On the subject of notation, I should like to offer one or two suggestions, it being a topic on which a good deal has been said of late. Mr. Gray's remark that v could be advantageously used in the place of $(1+i)^{-1}$ is doubtless correct as far as *some* investigations are concerned; but I do not see that it is by any means universally true. In the particular case, for instance, to which he refers, suppose I had commenced by speaking of the successive accumulations of extra premiums at the end of the first, second, &c., years, as being v^{-1}, $v^{-1}+v^{-2}$, &c., it would certainly have been a most needless mystification of the simple quantities $(1+i)$, $(1+i)+(1+i)^2$, &c., which convey their meaning to the mind so much more readily, and it surely would not have been in accordance with elegance or good taste in such matters to have started with one system of notation and ended with another in an investigation which occupies only half-a-dozen lines. A much more important question is, I think, involved in the use of such symbols as $N_{x-1|t}$ and $M_{x|t}$, which I see Mr. Gray employs. It has always appeared to me that these abbreviations of $N_{x-1}-N_{x+t-1}$, and M_x-M_{x+t} are highly objectionable, more particularly when they are allowed to remain in final results intended for practical use, because they are quantities of which we have no tabulated values, and we can make no use of any formula in which they appear without first replacing them (mentally at least) by the quantities for which they stand. Moreover, they give to a formula a degree of simplicity which it does not really possess. If I had used abbreviations of this description, I might have expressed the formula—

$$\frac{1+i}{i}\left(1-\frac{l_{m+e}}{l_m}-\frac{M_m-M_{m+e}}{D_m}\right),$$

which occurs in my paper, by $\frac{1}{d}(\Sigma_{e|}q_{m(n)}-M_{m|e})$, but no use could possibly be made of this if a numerical result were wanted without first of all retranslating it into its original form. Upon what principle then could it be called a more simple expression?

I believe I have now fully replied to all the objections raised by Mr. Gray. The anecdote of the Laputa Tailors and their sextants I will leave for the present, not having been able in the short space of two months properly to realize the force of the simile.

<div align="center">I am, Sir,</div>
<div align="center">Your most obedient Servant,</div>
<div align="right">SAMUEL YOUNGER.</div>

316, *Regent Street*, 28th *February*, 1863.

RULES TO BE OBSERVED IN CONVERTING THE PARTS OF ONE POUND INTO DECIMALS.

To the Editor of the Assurance Magazine.

My Dear Sir,—In taking the decimals of the parts of a pound by the *head-rule*, I have always followed the rule given in my *Arithmetic*, which I now repeat.

First three places.—For every pair of shillings, 100; for the odd shilling, 50; for every farthing above shillings, 1, with a unit of carriage at and after 6*d.*

Fourth and fifth places.—For every farthing above sixpences, 4, with a unit of carriage for every 6 farthings.

All subsequent places.—For every farthing above three-halfpences, 1, with 6 for a denominator, and reduction to a decimal. Thus at $8\frac{3}{4}d$. the sixth and following figures are as in $\frac{5}{6}$, namely, 8333..

The third rule may be advantageously abandoned in favour of the following:—When the fourth and fifth figures are 00, 25, 50, 75, the decimal has terminated; in every other case the complement to 5 of the fifth figure is the numerator; or, when the fifth figure is 5 or upwards, the complement to 10. That is, when the decimal is interminable, or when the fourth and fifth figures are not 00, 25, 50, 75,

The fifth figure.			Is followed by the places of	The fifth figure.			Is followed by the places of
0 .	.	.	. 5 sixths.	5 .	.	.	. 5 sixths.
1 .	.	.	. 4 ,,	6 .	.	.	. 4 ,,
2 .	.	.	. 3 ,,	7 .	.	.	. 3 ,,
3 .	.	.	. 2 ,,	8 .	.	.	. 2 ,,
4 .	.	.	. 1 ,,	9 .	.	.	. 1 ,,

And this sub-rule is convenient; a fifth figure *three* is followed by nothing but *threes*, a *six* by nothing but *sixes*.

Yours truly,
A. DE MORGAN.

ON THE FACILITY WITH WHICH THE ORDINARY ANNUITY AND ASSURANCE VALUES ARE DERIVED FROM THE VALUE OF THE ENDOWMENT.

To the Editor of the Assurance Magazine.

SIR,—The ordinary tables of life annuities and assurances which have hitherto been published, as well as the tables on the commutation method, are unquestionably of great value; but, nevertheless, are not, I submit, so extensively useful as they might be made by the introduction of certain supplemental columns of quantities required in practice, the want of which arises with sufficient frequency to call for their being tabulated. This view is, to some extent, recognised by Mr. Thomson, in his valuable work, entitled *Actuarial Tables*; and the object of the present communication is to draw attention to the fact, that the values of assurances, as well as of annuities, fixed and increasing, temporary and deferred, may be easily obtained and tabulated directly from the values of endowments.

On a previous occasion, I had the honour of addressing you on the desirableness of an extension of the D and N method, by the introduction of columns of differences (*Assurance Magazine*, vol. viii., p. 168), and endeavoured to point out the importance of tables in that form. I beg now to submit a specimen table of another kind, exhibiting various columns of values not usually-given, the adoption of which would tend much to abridge or simplify certain computations, in which such values occur as functions. The table is similar in principle, as regards a portion of the annuity values, to the tables given in Mr. Thomson's valuable work before mentioned, but differing from those tables in this respect, that the whole of the assurance values, as well as the values of the annuities, are derived, as above remarked, directly from the endowments at the corresponding ages.