gentlemen, numbering 1222, 144 arrows at 100 yards, 96 at 80, and 48 at 60 yards: the number of targets being, for the former, 164, and for the latter 266.

TABLE II.

Class of shooters.	Distance in yards.	Total No. of arrows delivered.	Numbers of hits in the several colours.					Misses.
			Gold.	Red.	Blue.	Black.	White.	
Ladies	60	81696	1722	4927	7279	8572	8688	50508
Do..........	50	40848	1364	3799	5145	5640	5159	19741
Gentlemen	100	175968	1873	5365	8239	10629	11605	138257
Do..........	80	117312	2516	7061	10137	12067	12058	73473
Do..........	60	58560	2553	6651	8455	8983	7752	24166
Sums total		474384	10028	27803	39255	45891	45262	306145

(8.) To compare these results with theory, and ascertain how far the distribution of the hits in each series corresponds with our formula, the best way will be to deduce, in each, five separate values of *a* the constant appropriate to each, from—1st, the hits in the gold; 2d, the sum of those in the gold and red; 3d, the sum of those in the gold, red, and blue, and so on. These, it is manifest, in each series ought to agree *inter se*, though different for different series. Applying, then, the expression given in § (3.) for *a* to these entries of "hits" in Table II. on this principle, we derive corresponding values of our constant or modulus as in the annexed table (Table III.), in the first division of which it is set down in units and decimals, as in Table I.; while in the second are entered the same values reduced to inches and decimals by the multiplier 4·8.