

MR. GALLOWAY'S METHOD OF ADJUSTING HIS TABLES.

To the Editor of the Assurance Magazine.

SIR—I am afraid that in the communication on the subject of Galloway's Amicable Tables, which you did me the honour to insert in your last Number,* I was not sufficiently explicit in the statement of my difficulty as to the manner in which Mr. Galloway has applied Mr. Gompertz' method of adjustment to the series of probabilities in Tables III. and IV.

I am well aware that it is of the essence of Mr. Gompertz' method, that between the two series expressing the numbers living—the one formed from the *raw* probabilities (and therefore exhibiting the direct results of observation), and the other from the *adjusted* probabilities—an exact coincidence should subsist at certain points; and these points are naturally, though not necessarily, equidistant from each other.

The symbol employed by Mr. Galloway to denote the mutual distances of these points is "*m*"; but he does not tell us what value he takes for "*m*" in his application of the method to the adjustment of the Amicable Mortality. In other words, he does not inform us of the points of coincidence between the two series above spoken of. He gives, however, the *raw* and the *adjusted* probabilities, and also the series of the numbers living formed from the latter. He also tells us, that before applying Gompertz' method to the adjustment of the former series, he effected a partial adjustment by means of Finlaison's method. From this it ought to follow, that if we apply Finlaison's method to the *raw* probabilities, and from these form the sums of numbers living, a comparison of the series so formed with that given by Mr. Galloway as formed from the adjusted probabilities would enable us to detect the points of coincidence of the two series, and consequently the value he has employed for "*m*." This is the course I have followed, and I can detect nothing like coincidence. It was the object of my former communication to draw attention to this, in the hope that some one might be able to throw light upon the matter.

I have no reason to suppose that I have failed in application of Mr. Finlaison's method. Mr. Galloway uses that method for the adjustment of his Table II., and in respect to that table my results are in entire accordance with his. Neither do I anticipate any difficulty in the application of Mr. Gompertz' method to Mr. Galloway's Tables III. and IV., since I have successfully applied it to the verification of Mr. Jellicoe's Table of Indian Mortality (at page 175, vol. i., *Assurance Magazine*). What I want is, to be able in like manner to verify Mr. Galloway's tables; but this I cannot do unless I can discover or have pointed out to me his *points of departure*.

I am, Sir,

Your very obedient Servant,

CHARLES WATKINS.

Pelican Life Insurance Office, June, 1856.

* See page 173 of this volume.