

diameter, which gives 4·8 in. for the unit of our α . This gives as a general average, 644 misses per 1000 shots; and therefore were the distances all alike, or for an average distance of 80 yards, would correspond to a value of α in our table, of very nearly $6\frac{1}{3}$, or to a mean probable deviation of a single shot, of 30·4 in.; the total number of competitors being 2075 (reckoning the same individual appearing in several lists as so many distinct competitors), shooting at 430 targets. As the causes of linear deviation may be considered as increasing proportionally to the distance, and as in fixing the average distance as above at 80 yards, (strictly 79·1,) the number of arrows discharged at each distance is taken into account; this may be regarded as a fair estimate of our national proficiency in archery, and as comparable, in the terms of its statement, with what may be obtained at a future period, or in other countries.

(7.) In deducing the results embodied in the following tables, the numbers of hits made by all the shooters at each target in its several colours were summed separately. The results so obtained for all the targets for each class of shooters, and for each distance, in each year of the series, were then grouped together and summed, and the fifteen sets of annual sums so obtained, united into general sums, as exhibited below in Table II., to shorten which it is to be borne in mind that of the lady competitors, 853 in number, each delivered 96 arrows at 60 yards, and 48 at 50;* and the

* In the year 1850 the arrows delivered by each lady were only 72 and 36 at the same distances.