To the Editor of the *Mathematical Gazette*
Calendar Reform

DEAR SIR,—In a letter in your issue of December, 1961, I admitted with regret my failure to locate a passage in Gibbon's *Decline and Fall* in which the historian underestimated the accuracy of the *Persian Calendar*, describing it as a little *less* accurate than the Gregorian (which we use in Europe now), though it is really a little *more* accurate.

I am greatly indebted to Mr. Richard Beetham, of Harrogate, for finding the quotation on the very day on which the Gazette reached me, and sending the reference to me at once.

Two-thirds of the way through Chapter 57, just before the death of Malek Shah in 1092, we read that under this Turkish conqueror Persian culture revived. " The sultan bestowed a more serious and learned care on the reformation of the calendar, which was effected by a general assembly of the astronomers of the East. By a law of the prophet the Moslems are confined to the irregular course of the lunar months; in Persia, since the age of Zoroaster, the revolution of the sun has been known and celebrated as an annual festival; but after the fall of the Magian empire, the intercalation had been neglected; the fractions of minutes and hours were multiplied into days; and the date of the spring was removed from the sign of Aries to that of Pisces. The reign of Malek was illustrated by the *Gelalaean* aera; and all errors, either past or future were corrected by a computation of time, which surpasses the Julian and approaches the accuracy of the Gregorian, style."

Yours, W. HOPE-JONES

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P.S. Later I have had the same news from Mr. F. G. Gordon, of Tunbridge Wells, who adds this quotation from Omar Khayyam.

> Ay, but my calculations, people say,
>   Reduced the year to better reckoning: nay,
> It was but striking from the calendar
>   Unborn tomorrow & dead yesterday.

W. H.-J.

To the Editor of the *Mathematical Gazette*

DEAR SIR,—Referring to Note 2978, an article appeared in *Machinery* dated 3rd October, 1946, entitled The Rectification and Squaring of the Circle by the Riga Square, by H. K. Barton. This article states that the Riga Square was devised by Mr. E. Bing of the Russian-Baltic Waggon Works at Riga. It is similar to a 30-deg. set-square except that the perpendicular and base are 23 and 44 units respectively giving an approximation to the angle $27° 35' 49·6''$ whose cosine is $\frac{1}{2}\sqrt{\pi}$. The article explains methods of finding the area and circumference of a circle of known diameter, or of finding the diameter when either the