

Notes on James Gray.

By CHARLES TWEEDIE.

(Received 19th October 1924. Read 7th November 1924.)

Very little information is now to be found regarding James Gray, the author of the famous Scottish Arithmetic, so universally in use in Scotland during the 19th century as to make his name synonymous for Arithmetic, just as Cocker's was in England during the 18th century.

What information I have obtained comes mainly from the *Memoir of R. Chambers*, by his brother William Chambers; Dr Williamson's *Glimpses of Peebles*; and from the Burgh Records of Peebles and Dundee, the two towns with which Gray was associated in his lifework as a schoolmaster. It seems desirable to piece this information together before Gray's memory fades entirely into oblivion.

It is an interesting fact that Gray was master of the English School at Peebles when the two brothers, W. and R. Chambers, attended that school, so that Gray had a share in the education of the founders of the well-known Edinburgh Publishing Firm of Chambers. The account they give of their teacher is not very flattering, but it must be remembered that it was shortly prior to Gray's death in 1810 that they were his pupils, when Gray was well up in years, and any weakness of character would likely be magnified.

They allow that he was a good teacher, but that he kept deplorable discipline, while he had a weakness for the bottle, which led to his frequent absence from school, or incapacity to control the scholars when he was present. Gray was not a severe disciplinarian—in his day this was considered a weakness, as one may learn from the Scottish novels of George Macdonald and Hugh Miller's "*My Schools and Schoolmasters*."

Gray, however, had his good points. He sang a good song, and in 1786 he was elected a member of the Peebles Club.

He seems to have been appointed to the school about 1776, as we learn from an entry in the Burgh Records of Peebles for 1796, which records an application by him for an increase in his emoluments. In his application he points out that he

had "taught the English School for Reading, Writing and Arithmetic at his entry and for twenty years, first at one shilling a quarter, raised in 1782 or 1783 to one shilling and sixpence, from such scholars as were taught Writing and Arithmetic." (The Council in response increased the fees by sixpence for each scholar.)

In 1798 Gray resigned his charge in Peebles for a similar office in Dundee, as the following Burgh Record of Dundee clearly shows.

EXCERPT.

"*Saturday, 24th March, 1798.* The Council nominated and appointed Mr James Gray, Schoolmaster at Peebles, to be Public Teacher of English in this Burgh in room of the deceased John Small, and that *ad vitam aut culpam*, and entitle him to a yearly salary of £20 sterling to commence from the time of his entry, which is hereby declared to be at the term of Whitsunday next, and also to the fees or quarterly payments payable by the scholars, but with the express declaration that it shall be in the power of the Town Council from time to time as they may think proper to fix and regulate the fees or quarterly payments to be paid by the scholars, and to arrange the hours, mode of teaching and other manner of conducting the School and Education therein, and to all of which the said James Gray shall be obliged to submit and conform."

The fees in Dundee were higher than in Peebles, amounting at the time to five shillings per quarter per pupil *plus* coal money in winter.

But, in any case, the Council did not pay an extravagant price for Gray's services.

He held the appointment for six years only as the following entry testifies :—

"*Thursday, 22nd March, 1804.* There was this day produced and read in Council a letter from Mr James Gray resigning his office of Public Teacher of English in this Burgh, of which resignation the Council accepts."

During his absence from Peebles things had not gone well with the English School. A Mr Brown was appointed, but

stayed only a short time, and, on his leaving, Mr Sloan, Rector of the Grammar School, was asked to take charge also of the English School, but as he had to appoint an assistant, he found it did not pay. Still no new appointment was made, and when Gray applied in 1804, the Council placed him in his former position, and he held it until his death in 1810.

In accepting the appointment, Gray expressed his attachment to the good town of Peebles for various reasons. It was during this latter period that the brothers Chambers were his pupils.

There were no Government Inspectors in those days, but there is a report of a visit to the school by the ministers of the Presbytery, from which we take the following excerpt :—

“ Peebles, *23rd April*, 1807. . . . The school under the care of Mr Gray discovered the same correct knowledge of the English Language, and both (*i.e.*, Grammar School and English School) showed that they were well instructed in the Assembly’s Shorter Catechism. These schools are at present in so flourishing condition that both masters have found it necessary to get assistants.”

Gray died in 1810 and was buried in Peebles Churchyard, and the tombstone over his grave bears the following inscription :—

ERECTED
IN MEMORY OF
JAMES GRAY,
LATE SCHOOLMASTER, PEBBLES,
WHO DIED ON THE 3RD OF JUNE, 1810,
AND ANN THOMSON, HIS SPOUSE,
WHO DIED ON THE 1ST OF MAY, 1788,
ALSO ISOBEL MASH, HIS SPOUSE,
WHO DIED ON THE 8TH OF OCT., 1808,
AND SEVEN OF THEIR CHILDREN.

Sacred to those whose lifeless cold remains
Here mouldring mingles with their native clay
Who whilst on earth employed their utmost pains
In social acts to soothe their rugged way.

GRAY'S EDUCATIONAL WORKS.

Gray wrote four books—

- (1) *A Concise Spelling Book for the Use of Children.*
- (2) *An Introduction to Arithmetic.*
- (3) *A Collection of Hymns and Spiritual Songs.*
- (4) *The Scholar's Companion.*

I add a few remarks regarding (1), (3), and (4).

(1) *A Concise Spelling Book.*

The copy in the British Museum is of date 1794, and as it is the Eighth Edition, one naturally infers that Gray wrote it about 1787, if not earlier. It is a duodecimo of 108 pages like "the Gray" which it much resembles.

This edition has a dedication to the Provost and Town Council of Peebles.

"Edinburgh. Printed by George Caw for the Author, and sold by A. Barrie, Teacher, Writers Court, Author of the English Collection,"

Some sort of partnership seems to have existed between Gray and Barrie, for Barrie's books are always advertised on the title page of the earlier editions of Gray's books.

Barrie's *Collection* had a great sale. His *Tyro's Guide to Wisdom and Wealth* was also well known. Barrie may have been a relative of Gray, and Gray's books seem to have passed into his possession on the death of Gray.

By 1804 the Spelling Book was in the 11th edition, and in 1832 it was in its 36th edition "Revised and greatly improved by Alex. Barrie. . . . Published by James Clarke & Coy.; and Oliver & Boyd, Edinburgh, and M. Ogle, Glasgow."

The little book was clearly a very successful venture, apparently meeting the demands of the day. One would think it a dull book nowadays, with its moral maxims and extracts from the Bible, bearing clearly the influence of the Clergy on Scottish education. It contains the lines—

"How doth the little busy bee, etc., etc.,"

which still find a place in Scottish schoolbooks.

The list of Scottish towns in the last edition noticed (1832) shows that a sale of the book in England was never contemplated.

(2) The copy of the *Introduction to Arithmetic* in the British Museum is of date 1797.

“By James Gray, Author of the Concise Spelling Book for the Use of Children. Edinburgh. Printed by O. Ritchie and sold by Alex. Barrie, etc.”

It has no dedication. The book was, therefore, brought out while Gray was still at Peebles, and it preceded (3) *Collection of Hymns and Spiritual Songs*, which would otherwise have been mentioned in the title-page.

(3) *A Collection of Hymns and Spiritual Songs*.

I have not seen a copy, but the British Museum has one of date 1797 “By James Gray, Teacher of the Public English School at Dundee (late of Peebles), Author of, etc.” This is doubtless the first edition.

(4) *The Scholar's Companion*.

A copy is in Dundee Public Library of date 1808. This book is about double the size of (1) or (2) and is well printed. The main part of the book is the Compenduous System of Arithmetic, which is practically the same as (2), the examples only being changed.

I question if there was much demand for it, the price (3/6) being high for a school book in Scotland in those days. The third edition of the Compendium (1814) is in the Edinburgh Public Library.

We now return to a fuller discussion of (2), so well known as “The Gray” or Gray’s book (Grace book was a corruption of it in Peebles).

THE GRAY.

The size o’ a park, wi’ the gushets left oot,
 We’ll guess gey and near, I daursay,
 Or the wecht o’ a stot, but we wadna gang far
 Gin we tried noo the coonting in Gray.

(Murray, Author of *Hamewith.*)

Title Page of the Fourth Edition.

AN
INTRODUCTION

TO
ARITHMETIC

CONTAINING

Arithmetical Tables with the most useful Rules in common Arithmetic.

Vulgar and Decimal Fractions —Extraction of the Square and of the Cube Root.

Rules for working on the Carpenters Sliding Rule, and on Gunter's Scale.—Duodecimals, or Cross Multiplication. Practical Questions in Mensuration.

The Gregorian Calendar; with a Table for finding the Day or every mean *New-Moon* in the 19th Century. — A perpetual Almanac.—A Table for finding on what day of the Week any Month begins; also a Table for Planting.

A few Forms of Bills and Promissory Notes; a Warping Table; with a small Collection of miscellaneous Questions.

By JAMES GRAY,

MASTER OF THE ENGLISH SCHOOL OF DUNDEE,
(LATE OF PEEBLES), AUTHOR OF THE CONCISE SPELLING BOOK
FOR THE USE OF CHILDREN, AND A COLLECTION OF
HYMNS AND SPIRITUAL SONGS.

THE FOURTH EDITION.

EDINBURGH:

PRINTED BY G. CAW, LIBBERTON-WYND,
And Sold by ALEX. BARRIE, Teacher; Writers' Court ·
Author of the English Collection, Tyro's Guide, School-
Dictionary, Child's Assistant, English Grammar
and Pronouncing Catechism.

1804

[PRICE, BOUND, ONE SHILLING.]

Entered in Stationers' Hall.

THE GRAY.

Had Gray been asked during his lifetime which of his books he considered the most successful, he would probably have selected his Concise Spelling Book. Even in his most sanguine estimate he could never have foreseen that his Arithmetic was to run through a hundred editions, destined to be used in every parish in Scotland, so that a "Gray" became synonymous for Arithmetic as Euclid used to be for Geometry a few years ago.

Cocker's Arithmetic was used by Hugh Miller about 1820-1830 in Cromarty, but Gray's book had distinct points of advantage over Cocker, and although only half the size of a Cocker, it contained twice as much practical information, in spite of the fact that it dropped out the Rule of the False and the stupid rules of Alligation.

The chapter on the Gregorian Calendar in the earlier editions was a great innovation, though it was soon considered out of place in an elementary school book, and disappeared so early as 1830.

The book by its inclusion of Scottish weights and measures, along with those for England, ensured its popularity in Scotland over any English rival, though thereby the English demand for it was cut off. It must have taken much patient study to master the Tables of so many Weights and Measures.

Rules were stated in the shortest possible form, and the examples chosen were such that any one who could master his Gray could face any ordinary arithmetical problem with considerable confidence. I have, myself, met many elderly men who speak with enthusiasm of the Gray and the benefit they derived from it. So much was the book esteemed in the first half of the 19th century that in 1830, when the Ionian Islands were under the protection of Britain, a Greek edition was printed at Corfu. After the Scottish Education Act of 1870, the Gray began to lose its popularity, and since 1880, only two or three editions of the book have been printed, though there is still a small demand for it in rural districts.

Many minor changes had to be made in the course of a century of use, but on the whole Gray's material proved so suitable that most of it was retained. Publishers (there were many) were usually careful to meddle as little as possible with so popular a book. One, indeed (Orr), did make considerable changes, but the book as so "improved" was not a success, and there was a reversion to the contents of a former edition in later publications.

After Gray's death in 1810 the Arithmetic became the property of A. Barrie. Oliver and Boyd's connection with the book as printers was at least as early as 1818 (13th edition). This firm bought a *one-third* share from Barrie in 1824, when the book was in the 20th edition. In 1846 the firm acquired the whole copyright, the book being then in the 53rd edition.

By 1880 the book was in the 98th edition, and the firm had printed 395,000 copies. After 1880 the sales fell off, and only three editions have since been printed, of two or three thousand copies in each edition.

There were, however, several editions by other printers who had probably no share in the copyright.

De Morgan, in his *Arithmetical Books*, speaks of an edition by W. Rutherford, at Berwick-on-Tweed, in 1838. But oddly enough some mistake has arisen, for there was no publisher of that name in Berwick-on-Tweed, and no such publication is given in the list of books printed in Berwick-on-Tweed.

I add a few remarks on such editions as have come under my notice. In many cases they were probably simple reprints. When changes were made, the dates of the Bills of Sales given in the book were usually brought up to date.

The fourth edition is of date 1803 in the Dundee Public Library, but Oliver and Boyd possess the fourth edition as of date 1804, in which the Bills of Sales were of date 1803. Probably this was a reprint in 1804 of the edition of 1803—

"Edinburgh. Printed by G. Caw, Libberton Wynd." The book is dedicated to "The Honourable the Provost, Magistrates, and Town Council of Dundee."

By 1810 the seventh edition had appeared—

“Printed by G. Caw for the Author and sold by Alex. Barrie. . . . Sold also by P. Hill at the Cross.”

1818: 13th edition—

“Printed for and sold by Alex. Barrie, Caw, and Elder, Printers, Stamp Office, High Street; Oliver & Boyd, Netherbow; and M. Ogle, Glasgow.

“To any of whom orders may be sent.”

The forms of Bills are dated 1818.

The dedication to Dundee is still retained.

At the end

“Finis.”

Printed by Caw & Elder.

1821: 18th edition—

“Edinburgh. Printed and sold by Alex. Barrie.

Caw & Elder, Printers, High Street.

Oliver & Boyd, Netherbow.

A. Peat, South Bridge.

and M. Ogle, Glasgow.”

1829: 30th edition—

The advertisement, however, bears the date 1826, as do also the Bills.

There are considerable alterations in the Tables, following an Act of Parliament; and the dedication disappears.

The book is now printed by Clarke & Co.

“Edinburgh. Printed for Alex. Barrie.

James Clarke & Co., Printers, 221 High Street.

Oliver & Boyd, Tweeddale Court.

and M. Ogle, Glasgow.”

1830: 30th edition (stereotyped)—

It is difficult to know why this should still be called the 30th edition. It was edited by Trotter and contained several important alterations. The Gregorian Calendar and the Planting Table are thrown out.

Intermediate (*i.e.* repeating) decimals are introduced. Thus $\frac{1}{3} = \cdot\dot{3}$ is a repeater; $\frac{10}{11} = \cdot9\dot{0}$ is a circulate.

$\cdot25\ 36\dot{1}$ is a mixed decimal, and $36\dot{1}$ is its circle.

In decimals the decimal point, hitherto written at the bottom of the line (*e.g.*, 2.46), is written (2·46) as is now usual, and this is observed in later editions (but not in Orr's, 1837).

There is a fresh advertisement, of date January 4, 1830, and the Bills of Sales are dated 1829.

Barrie's name no longer appears on the title-page.

1836. In 1836 a "new and improved edition, stereotyped" was printed for James Clarke & Co. at Stamp Office—

"In preparing a New Stereotyped Edition of this Popular Work, great care has been taken to render it still more acceptable as an Elementary School Book by the introduction of New and Useful Matter."

But the book still runs to 108 pages only.

The edition is not numbered.

1837. "Orr's Enlarged and Modernized Edition. Glasgow. Published by Francis Orr & Sons, 1837."

There is no doubt that this edition was much enlarged. The Publishers assert "that by using a small type, with the addition of thirty-six pages of print, the quantity of matter in the work is nearly doubled, while no advance is made in the price (one shilling)."

But the book in this form does not appear to have been popular.

In any case, the 56th edition of 1848, called a "new edition," seems to be identical with that for 1830, save that it is published by Oliver & Boyd, Tweeddale Court, Edinburgh, and Maurice Ogle & Son, Glasgow.

Thus the advertisements are identical, as are also the dates of the Forms of Bills (1829) though the latter had been changed in the edition for 1836. Doubtless the Publishers

were anxious to publish the work in a form that had already proved so attractive.

An edition (also on older lines) was published in Montrose in 1851, but so far as I know, Oliver & Boyd are the only publishers after that date, and their latest edition is called the Hundred and First.

There are several editions of the Arithmetic in the British Museum, also in the Public Libraries of Dundee and Peebles.

