

## CORRESPONDENCE

To the Editor of the *Mathematical Gazette*

DEAR SIR,—Having read Mr. Flett's article on "An Early Nineteenth Century Exercise Book" I think I must let you know about some books which are in my possession. They are the property of Mr. E. Russell, formerly headmaster of the Verdin Grammar School, Winsford, Cheshire.

One is an exercise book written by Edwin William Woodyer of the George Street Academy, Oldham, and completed by him on May 3rd, 1839, at the age of eleven years, ten months. Woodyer was a cousin of Mr Russell's mother. The book is beautifully written and the headings elaborate. It begins with examples on Simple Proportion. In one example "a gentleman had an annuity of 896 £ 17s. per annum I desire to know how much he may spend daily that, at the year's end he may lay up 200 guineas and give to the poor quarterly 10 half sovereigns".

In the section on "Alligation" "A intermingles 15 gallons of Canary at 8s. per gallon, with 20 gallons at 7. .4., 10 gallons of sherry at 6. .8 per gallon, and 24 gallons of white wine at 4s. per gallon, what is the worth of 1 gallon of this mixture?"

The second book is the *First Book of Arithmetic for the use of Schools* printed and published by direction of the Commissioners of National Education, Ireland, in 1859. One section is on Tare and Tret. Tare is an allowance made to purchasers for the weight of the package. Tret is an allowance of 4 lb. in every 104 lb. of goods, for waste. Cloff is an allowance of 2 lb. on every 3 cwt. made to those who retail goods, for turning the scales.

The third book is *The Key to the Tutor's Guide; or, The Arithmetician's Repository*, by Mr. Charles Vyse, and published in 1802.

A letter to Mr. Vyse from Christopher Carr, Master of the Free-School at Caister, written in 1773, mentions the Tutor's Guide as a "valuable treatise on Arithmetic" "well calculated to facilitate the Buifnefs of a school in those Branches of Learning of which it treats".

Included are sections on "Double Position" and "The extraction of the Cube Root" and Algebra. There are two biblical genealogical paradoxes and questions from the "Ladies' Diary" of 1719 and 1748.

In rhyme we are told

A Country Girl to Town did go,  
Some Walnuts there to fell;  
A Gentleman fhe chanc'd to meet,  
And thus it her befel:  
"My pretty Maid" fays he to her,  
"What Number have you here?"  
"I can't tell, Sir," faid fhe to him,  
"But this I'll make appear—  
I told them o'er, ere I came out,  
By fixes, fives, fours, threes, twos:

And every Time I number'd them,  
 One remain'd Overplus:  
 I told them o'er by fevens at laft,  
 And there were no Remains:  
 If you can find the Number out  
 Pray take it for your Pains."

In a copy of *Arithmetic* by the Right Rev. J. W. Colenso, D.D., Lord Bishop of Natal, dated 1872 is a chapter on Decimal Coinage "which has been for some time under the consideration of the Government, has been recommended for adoption by a Committee of the House of Commons, and is likely, therefore, before long, to be introduced in England, as it has been already in France and in the United States of America".

Two systems of decimal coinage were proposed, the one based upon the penny or farthing, "the chief coin of the poorer classes", the other upon the pound sterling or sovereign, "the chief coin of the wealthier classes".

In the system using the farthing for its unit of reference the proposed money table was:

10 farthings make 1 Doit = 10 f. =  $2\frac{1}{2}$ d.

10 Doits make 1 Florin = 100 f. = 2s. 1d.

10 Florins make 1 Pound = 1000 f. = 20s. 10d.

The suggested coins were:

Copper—farthing, halfpenny, and penny;

Silver —doit ( $2\frac{1}{2}$ d.), groat (5d.), shilling ( $12\frac{1}{2}$ d.), florin (25d.);

Gold —half-pound (125d.), pound (250d.).

One advantage of the system was that the farthing, halfpenny, and penny were to be permanently retained and "the price of food, the rate of wages et cet., being generally fixed by the penny, much inconvenience would be saved by this means to the mass of the population".

Another advantage was that there need be no change in "the penny postage, the penny-stamp, nor the tolls for turnpikes", etc.

Yours faithfully, FLORENCE OSBORN

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To the Editor of the *Mathematical Gazette*

DEAR SIR,—I was most interested to read Miss Hartley's letter in *Gazette* No. 355 as I think I have a copy of the text-book which was used by her great uncle or his teacher. In the *Tutor's Assistant* the chapter headings are in exactly the same order as in her great uncle's letter. My copy was edited by John Fraser in 1826 having been revised previously by several other people. The book was written by Francis Walkingame, the original preface is printed though unfortunately the original date of publication is not mentioned. My copy was used by