his resignation when it came. And now his death has brought to those who knew him best an added sense of personal loss. It is sad to know that never again shall we see him, even as an unofficial member, at our meetings or exchange views with him as to "how things are going". MARGARET PUNNETT.

## GLEANINGS FAR AND NEAR.

1385. The four Indians sat for some time watching how the strangers roasted their meat and cooked their rice.

"You've come a long way, no doubt", one of them said at last, "and no doubt you have a long way still to go. You are very clever men, that's sure."

"We can read books," Curtin replied, " and we can write letters, and we can reckon with figures."

"With figures?" another of the four asked. "Figures? We don't know that."

"Ten is a figure," Curtin explained. "And five is a figure."

"Oh," said another of their guests. "That's only half of it. Ten is nothing, and five is nothing. You mean ten fingers or five beans or three hens. Is that it?"

"That's so," Howard put in.

The Indians laughed, because they had understood, and one of them said: "You can't say ten. You must always say ten what. Ten trees or ten men or ten birds. If you say ten or five or three without saying what you mean, there's a hole and it's empty."—B. Traven, *The Treasure of the Sierra Madre.* [Per Dr. D. Pedoe.]