To the Editor, *The Mathematical Gazette*

FRIDAY 13TH

DEAR SIR.—In the article, *Friday 13th* (*Math. Gaz.* LV, No. 394 (December 1971) 412–5), J. O. Irwin finds that “in the 287 years 1901–2187, Jan. 1st occurs exactly 41 times on each day of the week”, and later conjectures “that 287 years is the longest consecutive period for which the occurrence of equal frequencies is possible”.

However, in the 378 years 1812–2189, Jan. 1st occurs exactly 54 times on each day of the week. I have not been able to stretch this period, but doubt whether it can be stretched.

It is here convenient to use the Quaker method of numbering the days of the week.

		Number of day of week on which Jan. 1st occurs						
1812–1895	(28 × 3 years)	1	2	4	6	7		
1896–1900								
1901–2096	(28 × 7 years)			3	4	5	6	
2097–2100								
2101–2184	(28 × 3 years)	1	2	3	5	7		
2185–2189								

Yours sincerely,

S. GEORGE YOUNG

27 Oakfield Walk,
Pogmoor,
Barnsley, Yorks.

To the Editor, *The Mathematical Gazette*

THE LINEAR EQUATIONS PROBLEM

DEAR SIR.—I relished the coverage given in reply to my article on “The Use of Matrix Methods when Solving Simultaneous Linear Equations” (*Gazette* LIV, No. 390 (December 1970) 337) and wonder if I might be permitted a reply.

It seems fair to say that no one has quarrelled with my opinion that a curriculum should not encourage the circumstances which provoked my pupils’ question. Considerable thought went into rebutting my considerations (a) and (b) which I made deliberately provocative.

The article was written early in 1969 when I became increasingly aware that some main-school texts were including matrix methods for solving sets of linear equations in two and three unknowns, without any consideration of the geometrical background or the future developments. What perturbed me more was the encouragement given to this trend by public examination questions some of which specified a matrix method for such a problem. My aim was to show that matrix methods had a context of their own and that my experience indicated that with careful handling this need not be feared. Against the rather stark presentation of a matrix method with little, if any, discussion of the cases when $\Delta = 0$, the elimination method was presented with a full discussion including graphs. This seemed to me to be a most biased state of affairs.

I think that several questions remain unanswered. For a start, why