

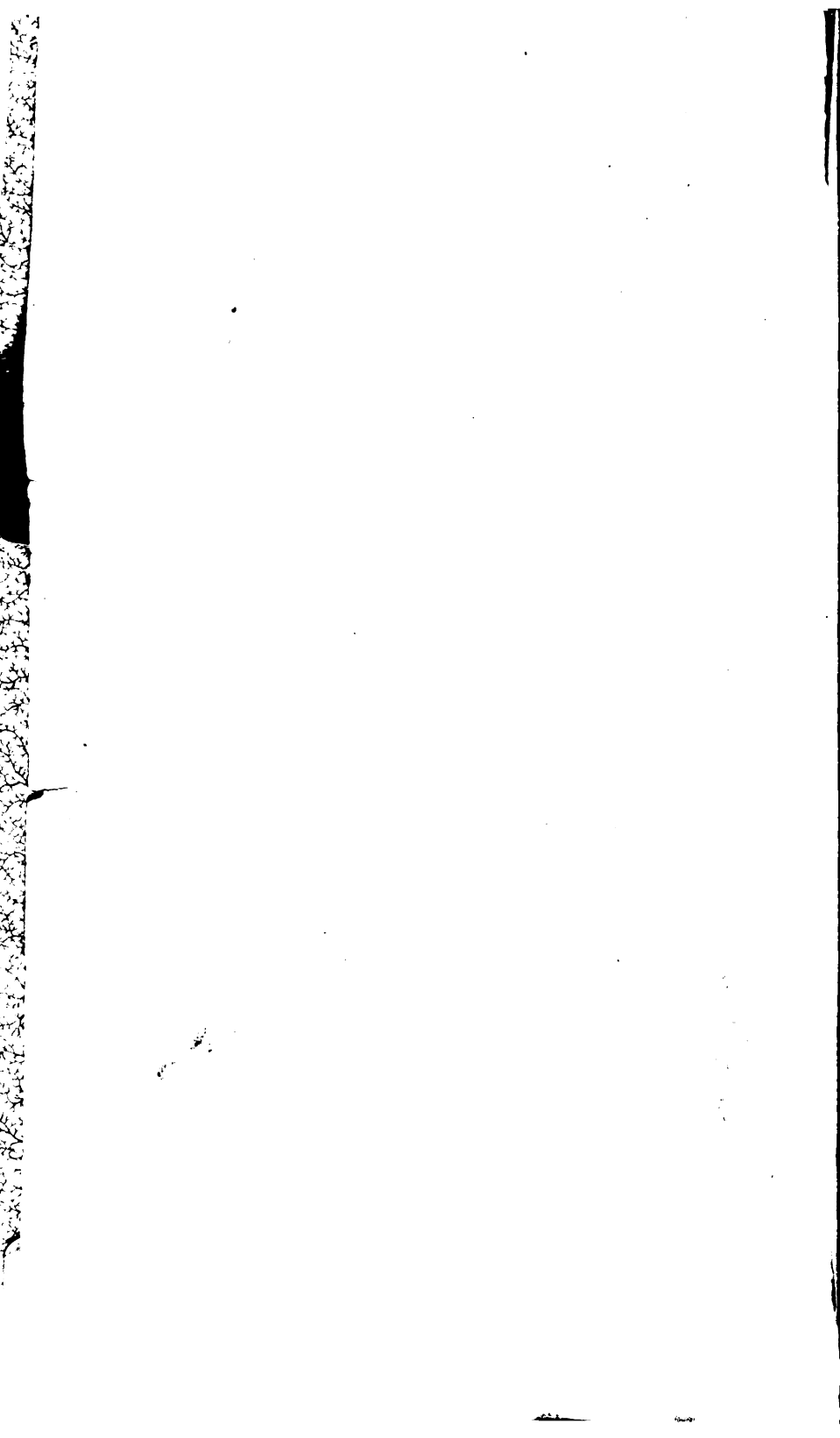
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ANNEX





THE
English Bowman,
OR
TRACTS ON ARCHERY:

TO WHICH IS ADDED
THE SECOND PART
OF THE
BOWMAN'S GLORY.

By T. ROBERTS,
A MEMBER OF THE TOXOPHILITE SOCIETY.

Thus thou peculiar Engine of our Land!
(Weapon of Conquest! Master of the Field!)
Renowned Bow! (that mad'st this Crown command
The Tow'rs of France, and all their Pow'rs to yield)

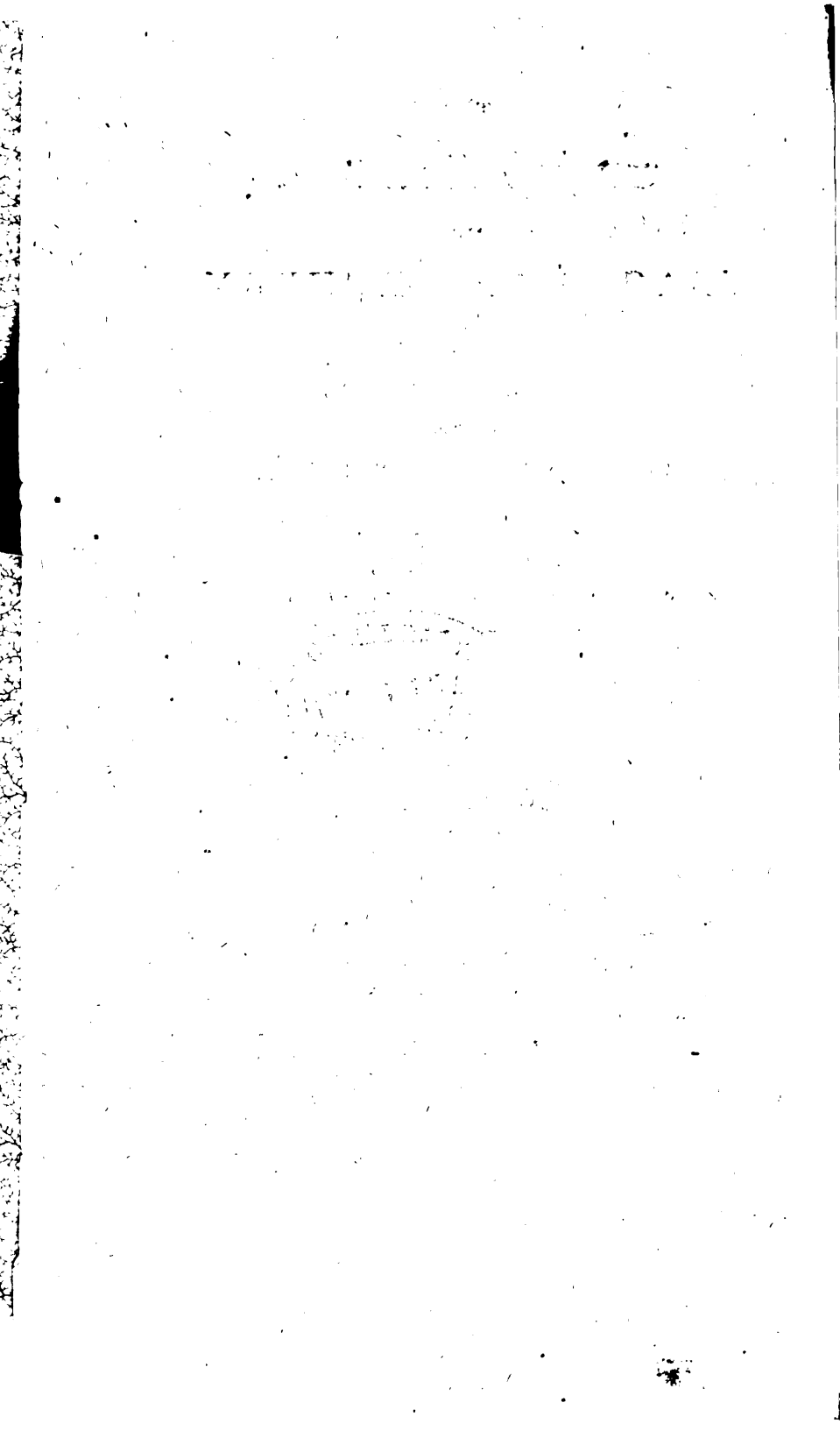
Thou first did'st conquer us; then rais'd our skill
To vanquish others:-----

And now how com'st thou to be out of date,
And all-neglected leav'st us, and art gone;
And with thee th' ancient strength, the manly state
Of valour and of worth, that Glory won?
Or else stay'st thou till new-priz'd Shot abate,
(That never shall effect what thou hast done)
And only but attend'st some blessed Reign,
When thou and virtue shall be grac'd again?

DANIEL. *Hist. of the Civil Wars, B. 8.*

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Sold by Mr. EGBERTON, at the Military Library, Charing Cross;
Also by Mr. WARING, at his Archery Ware-Room, Caroline Street,
Bedford Square.

1801.



To
His Royal Highness the
PRINCE OF WALES,
Patron;

Mr. Crespigny,
PATRONS;

His Grace the Duke of Bedford,
President;

THE VICE PRESIDENTS,
& other Members of the

TOXOPHILITE SOCIETY;

and so

All other Societies of Archers,

IN

GREAT BRITAIN & IRELAND;

These Tracts,

are with great respect, dedicated,

By a Brother Archer,
and Toxophile;

SR.

London

June 1801.

1954
1955
1956

P R E F A C E.

THE following tracts originated in notes, collected by the author for his amusement and instruction in matters relative to archery; and which (having been perused by those, whose superior knowledge and proficiency in the art entitle their opinions to very high respect, and by them deemed of more importance, than the author annexed to them) he has been induced to arrange and methodise; and by throwing them into a connected form, has endeavoured to render them of public utility: much prising archery himself, and desirous of contributing his mite towards the support and encouragement of an art, which requires only to be more generally known, and rendered more familiar, to become universally adopted and esteemed. A further encouragement to him in the undertaking, was the recollection, that although the revival of archery, at the close of the eighteenth century, had produced some small publications (1) upon the subject; yet, that

(1) *The Anecdotes of Archery* by the Rev. G. Oldfield. And another publication under the same title, by E. Hargrove. These works chiefly contain short Extracts from *Große's Military History of Great Britain*, and *Stow's Survey of London*; with some account of bugle horns; and a list of the present societies of archers.

those publications professed to be only anecdotes, and consequently (notwithstanding their merits and the amusement they may afford to the archer) fell very far short of any *treatise* upon the art, as well as of encouraging it, by clearing the path which led to the *practice* of it. Mr. Moseley, indeed, by far the most conspicuous of modern writers upon archery (whose performance is marked with much research and just observation) has evidently taken a very extended view of archery, ancient and modern, throughout the world; and has not tied himself down to an account of the particulars or practice of it in this country, beyond what was consistent with his *general* plan. Upon the subject of practical archery in England, we have but one writer (Roger Ascham) who lived in the reigns of Henry VIII. and Elizabeth, and who, as he himself informs us, wrote the *first* Treatise upon English Archery.

The Persians, we are told (*See the Preface to Moseley, p. 5*): possess treatises upon the art, as practised by them, written in very early times. The Emperor Leo, in his *Tactics*, has given a few hints upon this subject: and Vegetius (in his work *De Re Militari*) slightly notices the practice of this art. Why we have not any writer upon archery, prior to Ascham, is by him thus accounted for. “ And, that
 “ no man hitherto hath written anye booke of shot-
 “ ing, the faulte is not to be layed in the thyng,
 “ which was worthie to be written upon: but of
 “ men, which were negligent in doynge it; and this
 “ was the cause thereof, as I suppose. Menne that
 “ used

“ used shooting moſte, and knewe it beſt, were not
 “ learned : men that were learned, uſed little ſhoot-
 “ ing, and were ignorant in the nature of the thyng;e;
 “ and ſo fewe men hath bene, that hitherto were able
 “ to wryte upon it.”

Although in this kingdom

————— There are

“ Whom ſtill the meed of the green archer charms.”

Armstrong. Art of preſerving Health. B. iii.

yet, are there many, who have ſcarcely heard of ſuch an exerciſe as that of the bow: and others, who may occaſionally have ſeen that inſtrument in the hands of an archer; and yet are total ſtrangers to its peculiar and valuable qualities. And, there are not a few, who ſhew that reſpect and veneration for the bow, and that propenſity to take it up, which, Aſcham obſerves, is ſo *natural to the English nation*. Yet, as he tells us, “ becauſe they knowe not whiche
 “ waye to houlde to come to ſhootinge, have
 “ cleane turned themſelves from ſhootinge.” To encourage ſuch perſons to engage in the practice of an art, which promiſes to reward their labours, with health, pleaſure, ſatiſfaction and applauſe; and to aſſiſt their attempts to become proficient in it, is the author’s chief aim.

Aſcham had more extended views in writing his treatiſe, adapted to the times in which he lived: namely, the ſervice of his Prince, who ſtrove to encourage the art for military purpoſes, and of his Countrymen, by reminding them of the honour and value of it in the field; and an earneſt deſire to

check, as far as just reasoning and honest persuasion would go, the baneful influence of, among other vices of the times, that of gambling (which, we may collect, from his manner of expressing himself, was carried to a most lamentable height); and to substitute an honourable, healthful and manly amusement. This treatise of Ascham's, although, in some particulars, it appears to us defective as a Treatise upon the Art of Archery; yet is it found to be extremely useful to those who wish to become scientifically acquainted with the art. Upon the late revival of archery, it was reprinted, from an edition of his whole works by Bennet in 1761, with two or three trifling notes, that confess the inability of the annotator to explain this part of his author's work. Ascham was a man of great learning and (as his Biography informs) was not only the chief ornament of a celebrated college in the university, but visited foreign countries, frequented courts, and lived in familiarity with statesmen and princes; not only instructed scholars in literature, but formed Elizabeth to empire. He had too the honour and good fortune to be tutor to Lady Jane Gray. See Bennet's Preface to Ascham's works, and the Biographia. It was the fashion of the times, in which he lived, to write in the Greek or Latin language; but he wrote his *Toxophilus* (2) (for so he subscribes his Treatise on Archery) in the English tongue, for which he gives

(2) The *Toxophilus* has undergone two editions, subsequent to its first publication in 1544, and previous to the edition of Ascham's works by Bennet, viz. in 1571, 1589. It was reprinted at Wrexham, 1788. the

the following reason. “ If any man would blame
 “ me, eyther for takinge such a matter in hande,
 “ or els for writing it in the Englishe tongue, this
 “ answere I may make to him ; that whan the beste
 “ of the realme thinke it honest for them to use, I,
 “ one of the meanest forte, ought not to suppose it
 “ vile for me to write: and though to have written
 “ it in another tongue, had bene both profitable for
 “ my study, and also more honest for my name: yet I
 “ can thinke my labour well bestowed, yf with a little
 “ hindraunce of my profyt and name, maye come
 “ any fourtheraunce to the pleasure or commoditie of
 “ the gentlemen and yeomen of Englande, for whose
 “ sake I tooke this matter in hand.” Another ob-

ject with him was (as he gives us to understand) to bring into repute and purify the English language. And his performance was, no doubt, at the time, an ornament to it: but, at this day, his phraseology stands in need of much explanation, to make it intelligible. This treatise also wears a very forbidding aspect on another account; being written in question and answer, and in the Socratic style of disputation, (replete with arguments and similies of considerable length, often digressing largely from the subject matter, and not unfrequently involving that, as it were, in a cloud of excentric and often apparently trifling reasoning) it has been found by much too tedious and dry a publication for those, who either are not admirers of antique literature; or who wish to have the thread of the subject they are in pursuit of unbroken; or who have not sufficient leisure

to pursue it through the uninteresting mazes of quaint dissertation.

These circumstances induced the author of the following publication to consider, in what manner he could render this part of his work most acceptable to the generality of readers, and more conformable to his plan. To have republished the *Toxophilus* with explanatory notes (many of which must necessarily have been very prolix) would, he conceived, tend much to distract the attention of the reader. And, as archery had undergone some alteration, since the time when Ascham wrote, he apprehended, that the readiest way to make his design intelligible, easy and acceptable, was to throw the text and comment together, leaving little to follow by way of note. And, to prevent the idea, that he had arrogated to himself what was the production of Ascham, he has not failed to mark every sentence, which he has extracted from the *Toxophilus*, with inverted commas; a method he has adopted with respect to his quotations from other authors: to which he has also, in general if not always, observed to annex their names.

In attempting to *methodise* the *Toxophilus*, he found he had engaged in an undertaking of some difficulty. This Treatise on Archery may, with justice, may be compared to a *dissected puzzle*, consisting of many very differently formed parts; which, when rightly connected, form one complete and regular figure: or, to a number of alphabetical letters thrown *promiscuously together*, but which, when properly arranged, discover a regular and finished composition;

tion; and which are left for the reader to exercise his wit, in the putting them together. However, he has studied to make the business easy to his readers, by collecting and arranging the variety of little hints upon the art, which are to be found greatly dispersed in the *Toxophilus*, and often enveloped in the subtilties of logical discussion; and to methodise and reduce them into some kind of regularity and system. For which purpose, he has varied from the plan of that work, which only divided the treatise into two parts; and he has, throughout, made use of *chapter* and *section*, and arranged the subject matter accordingly. This method will be found to answer, tolerably well, the purpose of an *Index*; for, the heads of every chapter and section being somewhat full and explanatory, will become an easy guide to any particular part of the Comment upon the *Toxophilus*. And, as this plan is adopted throughout the following tracts, the reader will thereby have a pretty accurate view of the whole work. Besides, the author found it necessary, not only to change the old orthography for the modern, but also to explain, and, sometimes, *translate* whole sentences; which, though suited to the quaintness of the time in which Ascham wrote, are not well adapted to the present. Beyond these necessary liberties, he has made but little alteration in the grammatical part of the composition; occasionally, only, inserting between crotchets, a word or two by way of explanation: And, to satisfy *curiosity* and raise a *smile*; he has quoted some few of the more remarkable passages in their original form and dress.

The author must here, indeed, observe, he had been given to understand, that a Treatise upon *Archery* had been written since the *Toxophilus*, by Gervase Markham, (published in the year 1634). To this work, therefore, he was eager to refer; conceiving that it would either supersede the necessity of his intended collections from the *Toxophilus*; or, at least, save him much labour in the undertaking. With some pains he got access to the book (which, at this time, is a very scarce Tract); but he found himself greatly disappointed and deceived, and felt not a little indignation against the author and his performance, when he discovered, that it was a mere extract from Ascham, without any kind of comment or explanation: yet, with matchless effrontery, displaying a manifest endeavour to *conceal* the name of the original composer, and to transfer the language and merits of the *Toxophilus* of the learned Ascham to Mr. Gervase Markham.

To render this part of his publication more complete, the author has added to the *Toxophilus* several chapters; consisting of matters either totally unnoticed, or but very slightly touched upon by Ascham. And he has subjoined an account of the *different kinds* of shooting, and given the various *rules* applicable to each, which he presumed would not be unacceptable; particularly to young archers and those who may wish to form themselves into societies, and to regulate them according to the customary and established rules.

After giving this reason, for having entered so much
into

into the *minutiæ* of practical archery; he has only to observe, that he has endeavoured to avoid the error of becoming obscure by too much brevity; and possibly may have run into the opposite extreme. Upon the whole his object has been to execute his performance with fidelity and correctness, and he has been particularly, careful, not to omit any part or word in the *Toxophilus*, which could tend to elucidate his subject. In perusing the *Art of Archery*, the reader will frequently stumble upon *terms of art*. Ascham tells us, “ he must use *archers words*.” To make these terms familiar and intelligible, the author has added a Glossary or Explanation.

With respect to his Comment upon some parts of the *Toxophilus*, particularly on those points which are now termed *Ascham's five Points of Archery*, he feels great diffidence, and entertains much doubt of a successful endeavour: and, therefore, cannot but make avowal and apology for the imbecility of his pen; which indeed, must frequently manifest itself in that and various other parts of the following Tracts. To have left them in the unexplained state in which Ascham has given them, would not be satisfying the nature of a Comment: and as the want of an enlarged Comment has long been complained of, the author determined to do his best towards surmounting the difficulty of the task.

All *arts*, we know, are more properly the subjects of *imitation*, than of description: at least, so far as relates to the *minutiæ* of them, to *manual operation*, and, in particular to *corporeal attitudes*: to express which,
both

both the pen and the pencil are, even in the hands of the first masters, often found to be very inadequate; and fail to become satisfactory. In the operations alluded to, there is subjoined to great dexterity a peculiar method and *style* of action, that often cannot be taught but by *example*. To these causes must, in a great measure, be attributed the loss of some former arts. It was the difficulty of conveying a clear and satisfactory explanation, which seems to have deterred Ascham (whose learning and knowledge of archery might well have qualified him for the task) from giving us a greater insight into this part of the art: for, we find him frequently observing, that such nicety of action was more "*pleasant to behold than easy to be taught—not so difficult to be followed in practice, as to be described.*" And, speaking of *shooting well*, he observes, "I can teach you to shoote faire, even as Socrates taughte a man ones to know God; for, when he asked him what was God, Nay, sayth he, I can tell you better what God is *not*: as God is not ill, God is unspeakable, unfearchable, and so forth; even likewise I can say of faire shootinge." Following this rule, he has given us a sort of *negative* or *reversed* instruction: pointing out the faults, and leaving us to extract from them the excellencies and perfection, of an archer; and, closing his observations, by a reference to the archer, and an admonition to study from *life*. In these days, the practice of archery differs, in some respects, from the archery of former ages: and, from the partial attention now
paid

paid to it, the *principles* of the art do not seem to be thoroughly understood, or perfectly ascertained and settled; and consequently, we sometimes find, that opinions upon the subject clash, and by turns outweigh each other. Indeed, it must be observed, that many experiments in archery yet remain untried. Every man is too apt to flatter himself, and to think that method the best, by which he best succeeds. But such an opinion is founded in short-sightedness and narrow judgment. And, we are too much inclined to display our own weakness, by condemning or setting at naught what is not suited to our confined comprehension; and often suppose, that in this age every thing is better done than it was in the last: and beyond that, we think we discern great error and ignorance. Although this remark does not want foundation, yet, the hackneyed phrase, "that every age improves upon the last," may *sometimes* be misapplied. To bring these observations to our subject (archery). We are very unwilling to admit, and are often tempted to *deny* the excellence and feats of archery noticed in former times; because we neither saw any such instances of it ourselves; nor have we, after many attempts, attained to such excellence. Without digressing further into argument upon the occasion, one remark occurs; namely, that the knowledge of a few years should be cautiously set up against the experience of *ages*. And we should be somewhat inclined to allow, that we may not yet have *recovered* all the knowledge, principles and methods, under which archery was pursued by our ancestors. The
author

author of the following Tracts has dwelt longer upon these observations, than, perhaps, was necessary; left, by apparently leaning to the practice of *modern* archery, and setting forth the examples of a few good archers of this day, he should be charged with having modernised this *ancient* art too much. But, certainly, archery, and the cause of its practice, have greatly changed since Ascham wrote. We shoot shorter distances—use weaker bows, and study more precision, than our ancestors did. And, although the author is aware, that there are, in these days, men of great genius and ingenuity, who, being satisfied that archery is an art very difficult in nice performance, have not merely taken it up, but also have made it a *critical study and severe labour*; and who have, in their practice, somewhat swerved from the opinions of those, who derived their knowledge in the art, from the remnant of the *old* English archers: yet, he is ready to confess, his inclination leads him to think, that could our forefathers rise again and become our instructors, it may, at least, admit of a doubt, whether, in teaching archery, even under its present restraints, they would not support the *old* practice, by well founded *reasons* and *convincing experiment*.

To those who have seen *Mr. Anderson* shoot, it will immediately occur, that these observations advert particularly to his *style* of shooting; which has been by some (and very successfully) followed of late. To those who have not, further explanation may be necessary. In the last of the following Tracts, which contains the *Practice of Archery*, the

the reader will find it noticed, that, of late years, *two* fingers only had been, by many, used in drawing the string; and that several archers held their bows in an *oblique* direction or *somewhat* flattened. These two points particularly mark the shooting of Mr. Anderson; who obtained his knowledge of archery in Flanders: but it should be observed, that the Flemings seldom shoot any distance *beyond one hundred yards*. Mr. Anderson took up the bow at a very early age, and from that period has made it a constant exercise: and he is said to have found no rival in his practice of archery, either in England, Scotland, or Flanders. But, when it is said, he has found no *rival*, it must also be added, as far as Flemish archery (that is, in point of *distance*) extends. For, his shooting has been confined to the *target* and *butt*. Mr. Anderson shoots with a bow rather weak, yet suited to his strength and the Length he shoots: he has an excellent eye, and possesses an easy, steady and sharp loose. Upon the whole, he is allowed to be an incomparable archer.

In one part of the following Tracts (Part II.) it will appear, that the author has noticed archery, not only as a most gentlemanly recreation, and an exercise capable of affording the amusement of an hour; but as possessing in itself some valuable incidents, particularly in its tendency to promote and restore *health*, and to increase and invigorate the muscular powers of the body. Some may suggest, he has surely pressed the point too far; and that his own partiality has carried him beyond the bounds of reason,

when

when he ventures to *prescribe* archery as a remedy against *old age*. However, he has not written without citing his *authorities*, (some of them indeed *state-opinions* and sanctioned by parliamentary declaration). On this subject Mr. Salzmänn (the author of the *Gymnastic Exercises for Youth*) in speaking of the value of archery, as an exercise for young persons, supports his opinions by a sensible remark, which will apply very forcibly to this part of the author's Tracts. "I must confess," says he, "that every sport, which occupies a lad, exercises his faculties, and fortifies his health, by *employing him in the open air*, appears to me of importance. If the force of an Ulysses be desirable, let us not despise the means, by which he acquired and exercised it." On many accounts archery appears to be an *exercise* of much value. Perhaps there is no amusement whatever, which more awakens and enlivens the active powers, and creates so little satiety.

Part of the author's design was an investigation of *ancient* archery, with a view to ascertain the truth of the feats recorded of the bow in former times, when in the hands of *individuals*; and to disentangle them, as much as possible, from fiction and romance: for this purpose, he has collected, arranged, and commented upon all such feats of archery as history or tradition has handed down to us; and assayed the practicability of them by such rules, as seemed best adapted to attain the end proposed. Judging, that a favourable result to this inquiry, would quiet the many floating opinions and frequent desultory observations

observations upon the subject; and would also afford satisfaction to the lovers of archery. In the course of this investigation, many facts relative to *military* archery caught his eye; particularly such as are to be found in Sir John Smith's *Discourse on Weapons*: which were the subject of a very able publication at the close of the sixteenth century, and which are not to be met with, so fully detailed, in any historical writer upon the affairs of this kingdom. Hence, he was led into a new field of dissertation on the powers of the bow, recently indeed, trod over before him by a very ingenious writer (Mr. Maſon): who (although not possessing the evidence that had fallen in the way of the author of these Tracts, and which was highly important to the subject, in as much as it greatly extended the known powers of the bow, and supported its military character by more recent examples of its effects; long after the introduction of *fire arms*, drawn by the pen of a man of great military skill and experience, who himself bore testimony to part of his narrations) offers, as far as good reasoning and able deduction and comment can extend, a very forcible appeal in behalf of the bow, as a weapon of war; calculated to contend even with the weapons of the *present age*. In the course of this pursuit, the author was led to peruse and consider the arguments of those, who had written in opposition to Sir John Smith; and to collect, from a variety of authors, whatever he could find applicable to his subject. This part of his work alone has proved a task of labour and research, for having once entered upon it, he

he wished to leave it complete. In accomplishing his design, he has, perhaps, been somewhat too liberal of his notes, and at times too prolix in their details. However, in point of matter, this part of his attempt has answered far better than that, which purposes an investigation into the feats of ancient archery; in pursuit of which, he was carried far into the mazes of antiquity; for, when he had extricated himself, he had the mortification to find, that, among the many volumes in print and manuscript, from whence he most hoped for information, very little to his purpose could be gleaned. Yet, he feels some satisfaction in the confidence, that the search has been made; and, that he shall obtain credit for labours, which can never be made apparent. This inquiry has, however, enabled him to introduce, in a part of the following Tracts (Part IV. Ch. vi. Sec. iii.) an account of the *length of the old English arrow*: the different opinions respecting which have long been a subject of inconclusive argument; and, he has endeavoured, by a collection of ancient authorities in print and manuscript, to establish a well founded-conclusion upon this head.

The author had it in contemplation, to have introduced in the following Tracts, as accurate a sketch of the history of our great hero of archery (Robin Hood), as the public and private libraries, to which he had access, would afford. He had, indeed, entered upon the execution of this design; when, meeting with the *new edition* of the *Garland*, he desisted from further searches: believing, that any attempt,

attempt to add to the collections of the author of that publication upon the subject, would prove as fruitless, as any attempt to arrange and connect his own Collections, so as to render them in any degree as acceptable as those in the *new Garland*. Indeed, to the author of that publication, both the Archer and the Antiquarian are much indebted; no less for the best and most authentic account of that great archer ever published; than for the valuable additions of ancient poetry relative to his exploits, which that author has made to the *Garland* itself. However, one Extract, upon this head, from Grafton's *Chronicle*, will be found in the course of the following work.

Although these Tracts are dedicated to the *Archer*, and the English Long-bow is the subject they profess to treat upon; yet it is a subject so intimately connected with the affairs of this kingdom, that it cannot but partially include the *History* and *Antiquities* of Great Britain: and therefore may possibly attract the attention of those who are fond of perusing investigations of that nature. The English long-bow has, of late years, become a topic not only of private conversation, but also of public discussion. In the year 1783, the Honourable Daines Barrington presented to the Society of Antiquarians (of which he was a member) a paper upon the subject; which was read before them, and is printed in the *Archæologia*. It contains indeed, a very imperfect history of the English Long-bow; and, although not characterised by any extent of research, is erroneous in many particulars. Mr.

Battington's Mistakes will be noticed, as they occur, in the following Tracts: which will be found to pursue the subject to a very remote period of time.

Besides the lover of history and antiquities, a considerable part of the following work, as it involves *military affairs*, may perhaps draw the attention of *military men*: who, if they are not entirely of Sir John Smith's opinion, with respect to the expediency of resuming the bow as a weapon of war to the extent he recommends, yet may deem his arguments (supported as they are by numerous authorities of great respectability and weight) sufficiently important to merit, at least, some *consideration*, if not *experiment*. It is, probably, owing to this want of experiment alone, that the English long-bow has been of late years, so much unnoticed as a *weapon of war*. So simple an instrument carries in its appearance but little to attract attention: nor will any description of its powers be fully credited: till supported by the actual exercise and display of them. This observation is founded on daily experience. Many, who have looked upon the bow as a *toy*, have been brought to confess, that, upon various occasions, it must prove equivalent in its effects, as a weapon of war, to modern *fire-arms*.

Whatever may be the future fate of the English long-bow; yet the memory of Englishmen must, at times, bestow a grateful thought upon it: when they recollect, that by the aid of *this* weapon, they not only became an *independent* and *free* people; but also by that aid rose superior in the scale of European powers,

powers, and laid a secure foundation for their present commerce, trade and greatness. To use the words of Camden,—“ I will say no more, but as one sayth ; “ when Englishmen used Hercules *weapons*, the bow “ and the black bill, they fought victoriously, with “ Hercules *successe*.”—(*Remaines*).

The author apprehended, that he could not satisfy his readers better, than by adding, to his Tracts on archery, a copy of so much of Wood's *Bowman's Glory* as was at all interesting. Particularly as this little publication is now very scarce, seldom to be procured in a perfect state (wanting in general the *postscript*); and, being much sought after by archers, sells at very considerable price.

The *Bowman's Glory* consists of two distinct Parts or Tracts, introduced by a short address to King Charles II. a dedication, and a few lines in praise of archery: The first contains

1. A Patent of King Henry VIII. (in the 29th year of his reign) appointing and incorporating the Master of the Ordnance and others Overseers of the Fraternity or Guild of Saint George, and the Science of Artillery for *long-bows*, *cross-bows* and *hand-guns*, with power to establish the perpetual Fraternity of St. George, and with other usual corporate powers; and licence to shoot at all manner of Marks and Butts, and at the game of Popinjay, and at all fowls (except in the King's forests, chafes and parks without special Warrant): and to wear embroidery, silks, fatins and furs, not above the furs of martens. This patent

- also contains an indemnity to any of the fraternity, who, after having pronounced the word *fast*, shall happen to hurt or kill any one passing between the shooter and his mark: so as the same was a usual and a known mark, in an open place, accustomed to be shot at.
2. A patent of King James (in the third year of his reign) which, after noticing, that the archers marks near London, had of late been removed and obstructed, appoints the Lord Mayor of London, the great officers of state and others, to be commissioners, for surveying the grounds (near London, and within two miles) accustomed to have had marks for archers; and to reinstate the marks as they were in the time of King Henry VIII.
 3. A patent of King Charles (in the eighth year of his reign) for the same purpose as that of King James.

The Second Part of the *Bowman's Glory* appears to be written by W. M. or W. H. and contains an account of the public meetings or *Appearances* of archers from the year 1583. The whole of which will be found reprinted at the end of the following Tracts.

Having thus detailed the design of the following work, and briefly stated the plan of it; the author ventures to lay it before those for whom it is intended: and trusts that they will overlook his errors and accept his labours in the service of archery. There are many who would have performed the

the task in a far superior manner; but the circumstance, that (in the period of twenty years, during which time archery has produced many very excellent archers, well qualified in every respect to take up the subject) no one has stepped forward to afford that material assistance and support to the art (by making public its benefits and rules of practice) long earnestly desired; and, that former researches upon the subject extend but a little way, will he trusts sanction the present publication: which, although a widow's *mite*, is yet an offering at the shrine of archery, that may perhaps be entitled to call upon greater genius, and more persevering and successful labour and research, for a better.

The author is well satisfied, that his additions to these collections on archery are scarcely worthy of notice. It is upon those *Collections* alone, that he presumes to think his Publication may become acceptable. That must certainly be deemed worthy attention, which is eagerly sought after, and for the obtaining of which cost is not spared. It is therefore a pleasing circumstance to him, that, setting his time and labour out of the calculation, he is enabled to lay before the admirers of archery (at barely the Printer's Charge) the following Collections upon the subject, from printed works, with difficulty to be procured at any price; and from manuscripts which are only to be *seen*, and that in but one or two places in this kingdom.

It only remains for the author to acknowledge the friendly assistance he has received in the course of his undertaking.

To the pencil of an artist (Mr. R. K. Porter) whose excellent productions have long been the subject of great admiration and public applause, he is indebted for the frontispiece of his work; and which the reader will find referred to in the Comment upon the *Toxophilus* (Part IV. Chap. viii. Sec. iv.)

To Mr. Haworth he is indebted for the loan of the *Records* of the Finsbury Archers: and to Mr. Waring, for his communications and assistance in matters relative to the mechanical operations in archery.

As these Tracts are designed to support the cause of archery, the following extract from *Carew* may not be misplaced at the close of this introductory Preface.

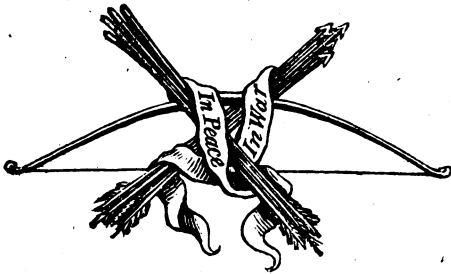
“ Amongst the bodily Pastimes, shooting carrieth
 “ the pre-eminence; to which in mine yonger yeeres
 “ I caried such affection, as I induced Archery, per-
 “ swading others to the like liking, by this ensuing
 PROSOPOPEIA:

“ My deare Friends, I come to complaine upon you,
 “ but to yourselves: to blame you, but for your good:
 “ to expostulate with you, but in the way of reconci-
 “ liation. Alas, what my desert can justify your
 “ abandoning my fellowship, and hanging me thus
 “ up, to be smoke-starved over your Chimnies? I
 “ am no Stranger unto you: but by birth, your
 “ Country woman; by dwelling, your neighbour; by
 “ education, your familiar: neither is my Company
 “ shameful; for I haunt the light and open fields:
 “ nor my Conversation dangerous; nay, it shields
 “ you from dangers, and those not the least, but of
 “ greatest

“ Consequence, the dangers of Warre. And as in
 “ fight I give you Protection, so in Peace I supplie
 “ your Pastime; and both in Warre and Peace, to
 “ your lymmes I yelde active Plyantnesse, and to
 “ your bodies healthful Exercise: yea, I provide you
 “ food when you are hungrie, and helpe digestion
 “ when you are full. Whence then proceedeth this
 “ unkinde and unusual strangenesse? Am I heavy for
 “ burthen? Forsooth, a few light stickes of wood.
 “ Am I combrous for Carriage? I couch a part of
 “ myself close under your girdle, and the other part
 “ serveth for a walking-staff in your hand. Am I
 “ unhandsome in your sight? Every Piece of mee is
 “ comely, and the whole keepeth an harmonical pro-
 “ portion. Lastly, am I costly to bee provided? Or
 “ hard to be maintayned? No, Cheapnes is my Pur-
 “ veyour, Easinesse my Preserver: Neither doe I
 “ make you blow away your Charges with my breath,
 “ or taynt your Nose with my scent, nor defile your
 “ face and fingers with my Colour, like that hell-
 “ borne Murderer, whome you accept before me. I
 “ appeale then to your valiant Princes, *Edwards*,
 “ and *Henries*, to the Battayles of *Cresfey*, *Poyters*,
 “ *Agincourt*, and *Floddon*; to the Regions of Scot-
 “ land, Fraunce, Spaine, Italy, Cyprus, yea and
 “ Jury; to be Umpires of this Controversie: all which
 “ (I doubt not) will with their evidence playnely
 “ prove, that when mine adverte party was yet scarce-
 “ ly borne, or lay in her swathling Clouts, through
 “ mee onely your Auncestours defended their Coun-
 “ try, vanquished their enemies, succoured their
 “ friends,

“ friends, enlarged their Dominions, advaunced their
 “ Religion, and made their names feareful to the
 “ present age, and their fame everlasting to those
 “ that ensue. Wherefore, my dear friends, seeing
 “ I have so substantially evicted the right of my
 “ cause, conforme your wils to reason, conforme your
 “ reason by practice, and convert your practice to
 “ the good of yourselves and your Country. If
 “ I be praise-worthy, esteeme mee: if necessary,
 “ admit mee: if profitable, employ mee: so shall
 “ you revoke my death to life, and shew yourselves
 “ no degenerate issue of such honourable Progeni-
 “ tours. And thus much for Archery, whose tale,
 “ if it be disordered, you must beare withall, for shee
 “ is a *woman*, and her minde is passionate.”

Survey of Cornwall.



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QUOTED OR REFERRED TO.

TO prevent the frequent Repetition of the numerous Authorities quoted and referred to in these Tracts, with their Titles and Editions, and to facilitate the Reader's Reference to the Originals; the following List of Printed and Manuscript Works is laid before him.

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Anglica, Hibernica, Normannica, Cambrica, à Veteribus Scripta. Ex quibus Giraldus Cambrensis, &c. *Francofurti. Anno, M. D. C. II. fol.*

Archæologia, or Miscellaneous Tracts relating to Antiquity, published by the Society of Antiquarians of London. *London,* 1770, 4to.

Archerie.—A Brief Treatise to prove the Necessity and Excellence of, (by R. S.) *London.* 1596, 4to.

Arnot (Hugo).—History of Edinburgh. *Edinb.* 1779, 4to.

Art of War, MSS. *Bibl. Harl.*

Afcham (Roger).—Toxophilus, or the Schole of Partitions. *London.* 1544, 4to.

Ayme for the Finsbury Archers, or an Alphabetical Table of the Names of every Mark within the same Fields, with the true Distances

- Distances by the Map, and Dimensuration with the Line, published by J. S. and E. B. *Lond.* 1594, 16mo. Republished by R. F. 1604, and again by James Partridge, 1628.
- Barclay (Joh.)*.—Euphormionis Satyrici Icon Animorum, 1615, 12mo.
- Barnes (Joshua)* History of Edward III. and the Black Prince. *Camb.* 1688, fol.
- Barrington (Hon. Daines)*.—Observations on Archery. See Archæologia, or Miscellaneous Tracts relating to Antiquity, published by the Society of Antiquarians of London, (vol. 7). *Lond.* 1740, 4to.
- Barwick (Humphrey)*.—A breefe Discourse, concerning the Force and Effect of all Manual Weapons of Fire, and the Disability of the Long-Bow, or Archery. *Lond.* 4to.
- Bellay (Guil. de)*.—De la Discipline Militaire. *Lyon.* 1627, 12mo.
- Boswell (James)*.—Tour to the Hebrides. *Lond.* 1785, 8vo.
- Camden (William)*.—Remaines concerning Britaine. *Lond.* 1614, 4to.
- Cantemir (Demetrius)*.—History of the Growth and Decay of the Othman Empire, Englished by N. Tindal. *Lond.* 1734, fol.
- Carew (Richard)*.—Survey of Cornwall. *Lond.* 1602, 4to.
- Charlton*.—History of Whitby Abbey. 4to.
- Chardin (Le Chevalier)*.—Voyages en Perse et autres Lieux de l'Orient, 3 tom. *Amst.* 1711, 4to.
- Cluveri (Phil.)*.—Germaniæ Antiquæ. *Lugd. Bat.* apud Elzev. 1616, fol.
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- Country Contentments, (by G. M.). *Lond.* 1615 and 1649, 4to.
- Daniel (Samuel)*.—Collection of the History of England. *Lond.* 1650, fol.
- Daniel (Pere)*.—Histoire de France, 7 tom. second edit. *Amst.* 1720, 4to.
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- Histoire de la Milice Française, 2 tom. *Amst.* 1724, 4to.

- Desaguliers (J. T.)*.—System of Experimental Philosophy, proved by Mechanics. *Lond.* 1734, 4to.
- Ducarell (Andrew Coltee)*.—Anglo-Norman Antiquities. *London,* 1767, fol.
- Edmonds (Clement)*.—Commentaries of C. Julius Cæsar, translated into English, with Observations, Comments and Notes. *Lond.* 1695, fol.
- Edward VI.*—MS. Diary in his own Hand. *Bibl. Cott.*
- Fire-Shafts.*—A new Invention of Shooting Fire-Shafts in Long-Bows (by a true Patriot). *Lond.* 1628, 4to.
- Fitzstephen (Will.)*.—Description of London, with a Commentary. *Lond.* 1772, 4to.
- Fortescue (Sir John)*.—Difference between absolute and limited Monarchy. *Lond.* 1714, 8vo.
- Froissart (Joh.)*.—Chroniques de France et d'Angleterre, 4 vol. *Par.* 1518, 4to. See the old English Translation.
- Fuller (Thomas)*.—The History of the Worthies of England. *Lond.* 1662, fol.
- Garland.* See Robin Hood.
- Gibbon (Edw.)*.—History of the Decline and Fall of the Roman Empire, 6 vol. 3d edit. *Lond.* 1778, 4to.
- Goodwin (Thomas)*.—History of the Reign of King Henry V. *Lond.* 1704, fol.
- Grafton (Richard)*.—Chronicle of Briteyn. *Lond.* 1568, fol.
- Greaves (John)*.—Description of the Pyramids in Egypt. *Lond.* 1646, 8vo.
- Hanmer (Meredith)*.—History and Chronicle of Ireland. *Dubl.* 1633, fol.
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- Hayward (Sir John)*.—The Lives of the three Norman kings of England. *Lond.* 1613, 4to.
- Life and Raing of King Edward VI. *Lond.* 1630, 4to.
- Herbert (Edward)*.—Baron de Cherbury. Life and Reign of King Henry VIII. *Lond.* 1672, fol.
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Jovius (Paulus).—Descriptio Britanniae, Scotiae, Hiberniae, et Orchadum. *Ven.* 1548, 4to.

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Latimer (Hugh).—Sermons. *Lond.* 1635, 4to.

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Leonis (Imp.).—Tactica sive de Re Militari. *Lugd. Bat.* 1612, 4to.

Lyttelton (Geo. Lord).—The History of the Life of King Henry II. and of the Age in which he lived, 4 vol. *Lond.* 1767, 4to.

Markham (Gervase).—Art of Archery. *Lond.* 1634, 12mo.

————— Country Contentments. *Lond.* 1615, 1649, 4to.

Mascou (Joh. Jacob).—The History of the ancient Germans, and other Northern Nations, translated by Thomas Lediard, 2 vol. *Lond.* 1738, 4to.

Mason (Richard Oswald).—Considerations on the Use of the Long-Bow and Pike. *Lond.* 1798, 8vo.

Montluc (Blaise de).—Commentaires, 2 tom. *Bourd.* 1592, 8vo.

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Mulcaster (Richard).—Positions concerning the training up of Children. *Lond.* 1581, 4to.

Muratori (Lud. Ant.).—Antiquitates Italiae medii Aevi. 6 tom. *Mediol.* 1738, fol.

Neade (Will.).—Double-armed Man. *Lond.* 1625, 4to.

Norfolk Militia.—Plan of Discipline for the Use of the. *Lond.* 1760, 4to.

Oldfield (H. G.).—Anecdotes of Archery. *Lond.* 1791, 12mo.

Patrizi (Franc.).—Paralleli Militari. *Rom.* 1594, fol.

Peck (Francis).—Desiderata Curiosa. *Lond.* 1779, 4to.

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- Percy (Thomas)*.—Reliques of ancient English Poetry, 3 vol. *Lond.* 1765, 8vo.
- Pinkerton (John)*.—History of the Scots from the Accession of the House of Stuart to that of Mary, 2 vols. *Lond.* 1797, 4to.
- Plinii (Caii Secundi)*.—Historiæ Naturalis, 2 tom. *Par.* 1723, fol.
- Robertson (William)*.—History of America, 2 vol. *Lond.* 4to.
- Robins*.—New Principles of Gunnery. *Lond.* 1742.
- Robin Hood*.—A Collection of all the ancient Poems, &c. now extant with historical Anecdotes of his Life, 2 vol. *Lond.* 1795, 8vo.
- Rollin*.—Ancient History (English), 10 vols. *Lond.* 1754.
- Rofs (John)*.—Historia Regum Angliæ. Edit. Tho. Hearne. *Oxon.* 1716, 8vo.
- Salzmann (C. G.)*.—Gymnastics for Youth, (translated from the German). *Lond.* 1800, 8vo.
- Sandys (George)*.—Relation of a Journey to the Mediterranean and other parts. *Lond.* 1670, fol.
- Saville (Henry)*.—Rerum Anglicarum Scriptores, post Bedam. *Lond.* 1596, fol.
- Scheffer (Johan)*.—Lapponica. *Franc.* 1673, 4to. *Angl. Oxon.* 1674, fol.
- Scot (Reginald)*.—Discovery of Witchcraft. *Lond.* 1665, fol.
- Shooterell (Robert)* and } —Archerie Revived, or the Bowman's Ex-
Durfey (Thomas). } cellence; an Heroic Poem. *Lond.* 1676, 8vo.
- Smith (Sir John)*.—Certain Discourses on Weapons. Comparison of Weapons. *Lond.* 1590, 4to.
- Answer to Mr. Barwick, MS. *Bibl. Harl.* No. 135.
- Speed (John)*.—History of Great Britaine. *Lond.* 1650, fol.
- Spelman (Sir John)*.—Life of Alfred the Great, by Thomas Hearne, *Oxon.* 1709, 8vo.
- Stow (John)*.—Survey of London, 1598, 4to.—Enlarged by John Strype, 2 vol. *Lond.* 1720, fol.
- Annales, or a General Chronicle of England. *Lond.* 1631, fol.
- Strutt (Joseph)*.—Horda Angel-cynnann, or a compleat View of the Manners, &c. of the Inhabitants of England, from the Arrival of the Saxons, till the Reign of Henry VIII. 3 vol. *Lond.* 1775, 4to.

- Stuart (James)*.—Antiquities of Athens, 3 vol. *Lond.* 1762, fol.
 Survey of English Forts, &c. MSS. *Bibl. Harl.*
- Taverniere (Jean Baptiste)*.—Voyages en Turquie, en Perse, & aux Indes, 3 tom. *Par.* 1676-9, 4to.
- The Booke of certain Triumphes upon the Marriage of Richard Duke of York (Son to King Edward IV.) with Ann Mowbray, Daughter to the Duke of Norfolk, MSS. *Bib. Harl.*
- Turner (Samuel)*.—Account of an Embassy to the Court of the Teshoo Lama, in Tibet: and Narrative of a Journey through Bootan. *Lond.* 1800, 4to.
- Vegetius (Flavius)*.—De Re Militari, cum Commentariis, aut Notis Franc. Modii, &c. &c. *Raphel.* 1607, 4to.
- Walker (Joseph C.)*.—An Historical Essay on the Dress of the Ancient and Modern Irish; to which is subjoined a Memoir on the Armour and Weapons of the Irish. *Dubl.* 1788, 4to.
- Warrington (William)*.—History of Wales, 2 vol. *Lond.* 1791, 8vo.
- Williams (Sir Roger)*.—A Briefe Discourse of Warre. *Lond.* 1590, 4to.
- Wood (Ant.)*.—Athenæ Oxonienses. *Lond.* 1721, fol.

Mr. Barrington, at the End of his Observations on Archery, notices a MS. Treatise on Archery, by a Sadler of Manchester; said to be in the possession of Sir Ashton Lever. This Treatise, upon Inquiry, cannot now be found; but by those who have seen it, is said to be of no Value; containing only some few Extracts from Ascham, with some very trifling Observations, accompanied with Drawings of the Forms of common arrows.

N. B. The following Book is not quoted or referred to; but may be said to relate to Archery.

Poems on the Archers of the Royal Company of Archers, by several Hands. *Edinb.* 1726, 8vo.

IT may not be unacceptable to the Admirers of Archery, to be informed, that the following Prints have lately been published on the Subject.

An Ancient Archer in Mail.—Designed by Stodart and engraved by Heath.

This Figure is the Frontispiece to Mr. Moseley's Essay on Archery. It is very neatly engraved, but an incorrect Example of the Archer's Position, Attitude and Action. For he is represented drawing his Arrow at a Mark: and if a *distant* one is designed, his *Bow-hand* is too low: if a *near* one, his *drawing-hand* very much so; and the Elbow of his drawing-arm is too much raised. He is drawn with the *heel* of his right foot elevated, in the act of Shooting, a very great Error of the Designer. In other respects, the Action of the Archer is faultily described.

The above Criticism upon this Figure appears the more necessary to be noticed, as it has lately been reduced by Harper, and prefixed to the *Wrexham* Edition of *Ascham*; which may fall into the Hands of those, who may be induced to rely upon this attitude as an Example to be followed.

An Engraving of a *Portrait of Sir William Wood*, in his dress as Marshal of the Finsbury Archers, from an original Picture in the possession of the Toxophilite Society. Drawn by *S. Harding*. Engraved by *J. Clamp*. Published May 21, 1793.

Archery.—A Print representing the Shooting at Blackheath. Designed by Joseph Slater. Engraved by J. Heath. Published March 23, 1789.

Meeting of the Society of Royal British Bowmen in Gwersyllt Park, Denbighshire, in Aqua-tinta. The Figures drawn by R. Smirke, R. A. The Landscape by J. Emes. The Aqua-tinta by G. Apostool. Published April 1, 1794.

Female Archers.—Three Figures designed by Adam Buck. Engraved by Wright and Ziegler. Published 1799.

The Frontispiece to Markham's Art of Archery, is the Figure of King Charles I. designed as an Archer; but very indifferently executed.

Bromley (in his *Catalogue of Engraved British Portraits*) notices a whole Length of *Ascham* reading to the Queen, prefixed to his Epistles, by *Elstob*, 8vo. but it seems doubtful whether this is a *real* Portrait.

PART I.

AN EXAMINATION INTO THE HISTORY, CHARACTER AND MILITARY CAREER OF THE ENGLISH LONG-BOW, FROM THE PERIOD OF ITS INTRODUCTION INTO BRITAIN TO THAT OF ITS EXTINCTION, AS A WEAPON OF WAR: COLLECTED FROM THE BEST AUTHORITIES: WITH THE OPINIONS OF WELL INFORMED MEN, AND SOME OBSERVATIONS, UPON THE PROPRIETY OF ITS ABOLITION IN THE FIELD.



TRACTS, &c.

CHAPTER I.

SECTION I.

Antiquity of the Bow—Superiority of the Bow as a Weapon of War, previous to the Knowledge of Gunpowder—Principles and Materials of Bows in general—English Nation renowned for Archery—Revolutions in the Art of War—Periods of all Arts.

OF all the inventions of men, scarcely any one can challenge higher antiquity, (1) or more universal and long continued use, than the *bow*; a weapon which

(1) Of the origin and first invention of the bow, we have neither history nor tradition. Mr. Moseley (who has carried his observations upon the subject to a very distant age) leaves unsolved the question, by what accident the string was first applied to the wood, and the arrow to the string. He notices (with Ascham) the opinions of the ancients: some of whom ascribed the invention to Apollo, others to Peres the son of Perseus, and Scythes, the son of Jupiter; and after observing, "that the founder of every nation has the merit of the discovery of the bow ascribed to him by the inhabitants;" he concludes, "that it is in vain to make conjectures on the subject; the early periods of the world being hidden in such dense obscurity, that we cannot form any plausible hypothesis, to serve as an explanation." *Moseley*, p. 43. However we find mention of the bow in the most ancient and most authentic history of the first ages of the world, and for the first time, in the days of Isaac, (about the year 1760 before Christ.) *Genesis*, c. xxvii. v. 3. Ascham observes,
B that

which has been common to almost all (2) people, and a chief instrument of victory and conquest from the remotest period of time. Previous to the discovery of gunpowder, the bow was, unquestionably, the most *efficacious* (3) weapon of war; it united and concentrated the distinct powers of the only two weapons of distant offence, that had been discovered and made use of, namely the *dart*, *javelin*, or *lance*; and the *sling*. To the *certainty* of the former, it added the *velocity* of the latter. For it must be apparent to every one who considers the construction and effect of this weapon (the bow) that the arrow is but the *lance*, reduced in quantity of *matter*, and increased in quantity of *motion*; by the power of an instrument, capable of communicating a velocity far greater than that given by the arm, and of

that Nicholas de Lyra carries the antiquity of the bow, as far back as the days of *Adam*, supposing, that it was the weapon with which Lamech slew Cain. *Toxophilus*.

(2) Dr. Robertson, (in his *History of America*), informs us, "that there were some tribes on that continent, who were so destitute of art and ingenuity, that they had not attained to the discovery of this simple invention." Vol. I. B. iv. p. 375, (4to. edit. 1777.) Our late discoveries have traced it to the most remote parts of the globe. *Cook's Voyages*.

(3) Mr. Barrington observes, "that the English were so well trained to the use of the bow, that their armies had (it should seem) the same advantage over their enemies, as the exclusive use of fire-arms would give us at present." It was not only owing to the excellence, but also to the *number* of the archers, that the English obtained so many victories; for we find, that the strength and *main body* of their armies, frequently consisted of *archers*, while their enemies in early time, in general composed their armies chiefly of *men at arms*, on whom they placed the greatest dependence. Upon which circumstance Philip de Comines makes the following observation. "Mon advis est que la souveraine chose du monde pour les batailles, sont des *archiers*: mais qu'ils soient à *milliers* (car en petit nombre ne valent rien.)" *Memoires*, tom. i. p. 25.

continuing

continuing it to an infinitely greater distance, than the latter can by any means be made to attain (4).

Lamentable is the truth, that owing to the corrupt state and violent passions of mankind, war always has been, and still is, the chief art cultivated among even the most civilized people. (5) Among the still barbarous nations indeed, it is almost the only one cultivated at all. We therefore cannot wonder, that an instrument, which in its effects was found to be not only materially useful, in the constant war which man wages against the beasts of the field, but also to possess very extensive powers in the frequent contests between man and man; should afterwards be turned to the destruction of the human race. Its first use procured for it universal reception and confidence; its latter destination assigned it, until long after the introduction of gunpowder, the chief place among the implements of war.

The *principles* upon which bows were constructed, (although different nations made use of different materials,) have been very similar in all countries. The only materials hitherto employed, have been *horn* and *wood*; (6) the former are peculiar to most of the Eastern,

(4) The ancients (both Greeks and Romans) appear to have made use of a thong in projecting their darts or javelins. The natives of some of the South Sea Islands, use a grooved piece of wood with a stop at the end, called a *throwing stick*; with the help of which, they are said to cast a spear fifty yards with unerring certainty. In the Island of Tanna the natives throw their darts (by means of a cord) *seventy and eighty yards*. *Cook's Voyages*.

(5) The great historian and philosopher *Gibbon*, makes the following observation upon the discovery of gunpowder. "If," says he, "we contrast the rapid progress of this mischievous discovery, with the slow and laborious advances of reason, science, and the arts of peace; a philosopher, according to his temper, will laugh or weep at the follies of mankind." Vol. vi. p. 377.

(6) As to bows of *metal*, see *post* (part 4. ch. 5. sec. 1.) *Cross-bows* although originally made of *wood*, and afterwards of *horn*, have, for many ages, been made of *steel*. A very full account of the cross-bow may be found in *Muratori Antiq. Ital. tom. 2. Dissert. 26.* and *Daniel Hist. de la Milice Francoise, tom. 1.*

as the latter are to most of the European and other Nations. The Chinese-Tartary bow consists (except in the center and at the extremes) entirely of horn. The Persian and Turkish bows have generally a species of elastic wood *incorporated* (as it were) with the horn, along both curves of the bow. Mr. Moseley has described the shape and materials of the bows used in all parts of the world. But he is somewhat incorrect in his description of the Persian bow; observing that the horn is united to the wood by means of *catgut*. For the horn used in the construction not only of the *Persian* bows, but also of such *Turkish* bows as are not made with the *natural* horn, undergoes a preparation before it is used in bow-making; being completely fused or liquefied, and in that state is (by means of its *own tenacity or a glue*) incorporated with the wood. These bows, after they are made, are often (in different places) bound tight with cane or the sinews of the Buffalo, in order to increase their strength and prevent their giving way (7).

Of

(7) In some countries, the bow has made far greater advances to perfection, than in others. But where we find it rude and simple in shape, and clumsy in operation; we sometimes see it assume a most terrific and abhorred appearance; becoming the conductor of certain and inevitable death, by the slightest wound from the arrow it projects, when dipped in the juice of some poisonous vegetable. Mr. Moseley has given an account of numerous experiments made upon animals, with the poison used for infecting arrows; which in general proved immediately fatal, and he quotes from *Tavernier's Travels*, a very remarkable occurrence in proof of the instantaneous effect of the poison used by the inhabitants of Makassar; in which an arrow having been dipped, it was blown through a tube with such dexterity, as to strike the great toe of a condemned person, (the criminal having desired to be wounded in that part of his body,) and although two European surgeons on the spot, immediately exerted their skill, and amputated the part *far below* the wound, with quick dispatch; the man died in their hands. *Moseley*, p. 150. Mr. Paterfon (in his *Travels in Africa*, in the years 1777-8-9,) tells us, "that he fell in with an European woman, who had been wounded with a poisoned arrow. Great
" pains

Of all nations, who adopted the use of the bow, no one was ever found, to be so fully competent to the exercise and command of its greatest powers, as the *English*, who with this weapon, acquired the most memorable renown, and gained such victories, as astonished Europe.

In the following pages, we shall find, (upon the report of Sir John Smith,) in what high estimation the English archers were held by other nations; and the praises bestowed (even by our enemies) upon their achievements with the long bow; a little while before it gave place to a newly-invented weapon. In very early times, the skill and valour of the English archers, carried their fame into foreign countries. Père Daniel, speaking of the archers of Henry V. calls them "*milice redoutable, & qui n'avoit point d'égale, en son espèce, dans les autres nations.*" *Hist. de France*, tom. 3. p. 873. and Philip de Comines styles them "*la fleur des archiers du monde.*" *Memoirs*, tom. i. ch. 3. p. 21. The Duke of Guelderland in a letter to King Richard II. makes use of this very remarkable expression; "the tried valour of your people, and *the sharpness of their arrows*, have so far advanced the fame of your magnanimous nation above any of the west, that terror and dread cannot but seize your adversaries." Lord Lyttelton, vol. iv. p. 28. *notes to second book.*

But the desire of novelty, the capacity of the human genius, and the rapid progress of philosophy and the arts, have brought about such frequent and absolute changes in all human affairs; that the manners, customs

"pains had been taken to cure her, but in vain; for at different periods of the year, an inflammation came on, which was succeeded by a partial mortification. She told him, that the wound was easily healed up; but in two months afterwards, there was a certainty of its breaking out again, and this had been the case for many years." *Paterfon's Travels.*

and arts of former times, are often scarcely to be traced, in the inquiries and researches of the most active and diligent antiquarian. As must be expected in such a revolution; those arts most conducive to the welfare of states, have met with the first and greatest alterations. And we find that no one has, in all respects, undergone a greater change, both in principle and practice, than the art of war. Hence, inventions, which in times past were deemed most excellent, and even master-pieces of art; after having once made way for others, calculated (or at least supposed to be better adapted) to attain the same end, and promising more powers and perfections, have sunk into neglect, and been long consigned to oblivion. Yet have we not always profited by the exchange. On the contrary, in this age we frequently deplore the loss of arts, which flourished some centuries ago; and which we find are not now to be revived; arts which we too late acknowledge to have had no rival. There have, in all ages, been men, who were decided opponents to every *new* invention: but this obstinate and wilful blindness to merit, genius and useful discovery, has served only to encrease their energy and progress. Old and new systems and discoveries can rarely be united; it generally happens, that in the struggle, one is triumphant, and the other looked upon with contempt or indifference, and at last for ever forgot. One of our first philosophers and poets, has divided the life of man into *seven* ages. In imitation of his example, we may distinguish the existence of every art, by *five* evident periods; namely, its *birth, progress, perfection, decline* and *fall*. Periods, which historians assume, in their correct details of the revolutions of Empires; and in the sequel of this treatise, we shall be able to trace, and ascertain these distinct times in the history of the English *long-bow*.

SECTION II.

Introduction of the Bow into Britain—Partiality of our Ancestors for it—founded upon solid reasons—their reluctance to abandon the use of it.

IT seems scarcely possible to ascertain, (with any degree of precision) the exact period of time when the bow was *first* introduced into *Britain* (8). Mr. Moseley thinks it probable, that the bow was *introduced* into Britain, (as a military weapon) by the Romans, (*Moseley*, p. 210.) Cæsar certainly had *archers*, when he first landed in England. *Comment.* But the Roman archers were chiefly auxiliaries, and their most expert bowmen Cretans, who, Mr. Sandys (*Relation of a journey*

(8) The author of these tracts has been not a little solicitous, and not wanting in the labour of a diligent research, to discover and trace the use of the *wooden* bow, among European nations in early times; with a view to find out, if it had made any figure in history, previous to the battle of Hastings. But in this attempt the most authentic ancient historians (whose works have survived the wreck of time,) afford but trifling assistance; the Roman historians relate but little of those nations not subjugated to the power of Rome; and we have neither any very ancient nor accurate history of their barbarian invaders. Cluver (the author of the *Antiquities of Germany*) tells us, “that the only people of Germany who used the bow, were the Finlanders and the Goths, who bordered on the left and mouth of the Vistula; but what was the *form* and *kind* of bow used by them, is (he observes) to be investigated: and that Marcellinus says, that the bows of all nations were formed of bent spears or poles, (*flexis hastilibus*) except those of the Scythians or Parthians, who, in ancient times, used the same form of bow, as they had then.” This

ney to the Mediterranean and other parts anno 1610.) observes, "used the *Scythian bow*, but much better than "the Scythians." The use of *this* bow was continued among the Romans, long after the division of the Empire: and Mr. Gibbon, (vol. iv. p. 130.) informs us, "that in the sixth century, they placed their great "reliance upon it in the African war." "As the Scythian bow was made of horn, the art of fabricating it was probably then, (as it has been for centuries past,) confined to the nations that used it; and it is not to be supposed, that the English could easily have obtained from their conquerors, the arms, or the secret of forming the weapons, by which they had been subdued. And as the use of the *horn* bow is not to be traced in the annals or traditionary histories of this kingdom, we may conclude, that the English were unacquainted with it. In a preceding note (note 8.) an endeavour has been made, to trace the use and progress of the *wooden*

Mr. Gibbon (vol. ii. p. 270) calls the *long Tartar bow*. Cluver observes, "that as to other bows, Marcellinus only means, that they "were very long (*prælongi*.) as were those used in England, and "among other nations, which equalled the height of a man." It is probable, that some of the Gothic tribes who invaded the Roman empire, used the *wooden* bow. That they used the bow is certain; and historians inform us, that in their first encounter with the army of the Emperor Decius (*anno Domini 251*.) his son was slain with an *arrow*, in the beginning of the action. Macou (who quotes Mauricius) in his *History of the ancient Germans*, speaking of the Sclavonians, says, "utuntur quoque arcubus *ligneis*." The northern Goths, who came originally from Scandinavia, were the forefathers of the Normans; the latter, Mr. Gibbon observes, "had long been concealed by a veil of *impenetrable* darkness, and suddenly burst forth "in the spirit of naval and military enterprise." The Normans (after carrying their arms into Germany, Italy and France,) in the eleventh century, achieved the conquest of England; principally, as our historians relate, by means of the *long wooden bow*, which probably was known to most of the inhabitants of Scandinavia, (in the northern parts of which it is at this day used in the sports of the field): but we do not read of any material display of its powers, till the battle of *Hastings*.

bow

bow in Europe, to the time of the invasion of England by the Normans. The Danes, who as Speed observes, "were a branch from the same root," could not be ignorant of this weapon; the use of which probably extended to their neighbours the Saxons; although Strutt in his *Horða Angel-cynnan* notices, that among the first Saxons who came into Britain, there is no mention of the bow, and that the axe was their principal weapon. Historians have given very confused and contradictory accounts of the introduction of the bow into Britain. John Ross (the Antiquarian) although he informs us that the Britons used bows on the arrival of the Saxons; yet in speaking of the battle of Hastings, he tells us, "that the Normans had the victory, especially by means of their long (9) bows and arrows;" and adds, "that William encouraged

(9) It has been supposed, that at the memorable battle of Hastings, Duke William had cross bows, as well as long bows, in his army. And some historians and poets in their details of this battle, have armed William himself with a *cross-bow*, conformably with the report, that he was so strong a man, as to have been able to bend this kind of bow, when on horseback.

The troops William commanded, being (as we are told) collected from various parts, were no doubt differently armed; and probably the Genoese bow, or cross bow, (which we find was afterwards so conspicuous at the battle of Crécy,) was brought over by William with soldiers from Italy. In *Ducarell's Anglo-Norman Antiquities*, will be found an engraving (taken by Smart Lethieullier, Esq. and published by Bernard de Montfaucon, in his work intitled *Les Monumens de la Monarchie Francoise*) of a piece of tapestry found in the cathedral of Bayeux in Normandy, which he tells us was "by tradition called Duke William's toilet, and said to be the work of Matilda his queen, and the ladies of her court, after he obtained the crown of England." This tapestry represents the entire history of the Norman invasion, and the battle of Hastings. It is divided into several compartments, in all of which, the conqueror is figured in a coat of mail, with an iron *club* or *mace* in his hand, and generally mounted on his charger. We see in this work many archers, but they all have long bows. Some credit will attach to the accuracy of this historic representation, as it was not only fabricated immediately after the event, but under the eye of William, and therefore less liable to error. And surely

“ encouraged his troops, by assuring them that the “ *English had not any archers in their army.*” He is followed by Speed, Echard, Lord Lyttelton, Sir John Hayward, and others, some of whom assert, that at the battle of Hastings, the English were *astonished* at being struck with arrows, before the battle joined, and by enemies *at a great distance.* While other historians (as Mr. Moseley observes,) do not notice this surprise. Stow says the English at this battle “ *shot darts.*” *Annals.*—Our great antiquarian Camden tells us, that the bow was first “ *showed to the English by the Danes,* “ and was *brought in by the Normans.*” (*Remains.*) Ascham says, that Sir Thomas Eliot informed him, “ he had read in an exceeding old chronicle, that the “ first Saxons brought with them the bow, in the time “ of Vortigern, with which principally they subdued “ the Britons.” In support of what Sir Thomas Eliot notices, we may refer to an authority (probably the very authority alluded to by him,) which is Henry of Huntingdon; who informs us, that in the twenty second year of the reign of Kenrick and Ceaulin (Saxon Monarchs) a great battle was fought between the Saxons and English; in which the English disposed their *archers (viris sagittariis)* and light-armed troops after the manner of the Romans: this battle happened about the year, 560. (*Scrip. post Bedam. p. 180. b.*) In the *ninth* century (according to Asserius) we find the bow

surely it better accords with our ideas of military operations, and the known practice of the great military leaders in former ages, that William (who had a very arduous and active part to perform, and who, by all historians, is said to have conducted that battle with great skill, vigour, and bravery, frequently exhorting and leading on his troops, and so indeed he appears in the *Bayeux* tapestry) should have preferred a simple weapon of defence, to a very cumbersome weapon of offence; the use of which latter required constant attention, and was, in its nature, fit only for a *foot* soldier.

in the hands of our renowned Alfred, who seems to have bestowed much attention upon it, and no doubt had frequently proved its value, as a weapon well calculated to ensure both the sports of the field, and the dismay of his enemies. The greater probability (and which may serve to reconcile the different accounts of historians) is, that at the time of the battle of Hastings the long bow had not become a *general military* weapon in this nation. And even supposing that Harold had his archers; yet the effect of *numerous* and *well disciplined* bands of archers, giving regular and successive discharges of arrows, (and perhaps from better made bows than what Harold's army possessed,) might well have created astonishment and dismay among his troops. However the battle of Hastings must have fully convinced the English, of the value and superiority of the long-bow, as a weapon of war; and no doubt, from that period, it became with them, and was deemed by their Norman conquerors, an object of the first attention; for Sir John Hayward observes, "that the English being trained to the use of it, became the *best shooters* in the world." Mr. Barrington tells us, "that there is not any account, when shooting with the long-bow among the English first began; and that the *use of archery*, as expressly applied to the cross or *long-bow*, is not mentioned by our chroniclers, till the death of Richard I. who was killed with a cross-bow; and that after this, (which happened in 1199) there appears not upon record, any notices of archery, for nearly *one hundred and fifty years*; when an order was issued by Edward III. in the 15th year of his reign, for providing bows for the war against France." Mr. Barrington indeed does not vouch for accuracy or investigation upon this subject, but observes, "that he has not happened to stumble upon any passage which contradicts his assertion."

tion." An attentive perusal of our chroniclers and first historical writers, will afford us considerable light in this enquiry. We read of archers in the civil contest between Stephen and Matilda; but in the reign of Henry II. the bow appears to have been well known, and in great use as a weapon of war in England. Lord Lyttelton (*vol. ii. b. 2. p. 157.*) speaking of the army of Henry the second, observes, that about *this time* "the infantry for the most part, consisted of *archers* and *slingers*;" and we find Henry II. frequently triumphing, by the power of archery. Even before the year 1199, archers are noticed in the armies of both English and Scotch. The same writer tells us, "that at the battle of Coton Moor in Yorkshire, (22d August, 1138) between Henry II. and David King of Scotland," *both* armies had their *archers*, "and that those of Henry terribly galled the Galwegians, and obliged them to quit their post, after they had compelled his men at arms to give way." In this reign, we find the Welch celebrated as very expert archers. Giraldus their chronicler (who was Henry's cotemporary) has noticed some of their remarkable feats of archery; and Henry himself, during his expedition into Wales, affords a sufficient proof of the fact; having twice nearly lost his life by the blow of an arrow shot from a Welch bow. (Lord Lyttelton, *vol. ii. p. 57.* Warrington's *Hist. of Wales, vol. i. b. 6. p. 494.*) Mr. Barrington seems to have forgot, that the *most celebrated* archer this country ever boasted, "*played his pranks*," (Dr. Fuller's phrase) in the Reigns of Henry II. Richard I. and Henry III. (*See notes to the new Garland.*) And even *half a century* before the order issued in the reign of Edward III. (noticed by Mr. Barrington,) was fought in the reign of Edward I. anno 1298, the great battle of Falkirk, in which 12,000, or

as some say 50,000 Scotch were left dead upon the field, while the English had not *an hundred* slain. Each army had its archers; but our historians observe, that about *this time* the English archers began to excel those of all other nations. (*Goldsmith's History of England.*) It may also be noticed, that Richard I. performed great exploits with his archers, in the Holy-Land; particularly, as Sir John Smith observes, "by over-throwing (principally by the wonderful effect of his archers,) the brave Saladin and his whole army." (*Discourse on weapons.*) Mr. Gibbon also takes occasion to notice, the singular dread with which the English archers filled their enemies in the *Crusades*, and informs us, "that at one time, Richard with seventeen knights and *three hundred archers*, sustained the charge of the *whole Turkish and Saracen army.*" (*chap. 59.*) Mr. Barrington tells us, that Richard himself used the *cross-bow*, in this expedition, and he quotes Vinefauf as his author, for the truth of the remark. However this may be, no doubt is entertained, that his English archers used any other than the *English long-bow* (10). Giraldus informs us, "that three thousand Welch, the most expert in archery, and the use of the pike, engaged to go into the Holy-Land at the instance of the

(10) Whoever is desirous to satisfy himself better upon this head, may possibly find something to his purpose, by consulting *William Archbishop of Tyre, Radulphus Cadomensis. Galfredi à Vinefauf Itinerarium Regis Anglorum Richardi et aliorum in Terram Hierosolymorum*, in six books, published in the 2d vol. of *Gale's Scriptores Hist. Angliæ*, (p. 247, 429). *Roger Hoveden* and *Matt. Paris* afford likewise some materials. Speed records a feat of Archery in the Holy Land, performed chiefly by means of an arrow, but from what sort of bow it was shot, is not noticed. "Certainly," (says he) *Hugo de Neville* one of Richard's special familiars, "is recorded to have slain a lion in the Holy Land, driving first an arrow into his breast, and then running him through with his sword." *Hist. of Great Britain.*

" Archbishop

“ Archbishop of Canterbury, anno 1188.” (*Warrington's History of Wales, vol. i. p. 175.*) It is true, that our chroniclers do not always mention the long-bow by name, and we read, that in the reigns of King John and Henry III. the *cross-bow* was used in England. See a description of the battles of *Chesterfield* and *Lincoln*, in the reign of King Henry III. (*Archæologia, vol. ii. p. 276, and vol. viii. p. 195.*) But it is probable, that the use of the latter was chiefly confined to the *foreign troops* then in England. And we may observe, that our historians seldom use the term *archer*, when they mean a *cross-bow-man*.

That our ancestors paid to the *long-bow* (11) the highest veneration, and that their affection, or (as the introducers of fire-arms termed it) their prejudice for the continuance of it, was founded upon the most solid grounds, no one acquainted with the English history can for a moment doubt:—It had long been the safety of the realm (12), and had led the English to the greatest and most extraordinary victories, that history had to re-

(11) The bow used by the inhabitants of this island, has always been distinguished by the title of the *English long-bow*. Mr. Barrington says, it was thus called, to distinguish it from the *cross-bow*. Paulus Jovius calls it the *great English bow*. It might acquire the title of the *long-bow*, in contra-distinction to the bows used by most of the Eastern Nations, which were short, being composed chiefly of horn. (See *Marcellinus's Observations* ante, note 8.) Although the English do not claim the merit of its first invention, yet the wonders it has performed in the hands of our ancestors, (who we find at a very early period adopted and fostered this their *darling* weapon,) very naturally and significantly annexed their name to it.

(12) Sir John Fortescue says, again and again, that the “myghte of the realme of Englande standyth mooste upon archers.” *Treatise of absolute and limited Monarchy*. This observation is acknowledged by several acts of parliament, particularly the statutes of 33 H. 8. c. 9. and 13 Eliz. c. 14. quoted post.

cord;

cord; securing their peace at home, and planting in the minds of their enemies a rooting terror, that did not terminate with them even in the grave; but survived, and was handed down to successive generations. It was the weapon, of all others most suited to their *genius*, *prowefs* and *strength*; (13) with which they had been accustomed

(13) Sir John Smith observes, that the bow was the singular gift of God to the English nation. And Ascham writes, that neither the French, nor even the Scots, could ever rival the English nation in archery. Patritius, an Italian, (who wrote on military affairs, in the reign of James I. says, "that shooting in the long bow was a skill almost appropriated to our nation, and that neither the Italians, Spaniards, French, or Dutch had been accounted archers for five hundred years." With respect to the use of the bow in France, Sir John Smith gives us the following singular account. "The French king and some other princes, did in times past, establish laws and orders for the use of the long bow, and our manner of shooting; that they might be able to encounter us with our own weapon: and to the intent that they should become good archers, granted unto all who became perfect in that weapon, great privileges and rewards; so that the English long bow was practised in the greatest part of France many years. Yet in the end, the French king, and the captains of many nations did manifestly see, that neither the French, nor any other nations, with any exercise, could attain to shoot so strong, and with that dexterity and excellence that the English nation did; whereby they, seeing that our manner and use of shooting in our sort of long bows was a very peculiar gift of God, given unto our nation; they left the practise and use of that weapon, (saying only to shoot at short butt for sport) and returned again to the use of the cross bow; and of later years to the harquebuzs." *Harl. MSS.* Sir John Smith probably alludes to an establishment of four thousand archers attempted in France, about the year 1444, every parish being obliged to furnish one. *Note to Barrington's Observations on Archery. See Parquières Recherches de la France, p. 133, and Histoire de la Milice Francoise par le P. G. Daniel, tom. i. liv. 4.*

Mr. Barrington (speaking of archery in England and Scotland) observes, "that as there was no material difference, between the activity and bodily strength of the two people, it might be supposed, that the English and Scots wielded the bow with no unequal vigour and dexterity; but from undoubted historical monuments, it appears, that the former had the superiority." And Ascham further tells us, "that notwithstanding James I. of Scotland procured an act of parliament to be passed, obliging every

customed to form an acquaintance, very early in life; and it may, with truth, be said to have been the
toy

“ every Scot (under an heavy penalty,) to learn to shoot; yet
 “ neither the *love* of their *country*, the *fear* of their *enemies*, the
 “ *avoiding* of *punishment*, nor the *receiving* of any *profit*, could make
 “ them good archers, who by nature were not apt for archery; and
 “ that they themselves bore testimony to the remark, by making use
 “ of a proverb, whereby they candidly gave the whole praise of
 “ shooting to the English: saying, that *every English archer beareth*
 “ *under his girdle twenty-four Scots.*” *Toxophilus*. Notwithstanding
 these opinions, we must be permitted to observe, that the disin-
 clination for archery shewn by the Scotch (a people brave, hardy,
 diligent, and possessed of much muscular power) was more owing
 to their partiality for other weapons, than to any *natural disability*.
 Every nation is naturally partial to the weapon it has been long
 acquainted with, and to the use of which its people have been
 trained from infancy. The English themselves afford an instance
 in point, in the great attachment they shewed to the bow. The
 Scotch too had their favourite weapon, (the broad sword and
 target,) with which even in modern times, they have performed
 very noble service in the field. And we may remark, that as far
 as *modern* archery extends, it affords a proof of the observation:
 since from the time of the institution of archery in Scotland, it
 has in that country met with very great support; and at this day,
 Scotland can boast of many skilfull bowmen. But Ascham ap-
 pears to have been not only somewhat *harsh*, but also somewhat
incorrect, in this remark concerning the Scotch nation. It is true,
 that James I. of Scotland, was particularly anxious to establish
 the use of the bow in that nation; and to that end, enacted laws,
 prohibiting the games of foot ball and Golf, and enforcing the prac-
 tice of *archery*. But it seems that after the death of that monarch,
 the national habits prevailed, and among an hundred attendants of a
 Baron, hardly *six archers* could be found, the remainder resuming
 their spears. James II. also made a similar attempt, to support
 the use of the bow in the Lowlands of Scotland, which proved
 ineffectual. However, that weapon met with greater encourage-
 ment in the Highlands. In describing the army of James III. in
 1488, Lindsay enumerates no less than *ten thousand Highlanders*
 with *bows*; under the Earls of Huntley and Athlone. The author
 of the *present State of Scotland*, (1682) mentions, (p. 6) bows and
 arrows as the *chief* weapons of the *highlanders*, even of that period.
Pinkerton's Hist. of the Scots, vol. i. p. 163, 425.

As to the *Welch*, they were always famous for strength and dex-
 terity in drawing the bow. The men of the province of Guent, or
 Monmouth, (which was formerly a part of that kingdom) were ac-
 counted the best archers, not being inferior in the use of the long bow
 to

toy (14) of their infancy, the *pride* of their manhood, and the *boast* of their old age. Nor was this all, it bore in their minds an inestimable value, on another account; for while it freed them from the fear of a foreign foe, it ensured their liberties, from the rapacity of an homebred tyrant. The universality of its practice had a most happy effect in this kingdom; since, when it readily furnished the realm with defenders, and the King with an army to chastise a continental foe; at the same time, it operated most powerfully in favour of liberty, by enabling every one (whenever the Monarch exceeded his just prerogative, and broke through the ties of his solemn compact with his people, to tyrannise over them;) to meet him in the field, supported even by a regular army, with *equal weapons* and *equal skill*. (15)
Add

to the Normans themselves. *Ld. Lyttel.* vol. 2, b. 2, p. 157. Among the old Welch game laws, we find one, which prohibited any person from shooting at a beast when at rest, that was appropriated for the chase; on pain of forfeiting his bow and arrows to the lord of the manor; though he might shoot at and kill any such, if he could, when the dogs were in full cry; but he was not allowed to shoot among the dogs. *Warrington's Hist. of Wales*, vol. 1, p. 183. The Irish do not seem to have been much acquainted with the use of the bow, till the reign of Edward IV. who enforced the practice of it in that nation (among the English residents, and their Irish servants) by several acts of parliament. The hardiness and natural strength of body possessed by that people, must have given them great advantage in the use of this weapon.

(14) The author of the invention of fire-shafts for long-bows (published 1628) observes, that "as *Rackets* are among the French, so *bows* are the *natural pastime* of the English." The propensity to archery in youth, is seen in every village in England; most boys being fond of making an instrument, somewhat in the shape of a bow; though in general, the imitation is very indifferently executed. Mr. Saltzman, (in his *Gymnastic Exercises for youth*), makes a similar remark.

(15) So long as the English continued the use of the bow in war, and all ranks of men practised archery, no less as an amusement, than as an introduction to its first great object; so long were they completely an *armed* nation; and as such, *invincible*;

Add to this, that archery had attractions and charms of a different nature. The exercise of it afforded an amusement, which was followed by the most eminent men in the nation; and not only tended much to preserve the blessing of health, and prolong life, but braced the nerves, and brought with it a considerable accession of strength to the body (16). Could then this attachment to the bow be looked upon as unnatural, or be deemed ill founded, or ill judged; or was it not to be expected, when a total change of weapons was proposed? Our ancestors by *experience* knew the *use* of the bow, they had long witnessed its *effects* in their hands, and had every reason to be satisfied with them. They very reasonably feared to hazard the loss of this weapon, in exchange for one of very modern introduction; which that experience had taught them was inferior to the bow; the English arrow having frequently rendered this new weapon useless, and beaten it out of the hands of the enemy. If they were guilty of error, in their comparative estimate of the value and effects of the two weapons; it may be urged (and not untruly) that it was not till *long* after the introduction, and many gradual steps of improvement in the construction and use of fire arms, that the patrons of them

for history satisfactorily proves to us, that an hostile army, however well disciplined, must ever invade a *whole people* naturally brave and trained to the use of the most effectual weapons of war, without the smallest chance of conquest, and with an almost absolute certainty of being speedily annihilated. The English, armed with the *long-bow*, could have little to dread from a standing army (though entirely devoted to the interest of the prince) the dread of modern patriots. The general knowledge of the use of the bow among all ranks, made rebellion doubly formidable; and to that may be principally ascribed the bloody conflicts during the civil wars.

(16) How far archery merits attention on this account, is fully noticed in a subsequent part of these tracts. (*Part 2. Chap. 1. sec. 1.*)

after

(after repeated experiments) were enabled to form such a judgement of their effect, as to venture them in competition with the bow. The invention of gunpowder, and the effect of it, when confined in a tube, was most singular and surprising. This hitherto unthought of *terrestrial* thunder and lightning, might well appal a nation of the bravest warriors. But notwithstanding their aptitude to astonish the whole creation, men as well as brutes; yet the writers of the times (Sir John Hayward, Sir John Smith and others,) observe, that when the former became accustomed to the “*noyse and cracke*” they made, and found that their terrors were more *imaginary* than real, they began to undervalue them: and probably, measuring their computed *ultimate* effect, by that of the bow, (which did not seem to promise or to be capable of affording any great improvement, or accession of power;) they were little inclined to believe in prospect, the still greater powers which fire arms by degrees began to unfold. And it was not till they had approached nearly to their present degree of perfection, and became a chief object of attention in war on the continent of Europe; and until the use of them was enjoined and enforced in this kingdom; that our bowmen could be brought to abandon, what they had been taught to look upon for so many ages, as the very *pillar* of the state.

SECTION III.

*Memory of the Bow still cherished in England—
 Advantage gained to our Enemies by the relinquish-
 ment of it, as a weapon of War—Present state of
 the Bow in England—Probability of the partial
 revival of military Archery in England—Neglect of
 it disapproved.*

ALTHOUGH the English were at length compelled to relinquish their favorite weapon; the memory of it was ever dear to them. Nor has a long intervening period of time, the succession of many subsequent generations, and the complete change which all human affairs have undergone, totally extinguished that energy, which the bow once impressed upon the minds of *Englishmen*. The spirit of military archery is indeed greatly damped; but perhaps it is not entirely extinct, in this nation. Few I must believe there are, who at this day can peruse (either in poetry or prose,) the details of the famous battles of Cressy, Poictiers and Agincourt, without feeling some touches of that respect and veneration for the bow, which our ancestors so often acknowledged, and so warmly cherished. And whatever may be the value of the modern weapons of war, let him who reads the history of modern times, look narrowly to find, if but *once* (since the days when *archery* flourished,) “with our *twelve thousand* or *fifteen thousand* we have defeated an army of *fifty thousand* or *sixty thousand*.” Or if our *new* weapons have ever
 “afforded

afforded us *parallels* to the victories, obtained with the *long-bow* (17). And may not the advocate for the bow, fairly ask those who have recently served in France, if the old proverb, (which our archers so often won) “*that one Englishman would beat three Frenchmen; and that the English would never fly, nor ever yield,*” (*Montluc’s Commentaries*) is still current there; or if the French nation has not (ever since the disuse of the long-bow by the English,) exulted and exclaimed, (as Mr. Barwick tells us, they did upon its decline in his time:) “*Non, non Anglois, votre cause est bien falle, car Dieu nous a donnees moyen de vous encounter apres un autre sorte que en ce temps passe. No, no Englishmen, your case is become fowle, for God bath given us means to encounter with you after another sorte than in times paste.*” There was indeed a time when, as Clement Edmonds observes, “*the English nation carried a scourging hand in France.*” *Sed tempora mutantur.*

Let not any one suppose, from what I have said, in

(17) “*What though with our 12,000 or 15,000 we have oft defeated their armies of 50,000 or 60,000; stands it with reason of war to expect the like success still? especially since the use of arms is changed, and for the bow (proper for men of our strength,) the caliver begins to be generally received.*” *Lord Herbert’s Life of Hen. 8. p. 18.*

It was remarked on the eve of the battle of *Agincourt*, (so fatal to the French and so glorious to the English;) that the former recollecting with shame, that for the space of a whole *century*, they had in all their encounters with the English, been beaten by them, and confiding in their extraordinary superiority of number; being near 160,000, while the English army did not consist, even according to the accounts of the French Historians, of more than 25,000; buoyed themselves up with the hopes of a certain and ample retaliation, and an easy victory. “*Of this they indeed, made themselves so sure; that they had resolved to put every man to the sword, except the King and some nobles, and even played at dice for the prisoners they designed to take.*” *Goodwin’s Hist. of the reign of Hen. V. p. 82.*

speaking of the great esteem, in which the bow has for so long a period been held; that I aim at disparaging the use and effect of musketry: far otherwise are my thoughts and intention. For while I am paying a just tribute of remembrance and applause, to the *fallen* pillar, upon which the trophies and emblems of our national glory were once displayed; I am sensible, that our valour and our efforts in these times, merit the highest encomiums, and that the weapons we now use, are common to most nations, and perhaps best calculated for the modern system of war. No, in common with other men, I have only to lament, that the new invented weapons of our enemies should compel us to yield the superiority, our own once purchased and long maintained for us, and to cope with them, upon their own terms; for such most undoubtedly has been the effect of the change of weapons, ever since it fully took place. Our enemies far out-number us, and the weapon we now both use, is evidently calculated to throw the advantage on the side of *numbers*. And Mr. Barwick notices, that upon the introduction of fire arms in *France*, it was a common observation in the mouth of every *Frenchman*, "that the *weakest* of them were able to give "greater wounds, than the greatest and strongest archer "we had." Thus, as an English poet, of the seventeenth century writes,

" We to the grey-goose wing more conquests owe,
 " Than to the Monk's invention; for then
 " We cull'd out *mighty armes* to draw the bow,
 " *Striplings* oft serve us now, then only men;
 " For these hot engines equal mischief can
 " Discharged by a *boy*, or by a man (18)."

Alleyne's Batt. of Cressy.

The

(18) The well-informed and accurate observer Dr. Johnson makes the following remark to our purpose: " It is (says he) thought " by

The bow, indeed, now appears amongst us only as an instrument of *amusement*, its ancient size (and "*pitb*," as Ascham terms it) is changed; and at this day, it is in most hands, but a *toy*, compared with what it once was, and might yet be. That archery (I mean military archery) will ever again rear its head in this kingdom, and again become, (to use the language of Sir John Fortescue) "*the myghte of the realme*," is not now to be supposed: but that it may at some future and not distant time, become a favourite with the nation and military men, and an *additional* support to our arms, is somewhat problematical. There are not wanting in these days, men of genius and great skill in military affairs, who have experienced the serious effects of even *mimic* bows (19); and who have been led to consider whether it would not be advisable, once more to admit the English bowman to a *share* of military glory. The present perturbed state of Europe, and the continental expeditions which have of late taken place, and proved upon the whole so disastrous; thinning the ranks of our best soldiers: the necessity of sending continual supplies of men to our distant settlements, and at the

" by sensible military men, that the English do not enough avail themselves of their superior *strength of body* against the *French*: for that must always have a great advantage in pushing with bayonets. I have heard (continues the Doctor) an officer say, that if *women* could be made to stand, they would do as well as men in a mere *interchange* of *bullets* from a distance; but if a body of men should come up close to them, then to be sure they must be overcome. Now (said he) in the same manner the weaker-bodied French must be overcome by our strong soldiers." *Boswell's Tour to the Hebrides* (October, 1785) p. 279. This observation seems to point out the great use of the long bow combined with that of the *pike*.

(19) Many English officers who served in America during the last war, bear testimony to the mischief occasioned in the English army, by a few natives armed with very sorry bows. Those who have served in the East Indies, have experienced similar effects from bows.

same time, of preparing for threatened invasions; seem to suggest the propriety of the use of archery, at least at home. This combination of circumstances has given birth to a recent very sensible and patriotic publication (20), in which, the advantages to result from a *partial* revival of *military* archery, are plainly pointed out, and convincingly proved.

The struggle for pre-eminence between the bow and fire-arms, caused no small difference of opinion among the military men of the times; each was partial to the weapon he had been most accustomed to use. And Alleyne, (whom I have before quoted, an advocate for the bow) tells us,

“ That the white faith of Hist’ry cannot shew,
“ That e’er the *musket* yet could *beat the bow.*”

Battle of Cressy.

Certain it is, that the bow did not fall into neglect without the dissatisfaction of many, and the opposition of some of the best soldiers and judges of military affairs of the age. Among others, was Sir John Smith, a gentleman who had seen much service, and who took great pains to set forth the advantage of continuing the use of the long bow, in such a forcible appeal to all men, that Mr. Barwick, (his fellow soldier, who seems

(20) *Mason on the Revival of the Long Bow and Pike.* In the reign of Charles I. Neade published a book upon the same subject, and obtained a commission under the great seal for teaching the combined management of the pike and the bow. Markam in his *Art of Archery* proposed the same. Lord Herbert tells us, that of the ten thousand men sent against France by Henry VIII. five thousand of them were archers; “ who besides their bows “ and arrows, carried *halberts*, which they pitched on the ground “ till their arrows were shot, and then took them up again to do “ execution on the enemy. This (he observes) was an excellent “ part of military discipline, and yet not remarked by our English “ chroniclers.” *Life and Reign of Henry VIII.* p. 20. At the battle of Agincourt, the archers wore by their sides, *battle-axes*, *swords* and *daggers.* *Goodwin’s History of the Reign of Henry V.* p. 67.

to have entertained a decided opinion and predilection in favour of fire-arms opposed to the bow, and no great partiality for Sir John Smith) in a treatise written by him, (in answer to Sir John Smith's observations upon the use and effect of the bow, and in which he most impatiently inveighs against Sir John Smith's opinions) declares, "that he had held conference with divers
 " persons, of sundry callings, touching some part of
 " those discourses; wherein he found so many addicted
 " to the opinion of Sir John Smith, touching the com-
 " mending of the archery in England; with so many
 " reasons and arguments by him alledged in that be-
 " half; that many were thereby persuaded, that the
 " long bow is the only weapon of the world for the
 " obtaining of battails and victories." (21)

This declaration is surely no *trifling* proof of the weight annexed by men of all "callings" to Sir John Smith's arguments, which he supports by reason, and grounds upon actual experiment. The discourse, upon weapons of war, written by Sir John Smith, is now so rarely to be met with, and is so complete and satisfactory an history of the powers of the bow; that few modern archers (most of whom are eager to hear any thing that can be said in praise of the bow) and perhaps few others,

(21) Sir John Smith wrote a very elaborate reply to Mr. Barwick, chiefly in explanation of his opinions concerning military tactics, and to point out Mr. Barwick's misinterpretations of his former Treatise. This work is not noticed in the account of his life, inserted by Wood in his *Athenæ Oxonienses*, who mentions his former works. According to that writer, Sir John Smith appears to have been a complete scholar and foldier. Wood adds, "I cannot yet find exactly when he died, only that he was living and in great esteem among soldiers and learned men in 1595." Mr. Barwick has the *modesty* to call himself (in the title page to his book) "*Gentleman, Soldier, Captain et encor plus oultre.*" But his publication does not appear to give any support to so *curious* and *extensive* a character.

will be dissatisfied with an enlarged account of archery; and a narration of the particular feats of valour performed by their ancestors, (which have long lain by unperused, and are not to be met with in the general annals or history of their country) from the pen of a soldier, who had frequently witnessed the effects of the long bow when opposed to fire-arms; and which is brought down to the time when archery ceased to be used in our wars: especially as this collection of reasons and facts will enable them to form a more accurate conclusion of the advantages to accrue from the future reintroduction and use of the long bow, than can be drawn from a display of its effects, in times, when (however great were the victories it obtained) fire-arms were either not invented, ill constructed, or inefficiently used. And although some very considerable improvements have of late been made in fire-arms, (rather indeed by a different construction of the *lock*, and by rendering the piece more *manageable* than by any alteration in *principle*) subsequent to the time when Sir John Smith wrote (22), yet even those advantages (great as they are) do not, in the opinion of many, render the bow so *inferior* in its effects to the modern firelock, as some are apt to imagine.

(22) It appears from Sir John Smith, that the *firelock* came into use before he wrote; so that he had an opportunity of forming a very good judgment of this improvement in the construction of fire-arms, when compared with the bow. He speaks of *Petronells* and *Snap-hances*. The first was probably the old *wheel lock*, (which succeeded to the match) the other was the present firelock, which lost the name of *snap-hance* in consequence of the substitution of a new lock (called an *English lock*); by which it seems there was little or no difference between the *snap-hance* and the *present firelock*. See Sir John Smith's *Comparison between Fire-Arms and Bows*. And the *Introduction to the Plan of Discipline composed for the Norfolk Militia* (1760) p. 7, note 3.

CHAP-

CHAPTER II.

EXTRACTS FROM SIR JOHN SMITH'S DISCOURSE
ON WEAPONS.

SECTION I.

Reasons for the Change in Military Weapons—Defects of the Musket—Imperfections of the Bow—Quicker Discharge of the latter—Quick firing condemned—Superiority of Archers in the Field—Reasons—Effects of Arrows upon the Horse—Objections against the Bow answered.

SIR John Smith prefaces his discourse by observing, “ that the change made in the military weapons in this kingdom, was owing to the youth, inexperience, and vanity of some men; who were unable to offer any solid reason, and in fact were averse to offer any argument at all, for a conduct opposite to the opinion of both English and foreign commanders and soldiers. Yet their decided wish and aim was, to abolish archery, and extinguish the exercise and serviceable use of the long-bow; by which weapon, our ancestors, with many miraculous victories, had made our nation famous in Europe, Africa, and Asia; and the neglect of which, had been fatal to several empires.”

He then proceeds to a comparison, between the bow
and

and the musket. In treating of the defects of *fire-arms*, he notices chiefly the following :

“ 1st, The extreme *nicety* required in *taking fight* ;
 “ which, if the musketeer fails in (to use Sir John
 “ Smith’s words) but the length of a *wheat corn*, in
 “ the height, his shot is of no effect, although the mark
 “ shot at is very large.”

“ 2d, The *uncertain* flight of the bullet (even at
 “ point blank distance,) owing to its being less than the
 “ bore of the piece.”

“ 3d, That fire-arms grow *hot* and dangerous in
 “ seven or eight hasty discharges.”

“ 4th, That if the powder is not well corned and
 “ kept very dry, it *fueth* the piece, and carries the
 “ bullet *point blank* but a *little way*, and many times
 “ goes *not off at all*.”

“ 5th, That when the piece is hung *down*, the bul-
 “ let *falls out* ; and that the piece is liable to *rust*,
 “ and to be *overcharged* ; and in the latter event, to
 “ *burst*.”

“ 6th, That the powder sometimes does not take
 “ *fire*, the rain *wets* it, and the wind *blows it out of*
 “ the pan.”

“ 7th, That a large body of musketeers is insuffi-
 “ cient to resist a much *less* body of *horse*, in an open
 “ plain.”

“ 8th, That after many *hours* in great encounters
 “ on both sides, and many thousand bullets discharged
 “ (often within short distances); very few men are *slain*
 “ or *hurt*.” (23)

The

(23) With respect to the *two first* observations, it must be admitted, that the best formed modern pieces are liable to very great uncertainty in the flight of the bullet ; which arises chiefly from the difficulty of keeping the arm steady in taking aim (particularly when the bayonet is fixed on the piece, which adds a preponderating

“ The imperfections of the long bow, (says Sir John
 “ Smith,) do consist only in the breaking of the bow,
 “ or bow-string; for the which, in times past when
 “ there was great accompt made of archery, there
 “ was special care had, that all livery (24) or war
 “ bows, being of the wood of yew, were longer than
 “ now are used, and so very well backed and notched,
 “ that they seldom or never broke. Besides that, the
 “ archers did use to temper with fire a convenient
 “ quantity of wax, rosin, and fine tallow together; in
 “ such sort, that rubbing their bows with very little
 “ thereof, laid upon a woollen cloth, it did conserve
 “ them in all perfection, against all weather of heat, frost,

derating weight to the end of it) and sufficiently firm to resist
 and counteract the jar of the piece. The uncertainty in the
 flight of the bullet (arising from the circumstance of its being less
 than the bore of the piece) is corrected in a very considerable
 degree, by the *rifle-bore*. As to the *third*, although frequent firing
 certainly furs the piece and lessens its effect; yet so strong is the
 chamber of muskets made, in general, that they are, I believe,
 seldom known to burst. The *fourth* and *fifth* observations are
 obviously applicable to modern fire-arms, and afford reasons in
 proof of the last assertion. The *sixth*, indeed, refers particularly
 to the *match lock*, (the pan of which was *open*) yet it, in some
 degree, also applies to modern fire-arms. The *seventh* needs no
 argument to support it. As to the *last* assertion, see note (46).

(24) Livery bows it should seem were made chiefly of the *English*
 woods: and Clement Edmonds (*lib. vii. c. 15, p. 137*) observes,
 “ that he could not commend them, being for the most part
 “ heavy slugs, and of greater weight than strength, and of more
 “ shew than service.” Our statutes on archery make mention of
wych, hazel, elm, ash, auburne, and other reasonable trees (accord-
 ing to their powers) as affording bow woods. See *Stat. of 33 H. 8.*
c. 9. and the *Irish Stat. of 5 Ed. 4. c. 4.* The statute of the
 8 Eliz. c. 10. describes *three* sorts of bows, viz. *outlandish yew* of
 the *best* sort (which that statute forbids to be sold for more than
 6s. 8d); the *second* sort for more than 3s. 4d. and the *coarse* sort
 (called *Liveray* bows) for 2s.; at which last price *English yew* was
 thereby fixed.

and

“ and wet: (25) and the strings being made of very
 “ good hemp, with a kind of water-glue, to resist wet
 “ and moisture; and being by the archers themselves
 “ well whipt with fine thread, they did very seldom
 “ break: but if any such strings did happen to break
 “ in time of service, the soldiers archers had always
 “ in readiness, a couple of strings more, ready whipt

(25) The long bow (when unstrung) was carried in a woollen or waxed-cloth case, to preserve it from wet and moisture. The bow strings of the *Dahæ* at the battle of Magnesia (between Scipio and Antiochus) are reported to have been relaxed by a fog. *Rollin* vol. 8, p. 263. Possibly their strings were made of what *Ascham* calls *Bullock's Thernes* (or thongs), of which, he says, many bow strings of the ancients were made. It is a singular fact, that our historians (following *Mezeray* the French chronicler) have remarked, that at the battle of *Cressy*, the strings of the Genoese cross bows were so much relaxed by the heavy shower of rain which fell previous to that battle, as to have been of little service. Some writers indeed do not notice this disadvantage on the part of the cross bowmen, but only the superior effects of the English long bow. *Muratori* has given us a more credible and satisfactory account of this matter, attributing the deficiency of the Genoese bows, not to the effect of the rain upon their strings, but to its effect upon the ground; which was so soft, that when they attempted to put one foot in the stirrup of the cross bow, in order to charge it, the other slipped from under them. As this circumstance seems worthy the attention of the accurate historian, I shall quote the passage from *Muratori*, in his own words: “ *Mezerayus* in
 “ *Historia Gallica* narrat, quum ex improvise cecidisset imber
 “ effusus, Genuenses ad pugnam lentos processisse, quoad conten-
 “ derent arcuum suorum chordas a pluvia debilitatas, seque prop-
 “ teria impotentes ad prælium; eaque de causâ, veluti proditores
 “ a subsequentibus iratis Gallis, fuisse trucidatos. Audi nunc
 “ auctorem vitæ *Nicholai Laurentii*, sive *Historiæ Romanæ* in
 “ hoc opere edendæ, qui iis ipsis diebus scribebat: *Era stata* (in-
 “ quit ille) *un poco di piovarella. La terra era infusa e molle. Quando*
 “ *volevano caricare la balestria, mettervano pede nella staffa. Lo pede*
 “ *sfuiva. Non potevano ficcare lo pede in terra. Hoc est, paulo ante*
 “ *modicus imber ceciderat. Humus ex infusa aqua mollis ac lubrica*
 “ *erat. Quum Genuenses Balestas Sagittis oneraturi erant, pedem sta-*
 “ *phiæ immittebant. Pes, in quo stabant, elabebatur. Nequibant*
 “ *pedem solo figere.* Tom. 2. *Dissertation* 26, p. 18.

“ and

“ and fitted to their bows, to clap on in an instant(26).
 “ And this I have heard of divers yeomen, who have
 “ served as soldiers archers in the field.”

“ I shall now, (continues Sir John Smith) pro-
 “ ceed to the consideration and examining, of *three*
 “ most important things; in the which, all effects of
 “ musketeers, harquebussiers and archers, and their
 “ weapons do consist: and that is, whether muske-
 “ teers or harquebussiers with their weapons of fire,
 “ or archers with their bows and sheaves of arrows,
 “ upon all occasions in the field, be most ready with
 “ all *dexterity* and *celerity*, to execute the effects of
 “ their weapons; by discharging, and giving vollies
 “ at their enemies. The *second* is, whether the
 “ archers with their weapons, or the other soldiers
 “ with their weapons of fire, do fail *least* to shoot, dis-
 “ charge and give their vollies. And the *third* is,
 “ whether by reason and common experience, the bul-
 “ lets of weapons of fire in the field, or the arrows of
 “ archers do *annoy* the enemy most, be they horsemen
 “ or footmen. To the *first*, I think, that there is no
 “ man of any experience in the aforementioned weapons,
 “ that will deny, but that archers are able to discharge
 “ *four* or *five* arrows a piece, before the harquebussiers
 “ shall be ready to discharge *one* bullet (27). Having
 “ their bows bent, the archers have no more to do,

(26) From a passage in Ascham, corroborated by an antique ring, found in the field where was fought the memorable battle of *Bannockburn*, (an engraving of which is given by Mr. Moseley) it seems, that it was sometimes the practice for an archer to have *two* strings (one of them loose) put on his bow *together*. *Moseley*, p. 107.

(27) It must be recollected, that Sir John Smith speaks of the ancient piece with a *match lock*; but see a note on this point *post* (note 66.), Sir John Smith also notices many other imperfections, to which that kind of fire-arm was liable, and which not being applicable in the comparison of the bow with the *firelock*, are here omitted.

“ but

“ but to draw their arrows out of their cases and
 “ sheafs; to notch them in their bows, to draw them
 “ to the heads, and shoot; all which is performed in
 “ almost in an instant. To the *second*, I observe, that
 “ neither hail, rain, or snow, (which impede the ef-
 “ fects of fire-arms,) can prevent or hinder the archers
 “ from shooting, and working great effects with their
 “ arrows.”(28)

As to very great celerity in firing muskets, Sir John
 Smith entirely condemns it; observing, that in such
 case, the musketéers take no sight, and only spend pow-
 der and heat their pieces (29). “ As to the *third*
 “ and last point, I think, (continues Sir John Smith)
 “ it is superfluous to reiterate and again set down
 “ the different advantages and chief effects of harque-
 “ bufféers, musketéers, and archers; because I have
 “ already made it so manifest; as also that the reader
 “ hereafter shall see, in many parts of this discourse, by
 “ divers reasons, and many notable examples and
 “ experiences; that archers in the field do far exceed
 “ and excel all musketéers and harquebufféers; in ter-
 “ rifying, wounding, and killing both horses and men,

(28) Hail, rain, snow, and wind, will certainly take effect
 upon the arrow, and in *some degree* alter its range and force. With
 respect to the latter, Afcham (in his *Toxophilus*) observes, “ that
 “ some kinds of winds, (as a side wind) try an archer and good
 “ gere very much; and that once the down wynd *twelve score*
 “ *mark* (for the space of three weeks) was *thirteen score and an half*;
 “ and into the wind (being not very great) a great deal above
 “ *fourteen score* :” meaning, that the wind was so strong and brisk,
 that the arrow flying *with* the wind, greatly over-shot the mark.
 However, he is speaking of light arrows; not war arrows, which
 were much heavier, and in their construction better calculated to
 contend with the wind. We read indeed, of a battle in the east,
 during an hurricane, which was so violent, as to render it diffi-
 cult to send an arrow from an Indian bow beyond a few paces.
Reign of Behaader Shaw, Asiat. Reg. Characters, p. 11.

(29) This is another reason in support of Sir John Smith's
eighth observation.

And

“ And therefore will only in this place, answer one
 “ objection, which I have divers times heard alledged,
 “ in commendation of the effects of weapons of fire,
 “ and to the disabling of the effects of archers; and that
 “ is, there are many that have reported, that the
 “ blows of the bullets of muskets and harquebuffes
 “ are no less than death, to such as they light upon:
 “ whereas contrarywise, the blows of arrows do but
 “ only gall, or lightly wound: which in troth, is
 “ greatly mistaken, by all such as do hold that
 “ opinion. For that by common experience it hath
 “ been seen, in all skirmishes and great encounters,
 “ that for every one that hath been slain dead in the
 “ field, by the shot of musket or harquebuses, there
 “ have been *four*, that have *not* died by the hurts
 “ of such weapons of fire; although some of them
 “ have remained ever after maimed, and some not.
 “ Whereas by true experience, archers with their ar-
 “ rows, do not only greatly wound, but also some-
 “ times kill both horses and men, in such sort as
 “ they never depart out of the field alive, as it shall
 “ hereafter appear by divers ancient, as also modern
 “ examples. Besides that I, and divers other gen-
 “ tlemen of our nation, yet living, that were in
 “ France in king Edward the Sixth’s time, and also di-
 “ vers times since, have many times heard French cap-
 “ tains and gentlemen attribute all former victories of
 “ the English against themselves, and their ancestors
 “ the French, more to the effect of our *archers*, than
 “ to any extraordinary *valliance* of our nation; and
 “ therewithall further report and say, that they did
 “ think, that the English archers did use to poison
 “ their arrow-heads; because, that of great numbers of
 “ the French nation, that many times had been
 “ wounded or hurt with arrows; very few had escaped

“ with their lives; by reason that their wounds
 “ did so imposthume, that they could not be cured.
 “ In which their conceits they did greatly err; be-
 “ cause, in truth, those imposthumations proceeded of
 “ nothing else but of the very *rust* of the arrow-heads,
 “ that remained rankling within their wounds; and
 “ therefore by the common experience of our ancient
 “ enemies, (that we have so often vanquished), not
 “ only the great, but also the *small* (30) wounds of our
 “ arrows, have been always found to be more dange-
 “ rous and hard to be cured, than the fire of any shot
 “ unpoisoned.”

“ Besides all which, it is to be noted, that horses in
 “ the field being wounded, or but *slightly hurt* with ar-
 “ rows, they (through the great pain that upon every
 “ motion they do feel in their flesh, veins, and sinews,
 “ by the shaking of the arrows with their barbed heads
 “ hanging in them,) do presently fall a yerking, fling-
 “ ing and leaping as if they were mad: in such sort, as
 “ be it in squadron, or in troop, they do disorder one
 “ another, and never leave until they have thrown (31)
 “ and

(30) Our arrow-heads used in war, were much smaller than those used by most other nations. And Ascham observes, that the *less* hole an arrow makes in the body, the more difficult it is to heal. The barb of the arrow-head may be made in such a form, as often (when sunk into the flesh) to defy extraction, by the most skilful surgeon. The barbs used by some of the African nations are not straight and parallel, as our ancient barbs were, but somewhat bent from the center, and turned different ways; on which account they are the more difficult to extract.

(31) Pyrrhus king of Epirus, in an engagement, had his horse pierced with an arrow, which made the animal so furious, that he ran with his master into the very *midst* of his enemies, and fell dead with him to the ground. (*Rollin*, vol. vii. p. 285.) At the battle of Agincourt, says Speed, “ the horses sides were altogether *larded* “ with arrows.” *Hist. of Great Brit.* And Drayton most forcibly describes the terrible effects, which the English barbed arrows had upon the horses in that battle.

“ Upon

“ and cast their masters. Whereas contrarywise, horses
 “ that are in their vital parts hurt with *bullets*, or that
 “ the bones of their legs, shoulders, or backs be bro-
 “ ken; they do presently fall down, or otherwise al-
 “ though they be stricken clean through, or that the
 “ bullets do still remain in them, they, after the first
 “ shrink at the entering of the bullet, do pass their
 “ *carriere*, as though they had very little or no hurt.
 “ And this of the hurting of horses with bullets, both
 “ I myself, and all others do know, that have seen
 “ any actions performed in the field. And the other,
 “ of the great disordering of horses, with the hurts of
 “ our English arrows; I have read in divers histories,
 “ and heard reported by divers gentlemen of our na-
 “ tion, that have seen the same.”

“ Among many other fancies, which some of our

“ Upon the horses as in chafe they fly,
 “ Arrows so thick in such abundance light,
 “ That their broad buttocks men like *butts* might see,
 “ Whereat for *pastime* bowmen shooting be.”

And compares them to the sting of an hornet:

“ And in their flanks like cruel *hornets* hung.”

Batt. of Agincourt.

Nor were they less terrible to *men*. “ Certainly,” says Mr. Barnes, (mentioning the sea engagement before Sluys), “ we are told by most writers, that in this fight, the English arrows fell so thick among the French, and did so sting, torment, and fright them, that many men, rather than endure them, leaped desperately into the sea.” *P.* 185. And Froissart (speaking of the battle of Cressy,) “ says, when the Genoways felt the arrowes persyng through heeds, armes, and brestes; many of them cast downe their cross-bowes, and dyd cutte their strynges, and retourned discon-
 “ fitted.” *Chron.* vol. i. cc. 128, 129, &c. *Grafton Chron.* p. 274. Ascham tells us, “ the *feare* onely of English archers hath done more wonderfull thinges, than ever I redde in any historye, Greke or Latine, and most wonderfull of all now of late, besyde Carlisle, betwixt Eske and Leven, at Sandyfikes: where the whole nobilitye of Scotland, for fear of the archers of Englande, (next the stroke of God) as both English and Scottishe men that were present hath told me, were drowned and taken prisoners.” *Toxophilus.*

“ captains of the Low Countries do alledge against
 “ archers, (to the disgracing and disabling of them and
 “ their weapons, in comparison of their weapons of
 “ fire,) one is, that the archers bows being by them
 “ used against the enemy in the heat of summer, will
 “ grow so weak, that thereby they will lose their force
 “ and effects. Whereunto I answer; that this objec-
 “ tion is a new fancy, and a very dream, contrary to
 “ all ancient and modern experience of English
 “ archers: whose bows being made of that excellent
 “ wood of *yew*, (32) do never so decay in strength,
 “ neither by hot nor wet weather, nor yet by often
 “ shooting in them; but that they will with arrows
 “ wound, and sometimes kill both men and horses a
 “ greater distance off, than the shot and bullets of har-
 “ quebuffes and calivers, being employed and used in
 “ the open field, by skilful conductors and leaders; by
 “ reason of the wonderful failings and uncertainties of
 “ those, and all other weapons of fire maniable.”(33)

Sir John Smith here notices two other objections against the bow; *first*, the impossibility (in foreign invasions,) of finding the weapons and furniture of *archery* where it is not used; and *secondly*, that sickness will disable bowmen. To the first he answers, by asking, if *muskets* and their necessary appendages can be procured in an *enemy's* country, and observes,

(32) Bows made of *horn*, are greatly affected by the weather, particularly wet or moisture; and often require to be set: that is, restored to their original shape and bending.

(33) Jaçoit que l'harquebuzier puisse tirer de plus loin, neatmoins l'archer & l'arbalestier tuera aussi bien un homme nud de 100 ou de 200 pas loin que le meilleur harquebuzier: & telle fois que le harnois s'il n'est des plus fors n'y pourra resister. Au plus le remede feroit, que ceux cy tirassent de plus pres qu' ils pourroint: & si cela se fait, l'on trouvera plus de gens bleffez & tuez par le *trais*, que par le double d'harquebuziers. *Discipline militaire de Messire Guillaume du Bellay.*

that

that they are much heavier of carriage than bows and arrows; and that Edward III. and Henry V. had 9,000, or 10,000, archers in their armies, who did not want any article of archery. As to the *second*, he insists, that *sickness* will disable *musketeers* as well as bowmen, and that the former must be strong to use heavy pieces; whereas bows are much lighter (34). And he proceeds thus:

“ Moreover they object against archers, that men
 “ in this age are not so mighty and *strong of body*, as
 “ they have been in former ages; and therefore, cannot
 “ shoot so strong, and work so good effects with their
 “ arrows, as their forefathers have done in times past.
 “ But in England, and in all other nations, they may

(34) Sir John Smith says, a man may draw his bow, if he is found from the girdle upwards. However, it must be admitted, that between the fire-arm and the bow, there is this difference; that the latter depends for its effect upon a much greater degree of bodily strength than the former. On this account, the battle of Agincourt wears the appearance of a miracle. One historian (Goodwin) tells us, that the English were almost famished, having “ (for some days before this battle) had nothing but nuts and “ water to subsist upon.” They were too attacked with a raging dysentery. So that we are informed, “ they were obliged to fight “ naked from the waist downwards.” *Peck's Hist. Stanford, quotes Acta Regia*, No. p. 134, 135. But it may be remarked, that although the proper management of a *strong* bow requires much strength of body, and particularly in the arms; yet is the action of using it, far less fatiguing than that of the musket. In the exercise of the former, so many parts and muscles are brought into *regular* and *united* action, that no one part is wearied by excess of exertion; and the bow in itself is of very light weight. On the contrary, the musket (with the bayonet fixed) is very ponderous, and as in using it, it must rest chiefly upon *one* arm; it soon causes fatigue in an hot action, when the volleys are given without intermission. Whereas the bowman can shoot for many hours without being fatigued. Another disadvantage on the part of the musket may be here noticed; namely, that the effect of the powder is such, that besides involving the musketeer in a cloud of smoke, it affects his eyes and assails his throat and stomach, circumstances which must contribute to lessen the effect of his discharges.

“ see many fons as tall, or taller; or bigger, and
 “ stronger; as they shall see lower, slenderer, or weaker
 “ than their fathers.” (35)

“ They also object, that the English have not for
 “ thirty or forty years, had so much exercise in archery as
 “ their forefathers used: whereby archers in number
 “ are greatly decayed. This is true I confess; but it
 “ is the fault of the magistrates in not putting the
 “ laws in force: which their negligence or contempt,
 “ whether it hath proceeded of that they have
 “ been carried into the fancies of liking the aforesaid
 “ weapons of fire, because they fill means ears and
 “ eyes, with such terrible fire, smoke, and noise:
 “ or else, that they have been persuaded thereunto, by
 “ some old new-fangled men of war, that do neither
 “ understand the true effects of musketry, harquebuffery,
 “ nor archery, I wot not.”

“ Our people and nation, of a singular gift of God,
 “ and as it were by a natural inclination (36), with

(35) Speaking of the English in *general*, we may observe, that they are not so strong as their ancestors. The reasons are obvious. Whilst commerce was but little attended to, the sports of the field filled up much of the time of the higher classes, and manual labour and recreations requiring strength, that of the lower. As arts and manufactories increased, the occupation of great numbers became either sedentary, or such as deprived them of the opportunity of keeping up the vigour and strength of the body, by exercise. Besides, the increase of cities and towns, the consequent impediment to the free circulation of air in them; with the unrestrained use of spirituous and adulterated liquors, and habits of luxury; have contributed greatly to enervate the people of this island. Yet among the laborious poor, we shall still find the strength and power of body possessed by their ancestors, (often the only patrimony descended to them) and which their occupations are admirably calculated to preserve, and continue to their posterity.

(36) “ All Englishmen (says Ascham) generally, be apt for
 “ shooting. Children even from their cradle love it, and young
 “ men, without any teaching, diligently use it.” *Taxophilus*.

“ good

“ good execution of laws, came to be so perfect and
 “ excellent in the use of the long bow, without any
 “ public charge. Our enemies are more used to fire-
 “ weapons, and having many fortified places and con-
 “ stant garrisons to keep up, have always men trained
 “ to arms.

SECTION II.

*Effects of Arrows more certain than those of Bullets—
 Arrows terrify the Eye—Sir John Smith's Chal-
 lenge to the Musket—Difference between the Range
 of an Arrow and a Bullet—Effects of both—Effect
 of Archery proved by Examples—Battles of Cressy,
 Poitiers, Navaretta, Agincourt, and Herrings—
 Opinion that Archers cannot stand the Charge of
 Horse, answered by Examples to the contrary.*

“ **A** RCHERS, being good, direct their arrows
 “ with a great deal more certainty, being within
 “ eight, nine, ten, or eleven scores, than any mus-
 “ ketéers or harquebusséers (how good soever they be)
 “ can do in a much nearer distance; by reason that
 “ musketeers and harquebusséers failing in their *points and*
 “ *blank*, do neither kill nor hurt: besides that in their
 “ *points and blank*, (through the great imperfections
 “ before declared), they do very seldom hit; whereas
 “ contrarywise, the arrows do not only wound, and
 “ sometimes kill in their *points and blank*, but also in
 “ their descents and fall (37): for if in their descents,

(37) Stow (who copies from John Ross) informs us, that at
 the battle of Hastings, Duke William commanded his men, “ that
 “ some of them should shoot directly forward, and other some
 “ upward, by reason whereof, the arrows shot upward destroyed
 “ the Englishmen as they stooped, and the arrows shot directly
 “ aforehand, wounded them that stood upright.” *Annals*, p. 100.

“ they light not upon the enemies faces ; yet in their
 “ lower descents, they light, either upon their breasts,
 “ bellies, thighs, knees, or legs ; and in their lowest de-
 “ scent fall even to the very nailing of their feet to the
 “ ground ; which with the terrible coming of the arrows
 “ in the eyes and sight (38) both of horsemen and
 “ footmen, causeth in them a wonderful fear and terror.
 “ Whereas contrarywise, harquebussiers and musketeers
 “ with their weapons of fire, do no ways terrify neither
 “ horses nor men, that are but four or five times used
 “ to their cracks, smoke, and noise ; unless by great
 “ chance, they happen to be stricken with bullets : and
 “ the reason is this ; that the bullets being discharged are
 “ invisible, and therefore do no ways terrify the sight :
 “ whereof it commeth to pass, that when horses and
 “ men that have been in three or four skirmishes, do see
 “ that they receive no hurt, neither by the fire, smoke,
 “ nor noise ; nor that in many thousands of harquebuss
 “ and musket shot, there are not twenty men slain,
 “ nor hurt ; they grow after to be far less in doubt of
 “ those weapons of fire, than of pikes, halberds, lances,
 “ and swords. Howbeit, the vollies (39) of archers
 “ arrows, flying together in the air, as thick as hail,
 “ do not only terrify and amaze in most terrible sort,
 “ the ears, eyes, and hearts, both of horses and men,

(38) “ If it be true (says Sir John Hayward) as all men of
 “ action do hold, that the *eye* in all battles is *first* overcome ; then
 “ against men equally accustomed to both, the *sight* of the *arrow*
 “ is more available to victory, than the *crack* of the piece.” *Life*
of William by J. H.

(39) It must not be supposed, that the archers delivered their ar-
 rows in a disorderly or promiscuous manner. On the contrary, their
 discipline seems to have kept pace with their prowess. Froissart
 relates, that at the ever memorable battle of Cressy, “ the archers
 “ of England shotte so *holly togyder*, that the Frenchmen were
 “ fayne to give place to the Englishmen.” *Froissart*, vol. i. c. 127.
Grafton Chron. p. 270.

“ with

“ with the noise and sight of their coming; but they
 “ also in their descents, do not leave in a whole squa-
 “ dron of horsemen, nor footmen (although they be in
 “ *motion*) so much as one man unstricken and not
 “ wounded with divers arrows, if the number of the
 “ archers be answerable to the number of the squadron
 “ (40). And therefore for the experience that both I,
 “ and many others, both noblemen, gentlemen and
 “ great captains of many nations, that I have served
 “ amongst, have had of the small effect of weapons
 “ of fire in the field, with the reasons and differences
 “ before alledged; for my part, I will never doubt to
 “ adventure my life, or many lives (if I had them)
 “ amongst *eight thousand archers* complete, well chosen,
 “ and appointed, and therewithall provided and fur-
 “ nished with great store of sheaves of arrows, as also
 “ with a good overplus of bows and bow-strings,
 “ against *twenty thousand* of the best *harquebussers* and
 “ *musketeers* that are in Christendom.”

“ This I know, that harquebussers, if led by skilful
 “ conductors, are not to give any vollies, above *three* or
 “ *four* scores at the furthest: nor musketeers any vollies
 “ of bullets, above *eight, ten, or twelve* scores, at any
 “ squadrons of horse or foot in motion. And yet that
 “ *too far* (41), unless the leaders think rather to terrify

(40) Nead informs us, that Henry VIII. won Turwin, Tournay and Bullogn, chiefly by the use of the bow: which amazed the enemy, and wounded almost every one. *Double-armed Man*. Such was the effect of well directed vollies of arrows shot by the English, that besides the slain, the number of the wounded, (who generally were made prisoners) was very considerable in almost all the great contests, in which they used the bow. Grafton, says that at the battle of Poitiers, “ there were divers English archers that had *four, five, or six* prisoners.” *Chron.*

(41) The *point blank* range of a musket ball is computed to be under 150 yards; in *action*, its effect can seldom be depended upon at more than two thirds of that distance. See *post* (note 67.)

“ with

“ with noise and smoke, than with any hurt of the bullets. Whereas, archers reduced into their convenient forms (42), being in so great numbers (as aforesaid) do dim the light of the Sun, darken the Air (43), and

(42) “ The ancient order of reducing archers into form, by our most skilful and warlike ancestors, was into *hearses*; that is, broad in front, and narrow in flank: as for example, if there were 25, 30, 35, or more or fewer archers in front; the flanks did consist but of 7 or 8 ranks at the most. And the reason was this, that if they had placed any more ranks than 7 or 8, the hinder ranks would have lost a great deal of ground, in the volleys of their arrows, at their enemies; considering the convenient and proportionate distances between rank and rank, and ranks before them; as also, that the sight of the hinder ranks would have been taken away, by so many former ranks, from directing their volleys of arrows towards their enemies faces. Our ancestors placed the *hearses* of archers, either before the front of their armed footmen, or else in wings upon the corners of their battalions, and sometimes both in front and wings.” *Sir John Smith.*

“ At the battle of Cressy the archers stood in the form of an *hearse*, about 200 in front, and but 40 in depth: which is undoubtedly the best way of embatteling archers, especially when the enemy is very numerous, as at this time. For by the breadth of the front, the extension of the enemies front is matched; by reason of the thinness in flank, the arrows do more execution, being more likely to reach home.” (*Barnes*, p. 356.)

After the introduction of fire arms, the archers were placed behind the Harquebussiers, with great effect; as we read was practised at the battle of Pinky, between the English and Scotch, on the banks of the Etke. *Vide post, chap. 4.*

(43) This expression of Sir John Smith's, respecting the appearance of arrows, is by no means hyperbolic. Historians of all ages, have made similar observations upon their flight. Our old chroniclers frequently compare the volleys of arrows, at the battles of Cressy, Poitiers and Agincourt, to the fall of *hail* and *snow*, and to *moles* in the Sun. Our poets follow them. Drayton (in his *Poly-Olbion*), speaking of the civil contests, writes,

“ The winters *fleet* or *hail* was never seen so thick,
 “ As on the houses sides the bearded *arrows* flick.
 “ The middle fight (which was the army's only pride)
 “ Of archers most approved——
 “ Stood stoutly to the shock, and flang out such a flight
 “ Of shafts, as well near seem'd t' eclipse the welcome light.
 “ And with the shot came shafts, like stormy showers of Hail.”

Song 22.

“ COVER

“ cover the Earth with their vollies of arrows, *eight*,
 “ *nine, ten and eleven*, scores distant from them (44);
 “ in such sort, as no numbers of musketeers or har-
 “ quebuffeers or argoletéers (45), nor yet squadrons of
 “ lances, nor of footmen (being so ill armed as in these
 “ days they are), shall be found able to abide the incredi-
 “ ble terror of the shot of such infinite number of arrows.
 “ For there is no doubt, but that archers with their
 “ vollies of arrows, will wound, kill, or hurt above
 “ *one hundred* men and horses, for every *one* that shall
 “ shall be slain or hurt, by the vollies of so great
 “ numbers of *harquebuffeers* or *musketeers*, as before
 “ mentioned (46).”

“ Now whereas our such men of war, do further
 “ disable our archers, saying, that they are to work in a
 “ manner no effect, neither against horsemen nor foot-
 “ men; and that archers are not able to abide the
 “ terror of the shot of musketeers nor harquebuffeers,

(44) It seems that *twelve score yards* was, in general, the full extent of the flight of the heavier kind of *sheaf* or war arrows, which were very long and proportionably heavy. Each sheaf consisted of twenty four, “ of which (Sir John Smith says,) eight were lower feathered, smaller and lighter arrows than the rest.” *Answer to Mr. Barwick*. The use of which was, “ to gaul or astonne the enemies with the haile shot of light arrows, before they shall come within the danger of the harquebus shot.” *Art of War, Harleian MSS.* 4828.

(45) The *harquebus* was a lighter sort of musket, and was used without a rest. The *argollette* seems to have been the same or very like it, and gave the name of *argolleteer* to the *horse soldiers* who used this latter fire-arm.

(46) Respecting the great inefficiency attending the firing of musketry in modern war; Mr. Mason observes, that Marshal Count Saxe, in his Memoirs, states, that on a computation of balls used in a day's action, not one of upwards of *eighty five* took place. Mr. Mason has collected several modern instances of the effect of musketry, from which it appears, that Marshal Saxe's computation may (under the present system of military tactics) fairly be doubled. *Mason on the Long-Bow and Pike*.

“ with

“ with many other vain and fond objections, contrary
 “ to all reason and experience: it is not to be marvelled
 “ at, that they do so grossly err in their fond opinions
 “ conceived and alledged, against the excellent effects of
 “ that weapon, of which they never had any experi-
 “ ence, nor yet do know how to order them. For
 “ archers, reduced into their forms, were placed by our
 “ ancestors in the *face* of the *men at arms* (47) of
 “ *France*, and all other brave horsemen of foreign
 “ nations, who in those days were far better armed,
 “ than any nations in these our days are. And yet
 “ with this good order, the wonderful effect of our
 “ archery and arrows was such; that flying in the air as
 “ thick as snow, with a terrible noise, much *like a*
 “ *tempestuous wind preceding a tempest*; they did leave no
 “ disarmed place of horse or man unstricken and not
 “ wounded. As may well appear by many battles and
 “ victories, and namely, by the battle of *Cressy*, that
 “ King Edward III. and Prince Edward his son won
 “ against King Philip of *France*; where the said King
 “ Philip had *eight or ten thousand men at arms*, and
 “ *fifteen thousand Genoese cross-bow men*, (which were no
 “ ways inferior for services in the field to the muskets
 “ of this time (48): with so puissant an army also on
 “ horseback

(47) The *men at arms* (sometimes called by Froissart *Gens d'armes*,
 at other times *lances*, from the spears, or lances they often carried)
 fought both on horseback and on foot. At times, they were
 habited in body-armour of iron, and plates of iron on their arms:
 the joints were defended with mail, which was worn under the
 whole armour (therefore often called by historians a *shirt* of mail).
 At other times they were still closer armed, with the joints of
 the armour defended by plates of iron. *Strutt. vol. 3. p. 33.*

(48) The *cross-bow* was the intended rival of the long-bow; but
 we find, from unquestionable authorities, that the *cross-bow-men*
 could never stand against the English long-bow men. In the sea
 engagements before Sluys, and with the Spanish armada near
 Winchelsea, in the reign of Edward III. Barnes, (p. 182. 451.)
 tells

" horseback and on foot, very well armed and ap-
 " pointed (of divers nations), that they were *six* at the
 " least for every one of the English: in which battle
 " were slain *eleven Princes*, and *twelve hundred knights*,
 " besides *thirty thousand soldiers* of all nations. And
 " the wonderful effect and terror of shot of arrows was
 " that day such, as neither the French King with his
 " men at arms, nor any other of his great captains, with
 " their brave and well armed bands of horsemen of
 " divers nations, were able to enter and break the
 " archers: although they had no pikes, *stakes*(49),
 " banks,

tells us, " that the *English arrows* did more execution *by far* than the
 " cross-bows;" and that in the latter engagement, " the archers
 " of England pierced their arbalisters with a *further reach* than
 " they could strike again." Yet Wood (in his *Bow-man's Glory*)
 tells us " that some cross-bows shot *twenty score yards*." However,
 the care taken in this kingdom, by the legislature, to restrain the
 use of the cross-bow (which seems to have been favoured as an
 instrument of amusement in England in the reigns of Henry VII.
 and Henry VIII.) and to encourage the practice of the *long-bow*,
 sufficiently marks the preference given to the *latter*, as a *weapon of*
war. See Stat. 19 H. 7. c. 4. 6 Hen. 8. c. 13. and subsequent
 statutes. Hollinshed (who wrote in the sixteenth century) laments
 the decay of our strong archery, observing, " that Certes, the
 " Frenchman and Rutters, deriding our new archery in respect to
 " their corselets, will not let in open skirmish (if any leisure serve)
 " to turn up their tails and cry *shoote Englishmen*; and all because
 " our strong shooting is decayed and laid in bed: but if some of
 " our Englishmen now lived, that served King Edward III. the
 " breech of such a varlet should have been nailed to his bum,
 " with one arrow; and another feathered in his bowells, before
 " he should have turned about to see who shot the first."
Description of Britain, Book 2. Chap. 12. Among the plates engraved
 in *Strutt's Horda Angel-cynnan* (vol. 2. pl. 46.) is one representing an
 engagement between the English and French in Flanders, in the
 reign of Henry IV. in which a rank of English *long-bow-men* appears
 opposed to one of *cross-bow-men*: and one of the *latter* is repre-
 sented, as having stepped a little forward and turned up his *bare-*
breech; in which an arrow from an English long-bow appears to be
firmly fixed. These authorities, concurring in such particulars, prob-
 ably record, or refer to a well known fact.

(49) Our archers, to guard and protect themselves from the
 attack of the horse, used to place before them stakes five or six feet
 long

“ banks, nor trenches to guard them; but being in the
 “ plain and open fields, the archers, with their vollies of
 “ arrows, did break both horsemen and footmen;
 “ wounding and killing, both horses and men, in such

long pointed with iron. (*Grafton chron. p. 455.*) Paulus Jovius gives us a complete view of the arms and manœuvres of a body of English archers, in the following words: “ Apud Anglos in
 “ sagittis unica spes, et præcipua gloria crebris victoriarum proven-
 “ tibus, parta. Eas minimo digito crassiores, bicubitalesque, &
 “ hamato præfixas ferro; ingentibus ligneis arcubus intorquent,
 “ tanta vi, arteque, ut ad primos præsertim ictus squamosam
 “ thoracem, aut loricam faciliè penetrent, fervefactamque gestatu
 “ & multo sole; ferream Equestrem armaturam sæpe transfodiunt.
 “ His è Romana disciplina, mos est vallum gestare, et dimenso
 “ spatio protinus, ubi hostis fuerit in conspectu, in orbem se
 “ munire. Palos enim teretes utrinque ferrea cuspide præcutos,
 “ mira celeritate solo defigunt, & infesta acie, paululum procli-
 “ natos in hostem vertunt: in medio autem ferreus est annulus,
 “ quo perpetua sæpe recte vincuntur. Circumvallati in hunc
 “ modum, levo pede in ima parte palum premunt, & divaricatis
 “ cruribus, panisique lacertis, sagittas excutiant. Interna autem
 “ sinistri brachii ossea tabella conteguntur, ne manicæ rugis
 “ recurrentis, nervi impetus elidatur: eo quod diximus, muni-
 “ tionis, genere Gallici equitatus impetium, *quo nihil acrius, atque*
 “ *vehementius olim fuit*, egregie sustinuerunt; quam alii temerè
 “ illatis se præcutis vallis induerent; alii vel in postrema acie
 “ sagittarum grandine sternerentur. Hac una prælii ratione Joan-
 “ nes Gallie Rex apud Pictavos ingenti prælio victus, captusque
 “ est: et Philippus ad Sammorabrinam accepta magna clade, pro-
 “ ffigatus. Apparuitque ea in pugna, sagittarios Ligures, qui
 “ Scorpionibus arcuferreis uterentur, quo teli genere atque animis
 “ hostibus pares videri possent; necque *vi*, necque *celeritate Anglis*
 “ *fuisse comparandos.*” *Descriptio Britannie. fo. 16.* Speed gives us
 the following account of the use made of these stakes, by the
 archers at the battle of Agincourt. “ The first troop of French
 “ horse were exquisitely appointed; whereon the riders much
 “ presumed, and meant to have burst through the archers, with a
 “ violent course; but they giving back, left their sharpe pointed
 “ stakes sticking, which till then were unseen. The French, sup-
 “ posing the archers had fled, came on with their horse upon the
 “ spur, and that in such heat, as the earth seemed to tremble under
 “ their thundering feet; and being forced forward without fore-
 “ sight of danger, carried their proud riders into the jaws of
 “ destruction: for falling by troops upon those goring stakes, they
 “ were miserably overthrown and paunched to death.” *Hist. of*
Great Brit. p. 628.

“ fort

“ fort, that the French King himself, being in great
 “ peril, had his horse with the shot of arrows slain
 “ under him. By which example, and divers others,
 “ that I will hereafter alledge; it may be apparent to
 “ any man that is possessed with the grace of God,
 “ and therefore of sound judgment, that archers being
 “ in great numbers, and reduced into the form of
 “ *bearfes* or *double bearfes*, as wings to a battalion or
 “ squadron of pikes (that they may the more conveni-
 “ ently give their vollies of arrows,) need not be guarded
 “ with pikes, nor yet stakes (as some talk of the bat-
 “ tle of Agincourt,) but they themselves are most
 “ brave pikemen: for as a squadron of pikes well
 “ formed, do with their pikes in their hands work great
 “ effect in resisting a charge of lances, or by encounter-
 “ ing with another squadron of pikemen their enemies;
 “ so the arrows of brave archers reduced into *bearfes*,
 “ being delivered out of their bows, do become so
 “ terrible pikes in the eyes and sight of the horses, as
 “ also in lighting upon their shafts, cranets or steel
 “ pectorells, or being not barbed, upon their bare faces
 “ and every disarmed part; that the horses with the
 “ huzzing, striking, and unaccustomed noise, and with
 “ the blows and wounding of the arrows, do fly back
 “ and athwart the one the other: in such sort, as no
 “ force of spurs can make them go any further against
 “ the archers, but that they do disorder and overthrow
 “ one another. Besides that against squadrons of
 “ armed footmen, the vollies of arrows flying in the
 “ air, and coming in their eyes and sights as thick as
 “ hail; and lighting upon their faces, and every other
 “ disarmed part; do so amaze them, that they come to
 “ lose their ranks and disorder themselves, before they
 “ can come to join with another squadron of armed
 “ men their enemies: and also with their terror do
 “ wonderfully

“ wonderfully confuse and confound the greatest and
 “ bravest captains, in their directions and command-
 “ ments. As it may very well appear, not only by
 “ the battle of Cressy before mentioned, but also by
 “ the battle of *Poitiers*: where, certain years after, the
 “ same Prince Edward, (that was at the battle of Cressy
 “ with King Edward his Father,) having not in his
 “ whole army above *eight thousand English*, and *Gas-*
 “ *coigns* (of the which there were six thousand *archers*,
 “ and two thousand armed men;) overthrew King
 “ John of France, (that valiant Prince,) who at that
 “ battle was accompanied with a great part of the
 “ nobility of France and of other nations, as Dukes,
 “ Princes, Earls, and other great captains; and had in
 “ his army above *three score thousand* horsemen and
 “ footmen; of the which there were above ten thou-
 “ sand men at arms; and of horsemen of all sorts above
 “ thirty thousand: where, a little before the battle, the
 “ Prince with his notable captains, considering the
 “ small number that he had to make head and resist
 “ the French King with so huge an host, did take a
 “ ground of some strength and advantage, for the
 “ guard of the flanks and back of his small army. And
 “ placing a great part of his archers in front, in the
 “ open place where the French horsemen and footmen
 “ were to enter and give battle: the archers with their
 “ wonderful vollies of arrows (through the great good-
 “ nefs of God) did that day so wound, kill and mis-
 “ chief both horses and men; that he overthrew King
 “ John of France with his whole army, and took him
 “ and one of his sons prisoners; and of Earls, Barons,
 “ Knights, and Esquires, to the number of sixteen hun-
 “ dred or more: besides that there were slain the Duke
 “ of Athens, with so many Earls, Barons, Knights and
 “ Esquires; that they were numbered to be above seven
 “ hundred

“ hundred, and so many prisoners of all sorts taken
 “ by the English and Gascoigns, that they far exceeded
 “ the number of the *Prince's army*.”

“ The battle also of *Navarretta* in Spain, fought by
 “ the same Prince Edward (in favour of Don Pedro el
 “ Cruel, against Don Henry of Castile,) may testify the
 “ wonderful effect of archers, where there were above
 “ an *hundred thousand* Spaniards, Frenchmen, Portu-
 “ guese, Genoese cross-bow men, and Moors, both
 “ horsemen and footmen, overthrown in that battle.”

“ The famous battle and victory of *Agincourt*, also
 “ of later years fought by King Henry V. against the
 “ whole power of France, doth evidently shew the
 “ most excellent effects and execution of archers, where
 “ with the grace of God and incredible vollies of ar-
 “ rows, the French King's army was overthrown, which
 “ consisted of above *forty thousand horsemen and footmen* :
 “ of the which there were ten thousand men at arms,
 “ all knights, esquires and gentlemen; whereas King
 “ Henry's army did consist of but *ten thousand archers*,
 “ *fifteen hundred lances*, and *two thousand footmen* of
 “ other weapons. In which battle were slain, the
 “ Dukes of Lorain, of Brabant, of Alençon, and Bar,
 “ with a great number of esquires; besides that, there
 “ were taken prisoners, the Dukes of Orleans and
 “ Bourbon, with many other earls, barons and knights.”

“ The battle of *Herrings* also (so called by the
 “ French chronicles) fought in King Henry VI's time
 “ (near unto a village in France called Rouveray, not
 “ far from Orleans) doth evidently shew the great
 “ excellence of archery, against all other sorts of
 “ weapons; in which battle Sir John Falstaff, with
 “ other brave English captains, by the grace of God
 “ and terrible shot of the archers, overthrew the bastard
 “ of Orleans, the Lord High Constable of Scotland, the

“ Count of Clermout, with many other captains of
 “ great account, and their whole army of Frenchmen
 “ and Scots; in the which there were a great number
 “ of French *barquebuffeers* and *cross-bow-men*, which
 “ against the archers wrought *no effect*.”

“ But I omit the particulars of many other *great*
 “ victories, that I could alledge for proof of the incre-
 “ dible effects of our archers in battles (50): and will now
 “ come to answer certain other frivolous objections, of

(50) Not only large, but even very *inconsiderable* bodies of archers, have done great service in the field. *Leland* in his *Collectanea* (vol. 1. p. 569 to 572) has mentioned several feats performed by a few English archers in France in the time of Edward III. And *Ascham* notices an action performed by Sir William Walgrave and Sir George Somerset with only *sixteen* archers, near Hammes, “ where (to use *Ascham*’s words) they turned with so few
 “ archers, so many Frenchmen to flight, and turned so many out
 “ of their jacks (coats of mail) which turne turned all France to
 “ shame and reproach; and those two noble knights to perpetual
 “ praise and fame.” *Toxoph.* See also *Sir John Smith’s Discourse on Weapons*; and *Barnes’s Hist. of Edward III.* The latter writer among others, notices an action which, in its effect, may well be ranked among the *wonders of archery*. This was the battle fought near Mauron, between Rennes and Plomerel, (15th Aug. 1352) between the English and French; the former (who were only 300 men at arms and 600 archers) were led by Sir Walter Bentley and Sir Robert Knowles. The army of the French and Bretons, (being four times as great as that of the English) was under the conduct of Lord Guy de Nesle marshal of France, and other great officers; and was so ordered by the marshal, that having a steep mountain behind at the back, the French and Bretons might be enforced to stand to it resolutely, by despairing to fly. This array was so dreadful, that it dismayed the hearts of several Englishmen, and they began to fly, and thirty of the archers actually deserted. But by the courage, good conduct and resolution of Sir Walter Bentley, the English (after a doubtful and bloody fight,) obtained a famous victory. Among the slain on the side of the French, were the marshal himself, *thirteen lords, one hundred and forty knights, five hundred batchelors*, (whose coats of armour were brought away:) but the common soldiery were not numbered. And the English took prisoners (of *lords, knights and batchelors*) to the number of *one hundred and thirty*. p. 463. See also *Holinshed’s Chron. Reign of Hen. VI.*

smaller

“ smaller moment than these that I have already, by
 “ such notable examples and experiences of great bat-
 “ tles and victories, answered.”

“ Some of our such men of war, (because by com-
 “ mon and modern experience, no number of muske-
 “ téers nor harquebusséers in the plain fields, without
 “ succours of some other weapon or ground of advan-
 “ tage, are able to abide the charge of half so many
 “ lances or *stradiots* (51) in number as they are, with-
 “ out being overthrown and broken,) do therefore
 “ think and commonly report, that with a very small
 “ number of horsemen, they will break a far greater
 “ number of archers; by which their opinions and
 “ reports, it seemeth, that as they are utterly ignorant,
 “ and without any experience of the effects of archers,
 “ so are they as ignorant of all notable histories; or else
 “ according to the new fashion, they do believe nothing
 “ but that which they themselves have seen, which in
 “ troth appeareth to be very little.”

“ For answer whereunto, (according to the testimony of
 “ the French chronicles) I say, that in King Henry VI’s
 “ time, John Lord of Bellay, being accompanied with
 “ two hundred lances at the least, met by chance with
 “ an English captain, called Berry, that had to the num-
 “ ber of *four score* archers; who perceiving the French-
 “ men, presently reduced his men into an *bearse*, turn-
 “ ing their backs to an hedge, (that the lances might
 “ only charge them in front; and so giving their vol-
 “ lies of arrows at the French lances *charging*, did so
 “ wound and kill their horses, that they overthrew
 “ them, and slew and took divers of them prisoners.”

(51) *Stradiots* were French light horsemen, with short stirrups, beaver hats, small spears, and swords like the scimiters of Turkey. *Grafton’s Chron.* p. 980.

“ And within a while after, a French captain (Guion
 “ de Coing) accompanied by *six score* lances, went out
 “ to seek an adventure with the English; and was met
 “ by Sir William Olde, with *sixteen* or *twenty* archers
 “ on horseback (52); who dismounted, and formed in a
 “ broad way, where lances could not charge them, but
 “ in *front*; and the French lances charging them, the
 “ volleys of arrows of those few archers, wrought such
 “ notable effect against the French horsemen, that they
 “ broke and overthrew them; in such sort, that there
 “ were divers of the French slain and taken prisoners.
 “ And in our time, King Henry VIII. being at the
 “ siege of Terouëne, a convoy of provisions was com-
 “ ing from Guines towards Terouëne: all the French
 “ captains of Picardy and Vermandois having intelli-
 “ gence of it, assembled all the men at arms, harque-
 “ busséers and cross-bow-men, laid in ambush, and
 “ overthrew the English light horse avan-couriers;
 “ which being perceived by the English, they so placed
 “ their *archers*, that after a long fight, and many
 “ charges by the French men at arms and their shot
 “ given, (the French far exceeding the English in
 “ number) the French, having a number of horses

(52) The bow was not confined to the *foot* soldier. The Eng-
 lish had in their armies a number of *mounted* bow-men, (called
Hoblers) who were found to be very serviceable. (See *Moseley*, p.
 262.) Barnes (speaking of the actions of these archers) says
 “ Those that went out into the field, to range themselves in order
 “ were warmly received by the archers on horseback, who rode
 “ about scouring the field, and wherever they espied any extraor-
 “ dinary concourse of men gathering together, thither they rode
 “ up, and dissolved them by their thick flights of arrows. P. 311.”

Sir John Smith (in his *comparison of weapons*,) draws a comparison
 between the effects of *horse-musketeers* and *horse-archers*, and decides
 in favour of the latter.

“ wounded

“ wounded and slain, were completely repulsed and
 “ overthrown by the *excellence* of the *archers* (53).

(53) On the effect of arrows against the horse, may be added the two following instances. “ At the battle of Durham or Nevils-crofs (anno 1346) Sir David Graham, a valiant baron, with a wing of *five hundred* horse, well appointed, gave a full charge upon the left flank of the English archers; but was received with such a shower of arrows, that after two or three attempts in vain, having lost many of his men, he was fain to fly back to the main battle, upon the spur, in great danger of being taken by his pursuers. *Barnes*, p. 379.

“ About Bartholomewtide last (1595) came out of Scotland, one James Ferguson, bowyer to the King; who credibly reported, that about two years past, rebels did rise there against the King, who sent 500 horsemen well appointed. They meeting 300 rebels, bowmen,—The bowmen flew *two hundred and four-score of the horses, and killed, wounded, and sore hurt most part of the King's men.*” *Treatise to prove the Use of Archery*, 1596. Paulus Jovius has given us a very lively description of a rapid charge made by a body of French horse, upon the English archers, than which (says he) there was nothing more severe and impetuous;” yet he adds, that the latter sustained it with a wonderful firmness; continuing to pour down upon them a storm of arrows. (*Vide ante note 49.*)

SECTION III.

Particular Effects of Arrows against Fire-Arms, proved by Examples—Ket's Rebellion—Rebellion in the West—Battle at Newhaven—Superiority of English Bows and Archery, compared with the Bows and Archery of other Nations.

“ **N**OW if the effect of vollies of arrows be so
 “ terrible, both against horsemen and footmen
 “ armed (54); (as I have before declared, by so many
 “ reasons and examples,) what then are the vollies of
 “ arrows

(54) In answer to those, who asserted that an arrow would not penetrate through single buff jerkins, or scarcely through ordinary clothes, Sir John Smith observes, that although the French formerly were well defended by body armour, yet did they not trust to that alone; but carried *pavoises* (shields plated with steel, seven feet long and about two feet broad) to protect themselves from the English arrows. We may therefore without difficulty imagine, that had they not found by experience, that armour was not proof against the English arrow, they would never in battle, have encumbered themselves with large and heavy shields. But upon this subject Patritius (before quoted) disputing the violence of arrows, makes a singular remark, doubting not to affirm “ that
 “ *an English arrow, with a little wax put upon the point of the head, will*
 “ *pass through any ordinary corselette or cuirass.*” *Parlat. milit. 1594.*
 Lib. 3. fo. 37. It seems needless to accumulate authorities upon a matter, in which all historians concur; but the two following examples (among many others) may perhaps tend to put Sir John Smith's observation beyond dispute. Lord Lyttelton tells us,
 “ that Henry II. during his expedition into Wales, was wounded
 “ by a random arrow; and if his habergeon, or coat of mail, had
 “ not been stronger than usual, the wound would have proved
 “ mortal, but the skill of his armourer saved him.” *Vol. 2. p. 57.*
 We may suppose, that the King's armour was made of the best materials, and well calculated to preserve the life of so royal a person;

“ arrows able to perform, against musketéers and har-
 “ quebufféers, that are in a manner *disarmed*; whose
 “ weapons of fire in the field do rather terrify and
 “ make afraid younglings and novices of war, with
 “ smoke and noise, than with any often killing, hurt-
 “ ing, or wounding them with bullets: whereof not
 “ only old soldiers, but horses also that are a little used
 “ to their fire, cracks and smoke, are not any thing
 “ amazed, nor afraid. But three or four vollies of
 “ arrows, lighting amongst any number of musketéers
 “ or harquebufféers (how old and brave soldiers soever
 “ they be) will so amaze and terrify them, that they
 “ shall fail to charge their pieces, to put touch powder
 “ into their pans and their matches into their serpen-
 “ tines (55). Besides, that they will either wound,

person; probably it was similar to that worn by his father, on receiving the honor of knighthood, which (says Lord Lyttelton) “ was an incomparable habergeon, composed of *double plates or scollops of steel*, which no arrow or lance could penetrate.” *Vol. 2. p. 157.* We are told, that the panoply worn by Earl Douglas at the battle of Homildon, was of remarkable temper. *Pinkerton’s Hist. of Scotland.* Speed says, that not only *his* armour, but that of his *men at arms* had been *three years* in making, yet he adds, “ the English arrows rent it with *little ado*;” and Douglas himself received five wounds. *Annals*, p. 328. Sir John Smith observes, that metal targets were made of two tempers, the soft to resist musket shot, and the *hard* to resist the lance, and *tempered heads of arrows.* *Answer to Mr. Barwick*, MSS. And Lord Lyttelton (speaking of the armour of the twelfth century) adds “ we find, “ that the armour of the knights in those days, was not always “ proof against arrows from Welch or English bows.” *Vol. 2. p. 160.* As to the effect of arrows upon wood, Edward VI. informs us, that one day an hundred archers of his guard, shot before him two arrows each at an *inch* board of *seasoned* timber; and that some of the arrows pierced quite through it, and others not only went quite through this board, but fixed in another board behind it; the distance is not noticed. MSS. *Diary of King Edward VI. Brit. Mus. (Bib. Cott. Nero. C. 10. P. 55.) page 39.*

(55) Although Sir John Smith is speaking of the *match lock*, yet the observation is applicable to the *fire-lock*.

“ kill, or mischief them, in such sort, as happy those,
 “ that with three or four arrows in their bodies, faces,
 “ arms or legs, throwing down their harquebuffes and
 “ muskets, can escape out of the terror and danger of
 “ the volleys of arrows (56). For confirmation whereof,
 “ there be divers modern examples, with very honour-
 “ able testimony of such as are yet living; very hon-
 “ ourable, by birth and parentage, as also by titles
 “ of honor and worthiness; of which that noble gentle-
 “ man Ambrose Earl of Warwick is one, that accom-

(56) On this head, Clement Edmonds furnishes us with the following just remarks. “ The disorder or routing of an enemy which
 “ is caused by the bowmen, cometh from the fearful spectacle of a
 “ drift of arrows; for a shower of arrows well delivered and well
 “ seconded, for a while, is so terrible to the eye, and so dreadful in
 “ success; that it is almost impossible to keep the enemy from
 “ routing. Of such bullets as do hit, the greater part do not
 “ strike death, but are oftentimes carried until the skirmish be
 “ ended, before the party feels himself hurt. But a sleeve of
 “ archers is available against an enemy, as well in such arrows as
 “ do not hit, as in such as do hit: for whereas the cloud of
 “ arrows is subject to our sight, and every arrow is both suspected
 “ and able to bring death sitting on the head, an enemy is
 “ as much troubled at such arrows as come fair upon him and
 “ do not hit, as those that do hit; for no man is willing to expose
 “ his flesh to an open and imminent danger, when it lieth in his
 “ power to avoid it: and therefore whilst every man seeketh to
 “ avoid hurt, they fall into such confusion, as besides the loss of
 “ particular men, the enemy doth hardly escape disorder, which
 “ is the greatest disadvantage that can befall him; moreover,
 “ the arrows having barbed heads, although they make but a
 “ light hurt, yet they are not easily pulled out, which maketh
 “ the soldiers not mind the fight, until they be delivered of them.
 “ And the horse so sting and chafe, that it is impossible they
 “ should either keep their rank, or be otherwise managed for any
 “ service.” And he concludes by observing, “ that the use of
 “ the bow was too much neglected by the English of his time, (he
 “ wrote about the close of the seventeenth century) considering
 “ the honor they had achieved by it in former ages.” *Lib. 7.*
ch. 15. p. 137. Mr. Grose writes to the same purport; and adds,
 that archers can act in the rear of a battalion of infantry, and
 even of a squadron of cavalry. *Hist. of the English Army. vol. 1.*
p. 148. note.

“ panicked

“ panied the Duke of Northumberland his father,
 “ (then Earl of Warwick) a man of great valour and
 “ sufficiency for the governing and conducting an
 “ army: who in the year 1548, was sent by King
 “ Edward VI. as his lieutenant general, with an
 “ army of horsemen and footmen, to suppress the re-
 “ bellion of Ket, in Norfolk ; who at that time lay en-
 “ camped with a great power of notorious and hardy re-
 “ bels by the city of Norwich, upon a high hill called
 “ Mount Surrey. To the which city, the duke with his
 “ army being come, he with great order did encamp and
 “ lodge himself and his army on the other side of the
 “ city and river. And the next day he entered the town
 “ and brought four and twenty field pieces, to the
 “ chief charge whereof he appointed colonel Courpenick
 “ an *Alman* and a great soldier, with his regiment of
 “ *Almans*, which was twelve hundred, the most of
 “ them brave shot, and all old soldiers ; with divers
 “ English bands and valiant captains of our own
 “ nation, for the guard of the same: but before they
 “ could thoroughly entrench themselves, those furious
 “ rebels, (contrary to all expectation,) descended down
 “ their hill with such fury of shot of *arrows*, (being all
 “ bowmen, swords and bills,) that they gave such a
 “ terror and fear to our people, both strangers and
 “ English, as they were fain to run away, with the
 “ loss of ordnance, and slaughter of a great sort of
 “ soldiers: and before the Duke could make head
 “ against them, they had recovered eighteen field-
 “ pieces ; and carried them up to their hill, even with
 “ very force of men. And within two or three days
 “ after, those gallants did not let to abide the battle
 “ against the Duke and his whole army, in the plain
 “ field; where the battle was so manfully fought on
 “ both sides, that it could be hardly judged (by the
 “ best

“ best soldiers that were there,) which side was likely to
 “ prevail: but in the end, (God giving the victory,) it
 “ was seen by that battle, that arrows were a most noble
 “ weapon. And whereas the Duke, who at his first
 “ assembling and forming his army, changed many
 “ archers into harquebussiers (because he had no
 “ opinion of the long-bow) he, after the victory and
 “ suppression of the rebels, upon the experience that
 “ he in those actions had of the *danger* and *terror* of
 “ *arrows* (his own horse being wounded under him at
 “ that battle with three or four arrows, whereof he
 “ died) did both then, and many times after, openly
 “ protest his error before Count Malatesta Baglion, (an
 “ ancient and noble soldier, *Italian*,) and other great
 “ captains Italians and Germans; saying, that from that
 “ time forward, he would hold the *bow* to be the *only*
 “ *weapon of the world*; and so did all the notable cap-
 “ tains, both English and strangers, affirm the same.
 “ And this I have set down almost *verbatim*, from the
 “ report of the aforesaid Ambrose Earl of Warwick,
 “ who was present at that action, and had his horse
 “ wounded under him with two or three arrows (57).

“ In the same year of the reign of King Edward VI.
 “ and the same summer, Sir John Ruffel, Kt. (Lord
 “ privy seal, that was after Earl of Bedford,) being
 “ sent by the King as his lieutenant general, with a
 “ great power both of horsemen and footmen, against
 “ the rebels of the *west* parts; accompanied with Lord
 “ Grey of Wilton, Sir William Herbert (after Earl of

(57) Speaking of this action, Sir John Hayward observes,
 “ that the rebels first put forth their archers, then their horse-
 “ men, then a tumultuous multitude without judgment or direc-
 “ tion: and that the Italians were well ordered and disciplined.”
Life of K. Ed. VI. p. 67.

“ Pembroke,

“ Pembroke, the Lord of Hunfdon (that now is,) with
 “ many others, both Knights and Efquires of great
 “ worship; and coming to certain skirmishes and en-
 “ counters with the rebels: the archers of the rebels,
 “ did fo behave themfelves with their vollies of arrows,
 “ againft divers old bands, harquebufféers, Italians,
 “ and Spaniards; that they drove them from all their
 “ strengths, as from banks, ditches, hedges, and other
 “ advantages of ground, to the great mischief of many
 “ of thofe ftrangers. And of thefe great effects of
 “ archers againft harquebufféers, I have heard the
 “ Lord Chamberlain aforefaid (who was there an eye
 “ witnefs) very notably report. Befides that, many
 “ years paff, I have heard Captain Spinola, an Italian,
 “ (who was a very brave foldier, and wounded with
 “ arrows in thofe fervices and actions,) give fingular
 “ commendation of the archery of England.

“ To the like effect and fingular commendation of
 “ archers, I have alfo heard the aforefaid Earl of
 “ Warwick divers times further report, that in the
 “ year 1562, being at Newhaven in Normandy; the
 “ notable and great Chafillon, admiral of France, being
 “ at the fiefge of Caen, fent to the earl for fuccour of
 “ fome Englifh bands; which he defired might be
 “ moftly *archers*. But the earl having none with him,
 “ fent fix hundred brave harquebufféers with fome armed
 “ men alfo, which he very thankfully received: but
 “ therewithall fignified unto the earl, that he had rather
 “ have had *two hundred archers*; and that he would have
 “ performed *greater* fervice with that fmall number of
 “ *bows*, than with all thofe brave harquebufféers.

“ And fhortly after, the notable colonel Alman,
 “ the Reingrave, who had ferved many years in
 “ France, accompanied with many other brave captains,
 “ both French and Almans, with a great power both
 “ of

“ of horsemen and footmen; coming down and en-
 “ camping not far from Newhaven: there happened
 “ a great skirmish between certain English bands of
 “ Newhaven, and the French and Alman companies,
 “ which continued very hot, with many vollies of
 “ harquebushs shot, and new supplies on every side.
 “ But at length, the French and Almans, exceeding the
 “ English far in multitude, forced them to retire with
 “ disorder, even to the gates of Newhaven. During
 “ which action, it happened, that *four-score* tall archers
 “ (Hampshire men) did at that time land in the Haven;
 “ who, taking their bows and sheafs of arrows with
 “ their other furniture, did presently march without any
 “ tarryance through the town into the field, where the
 “ skirmish was; upon whose coming, the English
 “ bands (that a little before were forced by the often
 “ charges and great multitude of the shot of their
 “ enemies, to retire even to the very town ditches
 “ and gates); taking courage afresh, they and the
 “ bowmen entered again into skirmish with the Almans
 “ and French; where the *four-score archers* did behave
 “ themselves so notably against the enemies, with their
 “ vollies of arrows; that with the brave and valiant
 “ charges which they and the rest of the English
 “ bands gave upon their enemies, (but chiefly with
 “ the *excellence of the archers*) they forced them not
 “ only to retire, but to turn their backs; in such sort,
 “ as putting a great number to the sword, they became
 “ masters of the field. Upon which notable effect of
 “ those few archers, as also upon divers others, that the
 “ Reingrave had before time seen in serving against the
 “ English, he shortly after, upon the return of a message,
 “ sent by the Earl of Warwick (Sir Edward Horsley
 “ being the messenger), did most highly commend
 “ the notable effects, that he long before, in divers ser-
 “ vices,

“ vices, had been performed by English *archers*, both
 “ against horse and foot: and said also, that long
 “ before that time, he knew by experience, that great
 “ numbers of English archers were able to perform *very*
 “ *great matters* in the field; but that so small a number
 “ of bowmen, as were in that last great conflict, should
 “ be able, with their arrows, to do so great mischief
 “ against his old bands of Almans, French and Gas-
 “ coignes, he would not have believed, if he himself had
 “ not seen it. And therefore did with great reason and
 “ experience protest and acknowledge, the long bows
 “ of England, to be the most excellent weapons for
 “ the field, that were used by any nation in Christen-
 “ dom: and said, that the Queen of England had
 “ great cause so to esteem and account of them. And
 “ to this effect, I have divers times heard the Earl of
 “ Warwick himself very notably report.”

Sir John Smith then refers to Sir James Croft, (who
 he observes, had served under several of our kings and
 commanders in many great military stations), and who
 reports similar effects of the English archers. He calls
 to mind, the known effects of the Gothian, Parthian,
 Arabian, Turkish and Tartarian bows; which people he
 observes had more archers than other troops in their
 armies; that the Goths, Vandals, and Alans con-
 quered more with the effect of their bows, than of any
 other weapons (58): and that some nations, (as the
 Persians, Parthians, Medes, and Turks) did even in
 his time, prefer the bow to fire-arms. “ And it is
 “ evident (says he) by histories which have mentioned

(58) Pliny says, “ si quis Æthiopus, Ægyptum, Arabas, Indos,
 “ Scythas, Bactros, Sarmatarum tot gentes & orientis, omniaque
 “ Parthorum regna diligentius computet, æqua fere pars hominum
 “ in toto mundo *calamis* superata degit.” *Plin.* lib. 16. c. 36.

“ bows, and by such as have travelled into many
 “ parts of Europe, Africa, or Asia: that our English
 “ bows, arrows, and archers, do exceed and excel all
 “ other bows, used by all foreign nations; not only in
 “ substance and strength, but also in the length and size
 “ of the arrows”(59). However he concludes his dis-
 course, by expressing the little hope he had of convincing
 men, who were so self-willed, that they would give no
 credit to *history, experience, or example.*

(59) Whatever may be the superior skill of English bowmen, and the superior effect of their bows; yet Sir John Smith is not quite correct, in reporting, that the English arrow was *longer* than that in use among *other* nations. Many tribes in Asia, Africa, and America, use wooden bows and arrows, *as long* and sometimes *longer*, than English bows and arrows. Afcham notices (among others) the bows of the *Ethiopians*, the length of which were *four cubits*: and the arrows of the *Indians*, which were from a yard to a *yard and a half in length*. *Toxoph.* The arrows used at this day, with the Tartar horn bows, are probably, what Afcham alludes to, which are about that length. Alexander the Great, was wounded (in a battle with the *Oxydracæ*) with an arrow, *three feet long*. *Rollin*, vol. vi. p. 375. See also *Moseley*, p. 67. As to the comparative effects of the English and other bows; Patritius says, “ the wonders done by the Parthian bows, are not to be compared to the *English bows for strength or shooting.*” *Paral. Milit.*

CHAPTER III.

SECTION I.

Authorities in support of Sir John Smith's Observations—Disuse of the Bow, as a Weapon of War, in England.

IN the same year in which Sir John Smith's discourse upon weapons was made public, appeared a short tract, written by Sir Robert Williams; which Mr. Barwick observes, was to the same purpose; only, that the latter writer gives superiority to the bow over all fire-arms, with the *exception* of the *musket*. Sir John Smith is supported in his opinion, (upon the want of policy of the English, in relinquishing the use of the long-bow,) by Ascham, Sir John Hayward, Patritius (who although he gives fire-arms the first place, by no means assents to the *disuse* of the bow,) Clement Edmonds, and other writers. But as Sir John Smith had predicted, the advocates for the musket at length prevailed; and we find, that notwithstanding this his able attempt to support the character, and continue the use of that *noble weapon*, as he aptly terms the bow; (with which, the English had as the preamble to the statute of the 33 H. 8. c. 9. expresses, "not only defended this realm, and the subjects thereof, against the cruel malice and danger of their outward enemies in
" time

“ time heretofore past ; but also with little number and
 “ puissance in regard had done many notable acts and dif-
 “ comfitures of war, against the infidels, and other ; and
 “ furthermore subdued and reduced divers and many re-
 “ gions and countries to their due obedience ; to the great
 “ honor, fame, and surety of this realm and subjects, and
 “ to the terrible dread and fear of all strange nations,
 “ any thing to attempt or do to the hurt or damage of
 “ them or any of them :”) Archery, (which the sta-
 “ tutes of the 13 Eliz. c. 14. declares, “ not only hath
 “ ever been, but also is God’s special gift to the English
 “ nation, a singular defence of this realm, and an occa-
 “ sion of many noble victories),” yielded to the opinion
 of the times, and at length the *long bow* ceased to be
 employed in this nation, as a weapon of war.” (60)

SECTION

(60) Mr. Moseley has observed ; “ that the battle of Agin-
 “ court, (which happened 1415, under Henry V.) is the *last im-*
 “ *portant action*, in which *archery* is much spoken of ; and that,
 “ although the use of it was continued through several succeed-
 “ ing reigns ; yet it at length, seemed to have been cultivated more
 “ as an *amusement*, than for real military service (p. 228).” But
 on this head, Mr. Moseley is, most unquestionably, incorrect :
 for we find the English *long-bow* to have been, not only the
 chief weapon of conquest ; and a cause of the great slaughter,
 during the civil wars between the Houses of York and Lan-
 caster, (particularly at the bloody battle of Towton) : but that
 in the reigns of Henry VI. Henry VII. Henry VIII. and Edward
 VI. it continued to support its military character, and invincible
 career of glory, with undiminished effect : as the memorable battles
 of Floddon and Pinkey, (the latter is particularly noticed by Sir
 John Hayward (*post sec. 2.*) and the campaigns in France
 and Flanders, during those reigns, will testify. In the reigns of
 Edward VI. and Elizabeth, we find its value in military service,
 highly spoken of by foreigners of high rank and great military
 skill, who had witnessed its powerful effects. (*Sir John Smith’s Dis-*
course on Weapons, ante, ch. ii. sec. 3). In a letter from Queen
 Elizabeth, to the Sheriffs of Lancashire, is an order to levy men
 for the Irish service ; and the proportion of bows to calivers, is
 one half. And it appears (by Queen Elizabeth’s annual expence,
 civil and military, anno 1578), that *fifty bowmen* were on board
 each

SECTION II.

Comparison between the Bow and improved Fire-arms—Former Disadvantage of the Bow—Advantage of the Bullet over the Arrow—Peculiar Advantage of the latter—Question, whether the Musket or the Bow can discharge the fastest, considered—General Observations.

NOTWITHSTANDING the very powerful arguments made use of by Sir John Smith, for the continuance of military archery, and to prove the superior effect of the bow in war, over all other weapons: we cannot but suppose, that had he lived in these times, and been a witness to the degree of perfection

each of the first rate men of war, and that the inferior rates also had a due proportion of archers. (*Peck's Desiderata Curiosa*, vol. i. lib. 2. p. 72). And Sir John Smith informs us, that a considerable part of the army drawn out at Tilbury (to oppose the Spanish invasion, anno 1588,) consisted of bows. *Discourse on Weapons*. Pére Daniel says, arrows were shot by the English, at the siege of the Isle of Rhé in 1627. In 1643, the Earl of Essex issued a precept, "for stirring up well affected people by benevolence, towards raising a company of archers, for the service of the king (Charles I.) and the parliament." And in a Pamphlet, (noticed by Mr. Grose) printed anno 1664, giving an account of the success of the Marquis of Montrose against the Scotch; *bowmen* are repeatedly mentioned: which is the latest period to which any account of English military archery can be traced. *Grose on ancient Armour and Weapons*. Moseley, p. 231. For an account of the commissions issued for the revival of the use of the long bow; see *Stow's Survey of London*, vol. ii. b. 5. ch. 13. *Moseley and Hargrove*.

to which fire-arms (61) have been brought; and the ease and celerity with which they are now used; he would have entertained a much higher opinion of their effects, and valued them accordingly (62). It is true, that very little execution (comparatively speaking) is performed even by the most improved fire-locks, owing (as Sir John Smith justly observes) to the difficulty of taking a sure sight, the celerity used in loading and firing in action, and other circumstances. And it must be remembered that the bow had, in former times, to contend with fire-arms, which, though slower in their discharges, were *surer* in their aim; being considerably heavier than those now used, and having the great advantage of a rest, to correct the vacillation of the arm (63). On the other hand, the bow is subject to several inconveniences, not altogether so referrible to fire arms. It is liable to be completely disabled by the stroke of a bullet; being elevated for distant shots much above the head of the archer; and his aim is impeded and rendered somewhat uncertain, by the

(61) Mention of *cannon* and other great guns, has been omitted in this treatise; which offers a comparison between bows and *small arms* only. The superior and decided effect of *ordnance* (particularly of late years), where it can be brought into action with effect, needs no comment.

(62) Sir John Smith (to prevent his opinion of fire-arms being misconstrued) candidly observes, "that every weapon has its due time and place, and that fire-arms, although a most *useful* weapon, are yet often found out of *their place*, and consequently then of no value." *Answer to Mr. Barwick. Harl. MSS.*

(63) The author of these Tracts finds his suggestion upon this point, confirmed by authority. The author of the *Introduction to a plan of Discipline for the Norfolk Militia*; (speaking of the *match-lock*), observes, "However, most writers allow, and some old officers that we have known, who remembered match-locks being still in use, have confirmed it: that they were very *sure*, and less apt to *miss fire* than the fire-lock;" but adds, that he thinks the latter scarcely credible, as the old locks were not so well made as they are now. P. 7. note 3.

dazzling

dazzling light of the sun when in his front (64): while the musketeer (from the horizontal line of his level) avoids this latter inconvenience. Besides, the bullet has the decided advantage of the arrow, in *three* very important particulars; namely, *velocity*, *force*, and *point-blank range*. By means of the first, it reaches its object (supposing it to be distant one hundred yards) in less than the fourth part of a second of time, while an arrow (from one of the strongest bows) does not move that space in less than three seconds. As to force, the arrow beyond two hundred and fifty or two hundred and eighty yards at the furthest, does not possess a force equal to what a bullet retains at that distance. But the chief advantage of the musket lies in the *extent* of its *point-blank range*, which is calculated to be about one hundred and twenty yards; whereas the strongest bow cannot command a *point-blank range* much exceeding fifty yards: consequently, the latter must (beyond that distance) depend for its effect, upon the skill and judgment of the archer; and it is well known by experience, that in shooting at objects, distant about one hundred and eighty or two hundred yards and upwards, the eye is frequently deceived; and that, not only mists, but the loss of the sun in the evening, and indeed the absence of it (by the intervention of a passing cloud at noon day), will cause this deception in a degree; so that the arrow shall often either exceed, or (which most frequently happens under such circumstances), fall short

(64) The archers in all encounters avoided, as much as possible, fighting with the sun in their faces. See the engagement before Sluys. *Froissart's Chron.* vol. i. c. 50. Battle of Cressy. *Froissart's Chron.* vol. i. cc. 128, &c. *Hollinshed's Chron.* 1587, vol. ii. p. 358. *Barnes's Hist. Edward III.* p. 182.

of its destination (65). Again, the arrow possesses an advantage, (which the bullet can scarcely, if ever be made to command in any efficient degree, in the line of its flight); ranging with considerable certainty, in a curve, from an almost perpendicular to nearly an horizontal elevation; and taking effect, as Sir John Smith observes, "from the top of a man's *head*, even to the "nailing of his *feet*;" and from the first to the last rank in the army; while the bullet, once passing over its object, loses itself in an useless flight. However, the difficulty of hitting the mark with an arrow at a great distance, is much lessened in war, by the object to be struck, consisting of several extensive columns or lines of men; and it appears by recorded facts, that our ancient archers *very seldom* missed such marks: so much is all manual art, (and particularly the art of archery), under the influence of early habit and frequent practice. Besides, as Mr. Mason has justly observed, the archer has the advantage of the musketeer, in being able to notice the *flight* and *fall* of his arrow, and consequently to amend his discharge.

Whether it is possible for a musketeer, of this day,

(65) A remarkable instance, in which a true knowledge of distance became important, occurred at the great battle of Towton, between the Yorkists and Lancastrians, in the Reign of Edward IV. At the time the battle began, a thick snow fell, and was driven by a brisk wind full in the faces of the Lancastrians, who were thereby prevented from observing the exact distance of the enemy. The Lord Fauconberg, an old and experienced officer, made an admirable use of this accident; he ordered his men to advance as near as they conveniently could, to discharge a flight of arrows, and then retire with all speed out the reach of those of the enemy. This stratagem had a wonderful effect; for the Lancastrians feeling the arrows, and thinking their enemies were not many yards distant, emptied their quivers with unavailing discharges. *Speed. History of Great Britain.*

to shoot *faster* (66) than an archer, will scarcely be contended. Certainly the musketeer, in attempting this emulation, would heat and foul his piece in such a manner, as to lessen its effect very considerably: and the hurry of such impetuous discharges, would not only distract his aim, and consequently cause great deviation in his shot, but also would soon disable him with fatigue. When charged with the bayonet, the musketeer would, perhaps, have some advantage over the bowman, by being able to retain his shot the longest; as the latter would be under the necessity of relinquishing his bow, time enough for him to take up his pike; unless he could retire through the rank behind him; but the near approach of the enemy might, probably, render this manœuvre impracticable, without causing a fatal confusion in the other ranks. Against the *borse*, the bow, with the assistance of the pike, seems capable of being used with the greatest effect, as Mr. Mason has evidently pointed out. Yet, when acting against the *foot*, so long as the archers could maintain their ground, and give their discharges with firmness; it is difficult to conceive, how the best disciplined troops (within the reach of their volleys of arrows) could load their fire arms, during an incessant storm of arrows, assailing every part; and falling with such force, as even to beat their weapons out of their hands; which was the case

(66) An archer of this day has been known to shoot *twelve* arrows, at forty-six yards distance, into the circumference of *two feet*, within the space of *one minute*. An expert musketeer, cannot (we may presume) discharge above half as many bullets in that time, at the same distance, with any *certainty of effect*. The best Prussian musketeers (whose pieces prime themselves) are said to discharge six bullets in a minute; but such rapidity of discharge is too fatiguing to be continued. So simple is the exercise of the *bow*, that in the discharge of the arrow, only two distinct movements are necessary; viz. 1st, the drawing the arrow from the belt and placing it in the string. 2d, the drawing the bow, and loosing the arrow.

at the battle of Homildon (in the reign of Henry IV. and called by some *Hallidown*) where Speed tells us, "the Lord Percy's archers making a retreat, did withall deliver their deadly arrows (*tam viridè, tam animosè, tam gravitè*, faith our monk) so lively, so courageously, so grievously; that they *ran through the men at arms, bored the helmets, pierced their very swords, beat their lances to the earth*, and easily shot those who were more slightly armed through and through." Similar effects of English archery were noticed at the battle between the English and Scotch, on the banks of the Eske, near Musselburgh (called the battle of Pinkey), in the year 1547, when, says Sir John Hayward, "the English archers sent such showers of shot over the Hackbutter's heads, that many bodies of their enemies, being but half armed, were *beaten down and buried therewith.*" *Life and reign of King Edward VI.* p. 33. And it must be observed, that the archers would possess the advantage of being clear of the noise and smoke, with which their adversaries would be assailed, and which in some degree contribute to render the execution of musketry so uncertain, and consequently, would be at liberty to make rapid movements, and to give their discharges with greater regularity, certainty and effect (67).

(67) It has been already observed, that the *point-blank* range of a musket shot is about 120 yards; but that *in action* it cannot be much depended upon beyond *one hundred*. Beyond 80 toises, or 160 yards, the fire of a line of infantry can *seldom* have effect. (*Guibert*. vol. i. p. 157). See *Instructions for the Drill, (as ordered for his Majesty's Forces,)* by John Russell, Brevet Captain, and Paymaster, and late Adjutant in the West London Militia, 2d edit. 1799. And we have seen by calculation (grounded upon facts) what is the present general *execution* of musketry, in pretty close actions. (*Ante*, note 46). It must be admitted, that at 100 yards distance, the sheaf or *war* arrow, cast from a *war*-bow, would strike its object with a force nearly, if not quite, equal to that of a musket ball; and that its
strong

strong steel-pointed head would, in some respects, give it the advantage of the leaden bullet. Experiments have been lately made, to ascertain the claim for *certainly* of shot, between the musket and the bow. In order to accomplish this design, one of the best muskets was procured, and loaded with the greatest nicety; the powder used was of the very best quality, and the quantity was previously weighed, and proportioned with the utmost exactness, to the weight of the ball, which was confined with muslin or fine rag, instead of paper; and in short, every precaution was taken to afford the musket its true and full effect. The victory was to be decided in twenty-one shots, at a target distant 100 yards: and the result of the trial was, that the musket put *eleven* and the bow *fifteen* (out of twenty-one) shots into the target. The experiment was repeated once or twice, but the bow continued the successful weapon. However, this trial could not shew the advantage of the *bow* over the musket, in its fullest point of view; for had an *army* been shot at, instead of a target, every arrow which went wide of, or *over* the mark, would have taken place; while the bullet, having passed over the heads of the first rank, would probably pass over the heads of the other ranks. Against an enemy protected by a hill, wall, or other defence in front (above the height of a man); whilst the musket is useless, the bow can act with considerable effect. It may be found very serviceable in discharging arrows loaded with fire, against combustible matters. See *Moseley*, p. 175 to 182. Mr. Moseley quotes from Voltaire's History of Charles XII. King of Sweden, an account of the brave stand which Charles (with a few attendants in a stone-built house) made against the whole Turkish and Tartar army; and which the former would have repulsed, had not the Turks shot arrows loaded with fire into the roof, windows, and doors of that fortress. *Fire arrows* were formerly used by the English. *Ibid.* In the British Museum Library (*Tit. Milit. Tracts*) is a pamphlet, (printed in the year 1628, and entitled, "*A new Invention of shooting Fire-shafts in Long Bows*") wherein the author not only sets forth the use, but also gives particular directions for the construction of fire-arrows. "Their chief service (he observes) "is in molesting and putting in hazard the cannoniers; firing "the enemies tents; making a blaze for the musketeers to fire; "keeping workmen by night in awe; facilitating attempts by "night; dazzling the eye of the enemy, and exposing him; and "firing the sails of ships: most of which services may be performed from *behind* a breast of defence, (this indeed, is an advantage appertaining to archery in general); and in routing the "horse." The effect of a barbed arrow-head charged with *fire*, and *adhering* to horse or man, may be easily conceived.

SECTION III.

Observations on the possibility of increasing the Powers and Effects of the Bow—Causes of the Improvements in Fire-arms—Value and Importance of lately imported Bow-woods.—Improvement in the Construction of the Bow.

HAVING thus stated impartially, the claim for pre-eminence in military service, between the bow and fire-arms; the advocate for the latter cannot deny me the indulgence of making this last remark on the part of the bow; namely, that had the practice of military archery continued, it would have attracted the attention of the philosophers, and the mechanics of the times, to the present day: and that the realm (which so much depended upon the effect of archery) would have held out great encouragement to men of genius, to exert their abilities in improving the bow and arrow; and, no doubt, such attention and encouragement would have led to the discovery of greater powers and effects, than that weapon has hitherto displayed; or at least, would have greatly improved those which we acknowledge it to possess. For we are sensible of the rapid progress of all arts and sciences, and of the wonderful perfection to which they have been carried in the course of the two last centuries; by means of the advancement of letters, and the investigations and experiments of philosophers and men of genius in all countries; and of that liberal communication of useful discoveries and inventions, which
has

has long characterised Europe. To these causes, (as well as to the rewards secured by the laws of this country to ingenuity) fire-arms owe their present powers. And although the bow and arrow have during all that important period, lain by unnoticed; yet have they (however accidentally) profited by the knowledge and implements of modern mechanics; who construct them with greater nicety, than what our ancestors were used to do. The revival of archery has introduced to the attention of the bow-maker, several sorts of foreign wood, (but lately imported into this country), which upon trial, have been found to make bows that rival, and in some particulars even excel, those of the long famed *yew*: And the *arrow woods* now in use, are deemed far superior to what were employed in archery in former times. But the new method of constructing the bow with a *back*, which (as it not only renders it on some accounts, more acceptable as an instrument of amusement; but also increases its powers, by giving additional velocity to the arrow) may be found very useful in its *military* purpose, was not practised till some time after archery had quitted the field.(68)

(68) Admitting the great powers of the bow, and its value as a weapon of war, even at this day; yet it must be confessed to be a most *sanguinary* one. A gun-shot wound in a part not vital (even if the ball cannot be extracted), seldom proves fatal: the wound, after a time, closing over the ball; and but occasionally causing a degree of uneasiness, or pain. But a wound with a *barbed* arrow, *not extracted*, must ever be attended with pain, and considerable *danger*. Historians frequently mention the torment endured by those, who have been wounded by arrows: and Sir John Smith has sufficiently proclaimed the terrors of the English *barb*; and noticed the inflammation and fatal effect, occasioned by the rust of the arrow-head. Touching the galling of the enemy, (says Clem. Edmonds), "there cannot be a better description than that which Plutarch (*Plut. Crassus*) maketh of "the overthrow of the Romans, by the Parthian arrows. The "Roman soldiers hands (saith he) were nailed to their targets, "and

" and their feet to the ground, or otherwise were sore wounded in
 " their bodies, and died of a cruel lingering death, crying out for
 " the anguish and pain they felt; and turning and tormenting
 " themselves upon the ground, they break the arrows sticking in
 " them. Again, striving by force to pluck out the barbed heads,
 " that had pierced far into their bodies through their veins and
 " sinews, they opened the wounds wider, and so cast themselves
 " away." *Lib. 7, ch. 15.* The arrow has been, and if again
 used, may again become an instrument of torture, at which huma-
 nity shudders. An instance, (pleading imperious necessity indeed)
 occurred at the battle of Cressy, and is noticed by Stow in his
Annals: speaking of that battle he relates, " that the English
 " Marshals and the Earls of Warwick, Salisbury, and Suffolk,
 " with their wearied battailes, joined the prince; having first
 " supplied the exhausted quivers of their archers with arrows
 " drawn from the bodies of their dead and dying enemies." P. 262.
Barnes, p. 508. Such was the effect of arrows in war, that Sir
 John Smith tells us, " valleys ran with brooks of blood, caused by
 " the slaughter of the Turkish arrows." *Answer to Mr. Barwick.*
Harl. MSS. And Mr. Gibbon says, " that the first body of the
 " Crusaders was overwhelmed by the Turkish arrows; and a
 " pyramid of bones informed their companions of the place of their
 " defeat." *Ch. 58.*

P A R T II.

AN ACCOUNT OF THE REVIVAL OF ARCHERY, AS
AN AMUSEMENT, IN ENGLAND: IN WHICH THE
VALUE OF IT AS AN EXERCISE, CAPABLE
NOT ONLY OF AFFORDING MUCH PLEASURE
AND SATISFACTION, BUT ALSO OF RESTORING
HEALTH, AND ADDING VIGOUR TO THE NERVES,
AND STRENGTH TO THE BODY, IS CONSIDERED.



CHAPTER I.

SECTION I.

Archery always an Amusement in England—till of late, confined chiefly to the North—Revival of Archery in the South—Cause—Value of the Art as an Exercise—Authorities—Archery particularly recommended to young Persons—Not denied to old Age—Effect of Archery in relieving the Mind.

NOTWITHSTANDING the fate of *military* archery, the bow long kept its post in this kingdom, as an agreeable amusement, and a polite recreation of much value. Yet, even as an amusement, (till within these last few years) it has, for a century past, been little known. The archers division of the *Artillery Company* in the south; and one or two societies in *Lancashire* and *Cheshire*, (counties once famed in history for their powerful bowmen (1), and in which archery has never

(1) "*Lancasheere faire archere.*" *Leland's Collection.*

"From *Lancashire*, men famous for their bows."

Drayt. Barons Wars, b. i. f. 42.

Speaking of *Cheshire*, *Drayton* says,

Who with (their bills and bows) may confidently boast
Our Leopards they so long and bravely did advance,
Above the *fleur-de-lis*, even in the heart of France.

Drayt. Poly Olbion. Song 11.

been

been entirely difused); and the *royal company of archers in Scotland* (2), have been for many years the sole, (and at times the very feeble) fupport of the art in Great Britain. Thus is it with the bow; an instrument, which from the earlieft period of time, has been, in almoft all parts of the earth, the all conquering weapon; an instrument, by means of which the Norman conquered England; and the Englifh not only fubjected and fecured Wales, Scotland, and Ireland; but did *ten feveral times fuccesfully invade France; once brought it to the brink of ruin; once conquered it; made one of its Monarchs prifoner, and another tributary (Mafon);* and with which, they performed fuch exploits wherever they went, as, proverbially, to become the beft allies, or the worft foes. So that, but for the amufement which the bow ftill affords to a few; archery (in this kingdom) would be for ever loft and forgotten. And when that fails, this weapon, which once every Englifhman had at *band* (3), will (if even a remnant of it is found) be deemed a curious relick, worthy the acceptance of an antiquarian. But fo miserable an exit to fo noble, and once famed a weapon, need not be dreaded, while it receives the fupport it has met with for the laft twenty years; interrupted in fome degree only, by a long and unprecedented war, and the continued threat of invafion, which have compelled all men to fly to the arms of the day.

The late revival of archery (which although it took place in the *fouth* gave new vigour to its fupporters in the

(2) See a full account of the *Royal Company of Archers in Scotland*, in *Hargrove's Anecdotes*, p. 68, and *Mofeley* 228, and *Appendix*, p. 342.

(3) By an act of parliament paffed in the 33d year of the reign of King Henry VIII. (c. 9.) and which was continued and enforced by the 13 Eliz. (c. 14.) Every man (except fpiritual perfons and the judges) was obliged to ufe fhooting, and to have a "bow and arrows ready continually in his houfe."

north of England; and soon extended into every county, recommending as Sir William Wood in his *Bowman's Glory* observes "at least itself as an exercise, and though but in sport and triumph," to every Englishman) was owing to one of those accidents which, however trifling in themselves or confined to an individual, have sometimes laid the foundation of much benefit to mankind.

About the year 1776, Mr. Waring (who resided with Sir Ashton Lever, at Leicester House, and who may justly be stiled the *father of modern archery*) having, by continual application to business, contracted an oppression upon his chest, (arising principally from sitting too closely to his desk, and pressing his breast too much against it, and which the most eminent of the faculty had in vain endeavoured to remove), resolved to try the effect of the bow in affording himself relief. He accordingly made it a regular exercise, and in a short time derived great benefit from the use of it; and ascribes his cure, which was perfect, solely to the use of archery. Sir Ashton Lever, perceiving the good effects, which so engaging an amusement had upon the constitution, followed Mr. Waring's example, and took up the bow; he was soon joined by several of his friends, who, in the year 1780, formed themselves into a society, under the title of *Toxophilites*, and met regularly at Leicester House, having butts erected in the gardens belonging to it. And this society was the parent stock of the numerous societies of Archers, known at this day; except those, which I have before noticed, as existing prior to this late revival of archery (4).

On

(4) For a list and an account of these several societies, see *Moseley*, p. 230. *Hargrove*, p. 73. *Oldfield*, p. 73. With such liberality

On the score of *health* then we find, that archery holds out to us a strong inducement to value and use it as an exercise. Its value indeed upon this account, does not rest solely upon a single fact. Ascham, who was himself a valetudinarian, and of weak body, (and therefore thought it necessary to spend many hours in such exercises, as might afford the best relief and relaxation, after the fatigues of study), has in several pages of his treatise upon the art, recommended the practice of it, as an *innocent, salutary, useful, and liberal* diversion. In his own words, "It is an exercise moste holosome, and also a pastime moste honeste; wherein laboure prepareth the bodie to hardnesse, and the mind to couragiousnesse (5), suffering neyther the one to be made with tenderesse, nor yet the other to be hurte with ydleneffe," and, comparing it with other exercises and amusements, adds, "therefore, to loke on all pastimes and exercises holesome for the bodye, pleasaunt for the minde; comlye for every man to do; honeste for all other to loke on; profitable to be fet by of every man; worthy to be rebuked of no man; fitte for all ages, persons, and places; onlye shootinge shall appeare, wherein all these commodities may be founde." Bishop Latimer (in a sermon preached before King Edward VI.) observes, "It is a goodlye arte, a holesome kynde of exercise, and much commended in phisike," and quotes Mar-

liberality of sentiment was the revival of archery embraced, that a mutual exchange of honorary freedoms soon took place between these societies and the Toxophilites; which confers upon the latter, the privilege of being received, as archers, in the different societies in Great Britain.

- (5) "For bows the strength of brawny arms imply
"Emblems of valor and of victory.

Dryd. Flower and the Leaf.

Tum validis flexos incurvant viribus arcus
Pro se quisque viri.

Æneid. Lib. 5. l. 500.

cilius

cilius Phisinus, who says, "it wrastleth agaynste manye kyndes of diseases." *Latimer's Sermons*. (Ser. 6, before King Edward VI.) And Wood, who doubtless was a better archer than *poet*, speaks to the same effect:

"It is an exercise (by proof) we see,
 "Whose practice doth with nature best agree.
 "Obstructions of the liver it prevents,
 "Stretching the nerves and arteries, gives extents
 "To the spleen's oppilations, clears the breast
 "And spungy lungs: It is a foe profest
 "To all consumptions:"

Bowman's Glory. (6)

To young persons, Ascham strongly recommends the practice of archery; not only as an happy and honorable substitute for many unworthy amusements and expensive follies, (especially for that terrible propensity to gaming, which he seriously deprecates and laments, as the great bane of the age in which he lived) but also on account of the manliness of the diversion, and of the share it may fairly claim in the preservation of the health: for this exercise evidently tends to suppress effeminacy, to invigorate the nerves, and to increase the strength of the body. With his sentiments upon this subject, those of a modern writer (Mr. Saltzmann) perfectly accord. The latter, in considering the gymnastic exercises proper for youth, speaks of *archery*, as an exercise, in terms of high commendation. (*Gymnast. Exercises.*) And Dr. Mulcaster (a cotemporary of Ascham, and master of Merchant Taylors, and, afterwards, of Saint Paul's school, who published a treatise on the education of youth), speaking of shoot-

(6) Wood lived to prove the truth of his remarks; he died at a very advanced age. And his epitaph tells us,

"Long did he live the honor of the bow,
 "And his long life to that *alone* did owe."

Barrington.

ing with the long-bow, observes, "to say enough of this exercise in few words, (which no words can praise enough for the commodities which it bringeth to the health of the body), it consisteth of the *best* exercises, and the best *effects* of the best exercises." *Positions*, chap. 26.

Indeed, of so much importance to youth was deemed the knowledge and exercise of archery, in the reign of Queen Elizabeth, even at the time when the long-bow, as a weapon of war, was falling into neglect; that we find, by the orders, statutes, and rules made in the 33d year of that reign, for the government of Harrow School, (erected and endowed by patent in the 14th year of the same reign); it was a condition, which every parent and other person, who sent a boy to the school, was obliged to observe; "that he should allow the child at all times, a bow, three shafts, bow-strings and a bracer, to exercise shooting." See a description of Harrow in the *Topographer*, for the year 1791, vol. 4. In consequence of this regulation, there has been observed at the school, till of late years, an annual shooting with the English long-bow, for a silver arrow. This regulation respecting archery, probably, took place in compliance with the statute of the 13 Eliz. c. 14. which, after declaring archery to be "*an wholesome exercise for the health and strength of men,*" directs all the statutes for the suppression of unlawful games and for the maintenance of archery, to be put in execution: and consequently (among others) the 33 H. 8. c. 9. which enacts, "that the fathers and governors of persons under age, shall teach them shooting, and provide for them a bow and two shafts." This manly exercise had a general continuance to the Reign of Charles I. for we find in many hospitals founded in that reign, among the articles of benefaction recorded upon their walls,

walls, this singular provision; “*Arms for the Boys,*” which signifies *Bows and Arrows*. (*Gent. Mag.* for 1783, vol. 53. p. 762.)

Nor is this exercise (like most others) the peculiar advantage and amusement of *early days*; for Ascham justly remarks, “that the labour which is in shooting, of all other is best; not only because it encreaseth strengthe, and preserveth healthe most; but because it is not vehement, but *moderate*; not *over-layinge anye one parte with wearinesse, but sefilye exercisinge everye parte with equalnesse*; as the arms and breastes with drawinge, the other partes with goinge; being not so painful for the laboure, as pleasaunt for the pastime, which exercise (by the judgement of physicians) is moſte allowable.” It may with truth be stiled the *friend of old age*. And we see old archers continue the diversion with satisfaction to themselves, and pleasure to others; and although, when very far advanced in life, they find their strength somewhat give way; yet do they not perceive any loss of *skill* in the art: by changing their strong bows, for those which are weaker, they seldom perceive the want of very powerful nerves; but in pursuing this amusement, can

“ —bid old age grow green and wear a second spring.”
Armstrong, Art of Preserving Health.

On another account too, archery may deserve attention. One known effect of bodily exercise, is, that of relieving the mind from a depression of spirits; and it is but justice to this art, to observe, that it can promote this effect in a superior degree. Walking, riding, and many other exercises, although well calculated to exhilarate and raise the spirits; yet if vehemently pursued cannot be so long; if languidly followed, they leave the mind open to an insensible aberration: and in that interval, the cause of its uneasiness has time to return and

prey upon the nerves. But archery being more a *regular* and *constant*, than a violent exercise, leaves but little time for intruding thoughts; and indeed requires, (and in a peculiar manner arrests) the attention both of the *eye* and the *mind*: inculcating and strongly enforcing a calmness and tranquility, free from the interruption of the tumultuous passions. If used in society, this effect is still greater; and emulation must at least for a time,

“ Drive melancholy from the *haunted* brow.”

Nor does the *care* of the bow cease, when it is unbent; for if the mind still requires active employment, the bow is always at hand; and the lover of archery, the more he becomes acquainted with the art, the more he will find himself inclined to imitate the great *Alfred* (7), and give some of his spare time to trim his bow and shafts. And he will soon discover, that they are capable of leading him to numberless experiments, which will call forth his genius and attention.

(7) See an anecdote to this purpose, in *Affer. Ælfredi rebus gestis.* p. 9. Spelman's *Life of Alfred*—or, *Moseley.* p. 216.

SECTION II.

Archery used as an Exercise by the first Personages in all Nations—Fashionable in England in the times of Henry VIII. and his Successors, till the Revolution—Causes of its former Decline—Modern Archery patronised by the Prince of Wales and the Nobility—in the hands of the Fair Sex—Defence of it in their hands—Value of Archery in promoting liberal and friendly Society—Peculiarity of its tendency in this respect—Unrestrained Pleasures of the Amusement.

THIS manly exercise and truly princely amusement, has, in all nations, attracted the notice and engaged the support, of the highest orders of men. Many Eastern Princes continue it to this day. Afcham tells us, that of all other pastimes “it is moſte fitte and agreeable with learning and learned men:” and he mentions, that ſeveral Biſhops of his own time practiſed themſelves much in archery. Indeed, it ſeems to be a diverſion, in which the clergy may engage, “being on that account worthy to be rebuked of no man.” He has alſo noticed many Eastern Princes and Roman Emperors, who were proud of exhibiting their ſkill in the art: and among other great perſonages, particularly praiſes Henry VIII. who took every opportunity, and uſed every means, to encourage archery; himſelf affording an example of no ſmall ſkill in the art (8). In his
reign

(8) Après allerent tirer de l'arc, & le Roy d'Angleterre luy-
meſme, qui eſt merueilleuſement bon archer & fort, & le
G 3 “ ſefoit

reign it seems to have been a very fashionable amusement; and his brother (Prince Arthur) became so expert in the use of the long-bow, that a good archer was honored by being stiled *Prince Arthur* (9). In this amusement he was followed by Edward VI. and Charles I.—Nor was it inattentively regarded by Charles II. and James II. in whose reigns it continued to find favor and patronage. It is said that James I. of Scotland was so much struck with the spirit and gallantry of the English archers, that (on returning to his own country, after his confinement in England), he established royal companies of bowmen, in several parts of his dominions; some of which still flourish. (*Moseley, p. 228, note.*) The abdication of James II. and the succession of a family little acquainted with this kingdom and its amusements, would naturally have denied to the bow, its former support and encouragement. Hence it was, that archery, (driven to seek an asylum where from the earliest period of its existence in this country, it had in all times found zealous patronage and support), lay so long a time concealed, in the remote corners of the kingdom. At this day, it must be considered as no small favor conferred upon archery, that his Royal Highness the Prince of Wales, and many of the nobility and first personages in this kingdom, have condescended to patronise and encourage the revival of this once much esteemed art: nor should it be forgotten, that our present gracious Monarch was pleased (a few years

“ *sefoit bon voir.*” *Meeting between Henry VIII. and Francis I. in the Field of the Cloth of Gold between Ardres and Guines.*

Montfaucon, Monumens de la Monarchie Francoise, vol. 4. p. 199.

“ *Nemo enim ipso rege (Henry VIII.) Britannicum ingentem arcum contentius flexit, nemo certius atque validus sagittavit.*”

Paul. Jov.

(9) In the year 1581, a society of archers existed, who stiled themselves, *Prince Arthur's Knights. Mulcaster's Positions. p. 101.*

since)

since) to revive the ancient royal prize, annually shot for by the royal company of archers in Scotland. (*Barrington*). But to modern days, was reserved the high and singular honor, which archery has received, at the hands of the *fair sex*; who have step'd forward at once to patronise, and to grace the exercise of it. One indeed among the rest, (whose exalted rank and acknowledged excellence stamps additional value upon every thing she deigns to notice) has taken up the bow. What greater encouragement can art expect or desire? Our sturdy ancestors, whose steady well braced nerves, enabled them to draw to the head their *yard-long* arrows (which pierced the strongest armour, and struck their fiercest foe to the ground) would have been proud, to have witnessed so flattering an attention to their favourite art; to have seen the neatly trimmed shaft loosed from the fair hand of an English Female; giving an example of *skill* to the rougher sex, and wanting but their *strength*, to contend with the enemies of their country.

This new æra, as it has been stiled, in the annals of archery, is condemned by some, as introducing to the other sex an amusement, too masculine to accord with the gentleness of manner, which should at all times characterise it. But this censure seems to be somewhat unmerited and ill-timed: for, as a late writer (*Moseley*) justly observes, it is unfortunate, that there are few diversions in the open air, in which women can join with satisfaction: and archery seems to be an admirable antidote to the sedentary life, which is incident to the general employment of their time. On another account indeed, they are gainers by the amusement; the attitude of an archer drawing the bow has been deemed worthy of notice, and cannot fail of displaying the graces of the female form, in a considerable degree.

Since then archery has again raised its head, crowned with such distinguished honors, and offering so much pleasure and advantage; let us receive it with due respect; and pay our tribute, by continuing to cultivate the art: not overlooking the merit of those, who have bestowed their endeavours to draw it from an undeserved neglect and obscurity. And although the English long-bow has been dismissed (honorably so we must confess) our service in the field; let us not forget the blessings we still enjoy, through the former exercise of its powers, and the value of the liberal, friendly and select society, which, in its present humble state, it is so well calculated to promote and preserve. Society and friendly intercourse are, it is true, common to many amusements; though perhaps not to be enjoyed to the degree of delight (combining our health with our pastime) which archery admits of. In this exercise, our Friends, both young and old, can engage with pleasure and satisfaction. At home, we may content ourselves with gaining a moderate portion of exercise and health, by shooting short distances; abroad, these may be obtained in a superior degree. Pursuing this amusement, we may, at pleasure, encounter the sharp air of the mountain, or inhale the milder breeze of the valley; *roving* (or shooting various lengths, to the extent even of the utmost powers of the bow, and of our own strength), over the most beautiful parts of the country, and in the most delightful seasons of the year (advantages which no other amusement can afford) when

- “ Fair-handed *spring* unbosoms ev’ry grace;
- “ Nor is the mead unworthy of thy foot,
- “ Full of fresh verdure, and unnumber’d flowers,
- “ The negligence of nature, wide, and wild;
- “ Where, undisguis’d by mimic art, she spreads
- “ Unbounded beauty to the roving eye.”

Thompson's Spring.

Or when,

“ From bright’ning fields of ether fair disclos’d,
“ Child of the sun, refulgent *summer* comes,
“ In pride of youth.

Thompson’s Summer.

Or,

“ while his sweetest beams
“ The sun sheds *equal* o’er the meeken’d day;

Thompson’s Autumn.

Till,

“ When the cheerless empire of the sky
“ To Capricorn the Centaur Archer yields;
“ And fierce *Aquarius* rules th’ inverted year.”

Thompson’s Winter.



P A R T III.

AN INQUIRY AND INVESTIGATION INTO SUCH EXTRAORDINARY FEATS, AS ARE SAID TO HAVE BEEN ACHIEVED WITH THE ENGLISH LONG-BOW, IN FORMER TIMES; AND PARTICULARLY BY THAT GREAT HERO OF ARCHERY ROBIN HOOD; WITH AN ACCOUNT OF THAT FAMOUS OUTLAW FROM THE MOST AUTHENTIC RECORD: AND A COMPARISON OF THOSE FEATS OF ARCHERY, WITH SUCH AS ARE WELL ATTESTED IN MODERN TIMES.



CHAPTER I.

SECTION I.

Preliminary Observations—Truth of the Existence and History of Robin Hood.

THE preceding *military* history of the English long-bow, affords us ample testimony and satisfactory proof, that “in the hands of *numbers*, it performed “*verie greate matters.*” And although we do not at this day, possess such authentic records respecting the *private* feats of the bow; as have been adduced in support of the effect of it, as a weapon of war: yet have we such traditional annals of the achievements of individual skill and strength in archery; as (corroborated by the opinion of those, who, although they lived several ages subsequent to the time, when the great feats in archery were supposed to have been performed; yet as they lived much nearer that time, and when archery flourished, had better opportunities of forming a more accurate judgement upon the truth of the facts in question than we can command; and corrected by our own reason and experience) may enable us to determine, without being liable to the charge of much error or credulity, upon the truth of such ancient tradition.—We have not, indeed, any one ancient and authentic history or record exactly to our purpose; and from such ancient testimony or tradition, as we are acquainted with, little can be gleaned worthy of credit or attention.—Many, as the proverb says, “*talk of Robin Hood who never shot with*
“ *his*

“ *his bow.*” The collection of old songs (which, for centuries, has decorated every ballad stall, under the title of *Robin Hood’s Garland*, and which is the only record of the chief feats in archery of this celebrated character and his companions) so completely involves the actions they notice, in such a cloud of marvellous narration and poetical fancy, that many, upon the perusal of them, have thought themselves warranted to declare their disbelief, that any such hero ever existed. A little reflection will teach us, that some of the most romantic popular traditions are grounded upon unquestionable facts, to which several of our ancient chroniclers and accurate historians bear testimony. That such persons as Robin Hood and his companions did live, and gave the most signal proofs of their great skill in the use of the long-bow; we have the testimony of several eminent historians, upon whose veracity we can depend (1).

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(1) Robin Hood is noticed by Fordun, in his *Scotichronicon*: by Stow and Hollinshed. But the most particular account of this hero and his companions, is to be found in Johannes Major (the Scottish historian,) which is copied by Grafton in his “*Chronicle of Breteyne*, (page 82)” in these words. “About this tyme (anno 1189) as sayth John Maior, in his chronicle of Scotland, there were many robbers and outlawes in England; among the which number, he especially noteth Robert Hood, whom we now call Robyn Hood, and little John, who were famous theues. They continued in woodes, mountaynes, and forestes, spoyling and robbing, namely, such as were riche. Murders commonly they did none, except it were by the prouocation of such as resisted them in their rifelynges and spoyles. And the sayde Maior sayth, that the aforefaid Robyn Hood had at his rule and commandement an hundreth tall yomen, which were mightie men and exceeding good archers, and they were mainteyned by suche spoyles as came to their handes: and he sayth moreover, that those hundreth were such picked men, and of such force, that four hundreth men, whosoever they were, durst never set, upon them. And one thing was much commended in him, that he would suffer no woman to be oppressed, violated or otherwise abused. The poorer sort of people he faoured

" fauoured, and would in no wise suffer their goodes to be
 " touched or spoyled, but relieued and ayded them with such
 " goodes as hee gate from the riche, which he spared not ; namely,
 " the riche priestes, fat abbotes, and the houses of riche earles.
 " And although his theft and rapyn was to be contemned, yet
 " the aforefayd auethour prayseth him, and sayth, that among the
 " number of theeues, he was worthie the name of the most *gentle*
 " theefe.

" But in an olde and auncient pamphlet, I finde this written of
 " the sayd Robert Hood. This man (saith he) descended of a
 " noble parentage, or rather beyng of a base stocke and linage,
 " was, for his manhoode and chiuarly, aduanced to the dignitie of
 " an Earl; excellyng principally in archery or shooting, his manly
 " courage agreeing thereunto: but afterwardes, he so prodigally
 " exceeded in charges and expences, that he fell into great debt:
 " by reason whereof, so many actions and futes were commenced
 " against him, whereunto he answered not, that by order of lawe
 " he was outlawed. And then for a lewde shift, as his last re-
 " fuge, gathered together a companye of roysters and cutters, and
 " practised robberyes and spoylyng of the Kinges subjects, and oc-
 " cupied and frequented the forestes or wilde countries. The
 " which being certefyed to the King, and he being greatly of-
 " fended therewith, caused his proclamation to be made; that
 " whosoever would bring him quicke or dead, the King
 " would geue him a great summe of money, as by the records in
 " the exchequer is to be seene: but of this promise, no man
 " enjoyed any benefite. For the sayd Robert Hood, being after-
 " wardes troubled with sicknesse, came to a certain nonry in
 " Yorkshire, called Berkliies; where, desiryng to be let blood,
 " he was betrayed and bled to death. After whose death, the
 " Prioresse of the same place caused him to be buried by the
 " high way side, where he had used to rob and spoyle those that
 " passed that way: and upon his graue the sayde prioresse did
 " laye a very fayre stone, wherein the names of Robert Hood,
 " William of Goldesborough, and others were graven. And the
 " cause why she buried him there, was, for that the common pas-
 " sengers and traualiers, knowyng and seeyng him there buried,
 " might more safely and without feare, take their jorneyes that
 " way; which they durst not do, in the life time of the said out-
 " lawes: and at eyther ende of the sayd tombe was erected a
 " croffe of stone, which is to be seene at this present."

The author of the *New Garland* has collected a great variety of interesting anecdotes, explanatory of the history of this famous outlaw, and his companions; which he has subjoined to his life. See *the Notes to the Life of Robin Hood*.

In the reign of Edward III. we find mention of a band of robbers, which in time grew so numerous and formidable, as to become a terror and grievance to the whole kingdom. But they seem to have possessed very little of that liberal and benevolent sentiment, for which Robin Hood and his men were so much noted. *Barnes, B. 1. c. 4. p. 62.*

SECTION II.

Testimonies respecting Robin Hood's Feats of distant Archery—Observations—Shots from Turkish Bows—Shot from a Bow drawn with both Hands—Distant Shots by modern Archers—Observations on Robin Hood's Archery.

THE feats recorded of this renowned bowman, may be considered as evidences of extraordinary strength, and extraordinary skill. Probably, the old pamphlet, mentioned by Grafton in his chronicle, contained somewhat upon the subject. As our hero lived and died, long before the art of printing was known; we may well suppose, that the songs made upon him during his existence, and for a considerable period of time after his decease, were committed to *oral* tradition: and consequently became subservient to the defective memory, and the fancy of those, who from time to time, transmitted them to posterity. Some of them indeed, bear evident marks of high antiquity; while others can lay claim only to what (considering the many centuries which have elapsed since the time, when the actions they celebrate, were achieved) may, perhaps, be stiled a *modern*, although not a very *recent* period of birth (2). These songs celebrate various feats and pranks of this hero, some of which may justly, to use Dr. Hanmer's words, "be ranked among the *lies* of the land."

(2) The editor of the *New Garland*, has endeavoured, by great industry, to ascertain the æra of almost every song; which he has prefixed to it.

The first song in the Garland informs us, that Robin Hood's *Father* shot,

“ *Two north country miles and an inch at a shoot.*”

But leaving such authority as this and most of the songs in this collection afford us; we will refer to such other testimonies respecting Robin Hood's exploits, as have been somewhat credited, and do not so much offend our reason, or deride our judgment. One of them is noticed by Charlton (in his *History of Whitby Abbey*, p. 146), who says; “ tradition informs us, that Robin Hood and Little John shot each an arrow, from the top of Whitby Abbey, which fell not far from Whitby Laths; and in memorial thereof, a pillar was set up by the Abbot, in the place where the arrows fell: and that their distance from the Abbey was a measured mile.”

Dr. Meredith Hanmer (in his *Chronicle of Ireland*) speaking of Little John, observes, “ there are memorable acts reported of him, which I hold not for a truth; that he would shoot an arrow a mile off, and a great deal more: but these I leave among the *lies* of the land.”

Mr. Walker (in his *Historical Essay on the dress of the ancient and modern Irish*) says, “ according to tradition, Little John shot an arrow from the old Bridge, Dublin, to the present scite of St. Michael's Church, a distance not exceeding, he believes, that mentioned by Mr. Barrington, as the greatest length, viz. *eleven score and seven yards* (3).

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(3) Mr. Barrington (in a postscript to his *Observations on Archery*) endeavours to correct the error he had committed, in supposing *eleven score and seven yards* to be the utmost extent an arrow can be shot; and observes, that the greatest length shot at the London marks (according to the map) was *thirteen score and five yards*.

The next authority upon the subject, is that of Drayton the poet, whose character for truth and historical accuracy stands very high; and indeed the fact he mentions is *somewhat* more adapted to our comprehension than those before noticed. Speaking of Robin Hood and his companions; he says,

“ At marks full forty score, they used to prick and rove.”
Poly-Olbion, Song 26.

The editor of the *New Garland* has hazarded an opinion in support of Drayton, whom he calls a well informed and excellent man, “ who wrote before “ archery had fallen into complete disuse.” And in his *notes to the Life of Robin Hood*, (note K. p. 33) tells us, “ their archery indeed was unparalleled, as both “ Robin Hood and Little John have *frequently* shot an “ arrow a *measured mile*, (or 1760 yards,) which, it is “ supposed, no one either before or since, was ever “ able to do.” But he brings no other authority in support of his assertion, than that from Charlton before noticed. Whatever may have been the information and general knowledge of Drayton, we cannot altogether subscribe implicitly to his opinion upon this subject. At the time he lived, archery had fallen so much into decay, that Hollinshed (who published his *Chronicles of England* soon after the *birth* of Drayton) observes, *that in his time, “ we had in a manner given over the artillery “ of long bows, and did use to shoot compass for our pastime.”* But without calling Drayton’s knowledge of archery

Mr. Barrington was not, it is true, an *archer*; but had he consulted the list of marks set down in the “ *Aime for the Finsbury “ Archers*,” he would have found several of them to be *eighteen score and eighteen yards*: indeed in the map he did consult, one appears to be *fifteen score and eight yards*, and another *sixteen score and two yards*: and he might have been satisfied by the *Finsbury archers of his day*, that several of them had, at the *Finsbury marks*, *frequently* shot *fifteen score yards*, and upwards.

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into question, we cannot surely with any sort of *gravity* admit (speaking of Robin Hood and his men) that

“ Their *loose* gave such a twang, it might be *heard a mile.*”

Poly-Olbion, Song 26.

Indeed this advocate for Drayton's accuracy has himself saved us the necessity of any further comment upon this marvelous feat; since in a subsequent note, (*note Y.*) he gives us the following remark, from Fuller's *Worthies*. “ Surely the poet gives a *twang* to the *loose* of “ *bis arrow*, making him shoot one a *cloth yard long*, at “ *full forty score mark*, for *compass never bigger than the* “ *breast*, and *within less than a foot of the mark* ;” and he adds, “ but herein our author hath verified the pro- “ verb; talking at large of Robin Hood, in whose “ bow he never shot.”

The length of the shot from Whitby Abbey is in a great measure accounted for, when it is recollected, that Whitby Abbey was a very lofty building, situated upon a very *high* cliff, and therefore cannot strictly be called a *fair* shot: but even allowing this advantage, we may still be permitted to *doubt*, if either of the arrows fell *near* the supposed distance, which is far greater than any arrow shot by the strongest man and best archer, even from a *Turkish* bow, was ever known to fly (4).

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(4) Of all bows that have been invented, and with which we are now acquainted, no one (in point of force, certainty, and effect) has come so near the English long-bow, as the Turkish bow. Although Knowles (in his *History of the Turks*, p. 517) tells us “ that the *Persians* used both *greater* and *stronger* bows, and shot “ more deadly arrows than the *Turks*.” The very great elasticity of the *horn* bow gives it greatly the advantage of the wooden bow, in the *distance of its cast*: and had not Ascham, Sir John Smith, and other writers, confidently and upon known experience, affirmed the superiority of the English bow in war; we might be inclined to esteem the Turkish bow as the *rival* of the English long-bow. However, in judging of the *effect* of weapons when

In later times we have, upon the archer's own authority, an anecdote of a curious experiment with the bow ;

used in war, we must not forget the distinguishing characters of those who make use of them. For doubtless, with the same weapon, the coolness, courage, and discipline of the English, must have given them great advantage ; opposed to the intemperate, and disorderly mode of warfare usually remarked among the Turks. The elasticity of the horn-bow is capable of communicating a surprising velocity to the arrow discharged from it ; but, probably, it is not calculated to cast so heavy an arrow as the bow of wood ; and its velocity diminishes its certainty of cast. Many very surprising long shots are well attested to have been made, with the Turkish bow. Stuart (in his *Antiquities of Athens*, vol. i. p. 10) mentions a random shot made, in the year 1753, by Hassan Agà the waiwoode of Athens, who delighted in Archery, to have been five hundred and eighty-four yards and one foot (English measure). Cantimir (in his *History of the Otman Empire*) speaking of the Emperor Murad IV. says, " in the art of shooting with the bow, he had " not his equal in the whole Turkish nation, except the famous " champion Tozcoparan. There are now two marble pillars " standing fifteen hundred cubits asunder, over which he is said to " shoot an arrow." Tozcoparan is said to have shot seventeen hundred cubits. In the year 1795, Mamhood Effendij, secretary to the Turkish Ambassador, a man possessing very great muscular power, shot an arrow with a Turkish bow four hundred and eighty two yards in the presence of three gentlemen, members of the Toxophilite society, now living ; who measured the distance, and to whom he observed, that the present emperor (Sultan Selim) could shoot further than any one of his subjects. In the year 1798, the sultan himself exhibited a proof of his great strength and skill in archery ; by shooting (in the presence of Sir Robert Ainslie, late ambassador to the Ottoman Port) an arrow, which drove into the ground at the distance of fourteen hundred pikes (Turkish measure), or, nine hundred and seventy two yards two inches and three quarters (English measure) : and which distance was measured in the presence of Sir Robert Ainslie. The arrows used by the Turks, for very long shots, do not exceed the length of twenty six inches, but they are drawn several inches within the bow, in a grooved horn used for the occasion : they are tapered from the nock to the pile, which is exceedingly small, and weigh about three shillings and two-pence English arrow weight. It must occur to every one, that a bow, capable of carrying even a light arrow so great a distance, must be capable of casting an heavy one a less distance with very great force. Accordingly, we read of arrows cast from Turkish bows, which penetrated the best made armour.

bow; by means of which, an arrow was cast a mile in three flights. To effect this, the archer, according to Mr. Barrington's report of the feat, *sat on a stool*, the middle part of his bow being fastened to his foot; which he elevated forty-five degrees; and he drew the string with his two hands applied to it. The bow, used upon this occasion, was a very strong one, made for the experiment. Mr. Moseley mentions an archer, who made a good shot in the presence of Henry VIII. in a similar way; and that he himself tried the experiment with success. *Moseley*. p. 90 to 93.

These ancient instances of very *distant shooting* with the English long-bow are all I have been able to collect, and, probably, they are all that have been handed down to us (5): and if those reported of Robin Hood were to rest upon the authorities I have quoted, we might be inclined to refuse our assent to his accomplishment of such extraordinary feats. It may, therefore, afford us much satisfaction, and, perhaps, be the means of removing doubt, if we assay the truth of the facts stated to us, by establishing, as a boundary to conjectural opinions, that measure, which our reason, knowledge, and experience naturally point out.

armour. Lord Bacon, indeed, goes so far as to say, that a Turkish arrow hath been known to pierce a *steel target* or a piece of *brass two inches thick*. (*Nat. Hist. Expt.* 704, vol. iii.) But this feat Mr. Moseley justly styles *marvellous*; and observes, "that to contradict such high authority might, perhaps, do greater violence to good manners, than *truth*." *Moseley*, p. 71, *note*. Yet Greaves, in his *Pyramidographia*, and Barclay, in his *Icon animorum*, notice similar facts. *Hooper's Rat. Recreat.* vol. i. p. 198. *edit.* 1783.

(5) Strutt, the diligent investigator of English antiquities, who, in the preface to his *Horde-Angelynnan* informs us, he had searched very many manuscripts; observes, "that it was not certain, how far the archers with the long bow could send an arrow." *Hord. Angel.* vol. ii. p. 44.

We are well satisfied that in *modern* times, no man hath shot an arrow *one fourth* part of a mile. Mr. James Rawson (of Cheetham Hill, near Manchester, who died about the year 1794, the best archer of his day), told Mr. Waring, that he once shot, upon ground, very little declining in his favour, *eighteen score yards*. And in the year 1798 Mr. Troward (a member of the Toxophilite Society) shot on Moulsey Hurst (an uncommon level piece of ground, and when the wind was very still) *seventeen score yards (6)*. It is not believed, that, for at least a century or two past, the two last mentioned instances of distant shooting have been surpassed.

That we do not at this time when archery is used merely as an amusement, exercise ourselves in such strong shooting as our forefathers did, is true: consequently, we must not form our judgment too peremptorily of what was done in archery, when in its prime; by what we have heard was performed in its decline, or have seen achieved in its present humble state: yet can we make due allowance for early habit and constant practice, which we know will effect surprising things. These advantages Robin Hood possessed in their full extent, "his manly courage," as his Historian says, "agreeing thereto." We may also admit the fact recorded of him, "that in his youth, he drew a prodigious strong bow:" and we

(6) This shot made by Mr. Troward, was not an *accidental* shot: he *repeatedly* shot (both up and down the wind) that distance, the same day, in the presence of many members of the Toxophilite society. As his shots were made during a contest for a prize, each shot was measured with the greatest possible accuracy. And the field had been previously staked out in *scores*, and *half scores*. Mr. Troward shot with a *self-bow*, of the power of *sixty-three* pounds. His arrows were flight arrows, of the length of *twenty-nine* inches, and weighing about *four-shillings* (arrow weight.) The bow with which Mr. Rawson shot was a *back'd-bow*.

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must certainly acknowledge, that he was a most *complete* archer. No doubt many of his companions (who Grafton says, were *picked* men) were excellent archers, and perhaps rivalled this great hero himself, in the art. Not only their food, but their lives frequently depended upon their prowess and skill in the use of the bow; and the life they led gave them ample opportunities of improving the latter. We must at the same time admit, that there have been in *modern* days, as strong men as Robin Hood, who have practised archery. Mr. Rawson followed it, from an early period of life; he was a very stout middle sized man, and being a man's shoe-maker by trade; had, (in the exercise of his business) increased the force, and hardened the muscles of his arms, to such a degree, that his power over the bow was exceedingly great; as was his skill in the use of it; having (from the age of eighteen to sixty) never refused a challenge in the art (*Hargrove*); and yet he never was known to have been beat at *inches*. What great power may be given to any part of the body, by early and constant use, is well known. The *arms* of a *waterman* or *blacksmith*, and the *legs* of a *chairman*, are conclusive evidence of the fact. Probably, Robin Hood himself did not possess much more bodily strength than Rawson. But archery was the *profession* of the former, while the latter could only pursue it occasionally, as an amusement. In this respect therefore, constant use must be considered.

SECTION III.

Observations on the probable extent of Robin Hood's Shots, drawn from the Power of the Bow, supposed to have been used by him—Conclusion.

HAVING thus endeavoured to establish upon experiment, a line to circumscribe conjecture and doubt; and to form the basis of a comparison between the *strength* and *skill* of man; the only circumstance remaining, which may lead our judgment to its object, in this enquiry, appears to be, an attempt to ascertain what *strength* (or weight) of *bow* (7), the *strongest*

(7) Mr. Waring was the first person in England, who hit upon the expedient of discovering the exact power of the bow, by *weight*. This method, according to Chevalier Chardin (see his *Voyages*, tom. ii. ch. 12.) has been long known and practised in Persia.

By this means, we can ascertain the quantity of weight, or power, which a man must *overcome*, before he can draw his bow fully up: for action and reaction being equal, it must require the same degree of power to *support* the bow, as is required to draw the string. So that when a man draws a bow of *fifty* pounds power or weight, he, *in fact*, suspends or moves *one hundred pounds weight* between his arms. This may be proved in experiment, by keeping the bow with a weight, instead of suspending it by means of a support. The moving so great a weight with the body, with so much facility, may appear surprising; but we must recollect, how very much strength is under the guidance of *art*; that in drawing the bow, we dispose of our strength, and exert our muscles to the greatest advantage; and that by a *general and united exertion* of muscular power, we are capable of doing great things. It is the judicious management of our bodily powers, which (as Desagulieres, in his *Philosophy* observes) will, in a great measure, account for the very surprising feats of strength, that have been exhibited by men.

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man can draw, and loose with a proportioned effect. One of the most muscular and powerful men, and at the same time, one of the best archers yet living, has been known to draw a twenty-seven inch arrow to the head, in a bow of *ninety pounds* weight; but he could not loose an arrow from this bow, to a distance at all proportioned to the strength of it. He found a bow of eighty pounds within his command; but from seventy to eighty pounds, is perhaps such a medium strength of bow, that *strong* men in general can manage with ease, so as to ensure a good *loose*; upon which most particularly, as well as upon the *spring* of the bow, not only good, but *far* shooting depends.

The bow with which Mr. Rawson shot, drew about *sixty-four* or *sixty five pounds*; and if we compare the *distances*, that both Mr. Rawson and Mr. Troward shot, with the *power* of their bows; we may, without coming to very nice calculation, allow *twenty pounds* weight, for every *one hundred and ten yards*. Now, supposing the bow used by Robin Hood, was even of *eighty pounds weight*; that, according to the preceding calculation, would cast an arrow upwards of four hundred yards. And if, agreeably to the laws of the increased force of bodies, we allow for an accumulation of power, independent of the calculation by simple weight, yet upon the whole, we shall not find any ground confidently to conclude, that Robin Hood ever shot, even the *lightest* flight arrow, *five hundred yards* upon level ground. And we may with very great reason, rely upon what Neade, a writer upon-archery in the beginning of the seventeenth century, observes; namely, that an ancient bow (8) would carry

(8) It is not believed, that any *very ancient* English long-bow is now in existence: whereby some judgment might be formed
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carry from eighteen to twenty score yards, as the truest point of distant archery. (9)

SECTION

of the power of the old bows. The author of the *notes to the Life of Robin Hood*, tells us, "that his bow and one of his arrows, his chair, his cap, and one of his slippers, were preserved, till within the last century:" and he quotes from Ray's *Itineraries* (1760, p. 161) a passage, wherein that writer says, that Robin Hood's bow was kept at Fountains Abbey. According to a note of Mr. Ashmole's (inserted in the *European Magazine*, October, 1794, p. 295), part of a bow, formerly belonging to Little John, hung up (anno 1652) in the chancel of Featherledge [Hathersage] church, in the Peak of Derbyshire, where he is said to have been buried. The author of those notes further adds, "he was informed that a bow said to have belonged to Little John, was (anno 1795) in the possession of a gentleman in the West Riding of Yorkshire. (Notes GG, KK, LL.)

Mr. Boswell (speaking of Dunvegan Castle, in the Isle of Sky, and Sir Roderick M'Leod, one of its ancient Lairds, called *Rorie More*), says, "we saw his bow, which hardly any man can now bend." *Journal of a Tour to the Hebrides*, London, 1758.

A few bows, supposed to have been made about the beginning of the sixteenth century, have been exhibited of late; but they did not, upon conjecture, appear to draw more than from seventy to eighty pounds, at the utmost. Upon the late revival of archery, a large parcel of bows, known to have been long secreted in a house in Scotland, was searched for: when it was discovered, that the servants of the house had been, for some time, in the habit of lighting fires with them. Fortunately, however, two or three of them were saved, one of which is said to be now in the possession of Lord Aylesford. In a *Survey of Forts and Garrisons* (made 30th July, 1623) we find notice taken of many hundred bows, bow-staves, strings, and sheaves of arrows, then in the Tower, and other forts in England. *Mus. Brit. Harl. MSS.* 1326. Upon inquiry at the Tower, I cannot learn, that any bows, bow-staves, strings or arrows, have been seen there for at least half a century. Old bows are now more valuable as *curiosities*, than for use: for time has so dried them, that several (although well rubbed with linseed oil) have, upon late trials, broke in bending.

(9) To this authority, we may add, that of Pèrè Daniel, who says, that an ancient bow would carry further than a fusil, and to the distance of 600 paces. Mr. Moseley observes, that if he means common military paces, each of which may consist of two feet or rather more, the distance of the range may be set down at 400 yards. *Moseley*, p. 266, *note*. Carew, in his *Survey of Cornwall*,

wall, speaking of the strength and excellence of the Cornish archers, observes, "for long shooting their shaft was a cloth-yard, " their pricks *twenty four score*; for strength, they would pierce " any ordinary armour." By way of corroboration, it may be noticed, that upon the report of the late Mr. Constable (a Finsbury archer) there exists a by-law, or custom of the city of London, (which he declared he had seen in the books of the corporation), that entitled any one to the freedom of the city, who could bring proof, that he had shot an arrow of a *pound* (20s.) weight, *eight score*, or a *flight arrow twenty-seven score*. But there appears to be some inaccuracy in this report: and instead of the flight distance being twenty-seven score, it should be only *seventeen score*; the latter distance with a flight arrow, being equal to the eight score distance with a pound arrow. As archery began to decline, distant shooting became neglected, which Hollinshed notices. *Descrip. of Brit. Ch. 16.* In the *Aime for the Finsbury archers*, we find few distances at nine score, most of them are from twelve to sixteen score, yet there are many from sixteen to eighteen score, and the greatest length is *nineteen score and fourteen yards*. The late Mr. Poole declared to Mr. Waring, that he had frequently shot an arrow (weighing nearly five shillings) *fifteen score and ten yards* at the Finsbury lengths. And his cotemporary (the late Mr. Constable) told Mr. Waring, that one in his time shot *seventeen score yards*. Sir William Hood informs us, that the *butts* shot at by the archers at the *show and shooting* in 1583, were at the distance of *seven score and eight yards*; and at the shooting in 1681, (before King Charles II.) the targets were placed upon butts at *eight score yards* distance. By a target book of the Finsbury archers kept for the year 1671 (in the possession of Mr. Howarth, a Toxophilite) it appears, that *eleven score yards* was the farthest target distance shot by them, before the archers began to draw in.

SECTION IV.

Robin Hood's Feats of Skill—Observations—Feats of Skill recorded of other Archers—Feats of Skill in Archery in modern times.

WITH respect to such of Robin Hood's exploits, as were, more immediately, acts of *skill*; we have still less authority, than what we have collected on the subject of his strong shooting. In the investigation of this latter point, the Garland is the only clew to guide us. In one song we are told, that when this hero was only fifteen winters old,

“ He hit the mark a *hundred rod*,
“ And he caused a Hart to die.”

Progress to Nottingham.

But his bard doubting, perhaps, whether he had said *enough* of this feat, adds,

“ Some say hee brake ribs one or two,
“ And some say hee brake three;
“ The arrow within the hart would not abide
“ But it glanced in two or three.”

Ibid.

However in the 10th song the poet gives him a rival.

“ Will Scadlocke he kil'd a bucke,
“ And Midge he kil'd a doe;
“ And Little John kil'd a hart of Greece,
“ *Five hundreth foot* him fro.

Robin Hood and the Curtall Fryer.

Robin Hood admits this to have been an incomparable shot: for in the next verse he declares (upon the occasion),

occasion), that he would ride an hundred miles to find one, who could match Little John.

The next feat of archery mentioned in the Garland, is recorded of a stranger; (and which indeed was not a very extraordinary one).

“ Now the stranger he made no mickle adoe,
 “ But he bends and a right good bow,
 “ And the best of all the herd he slew,
 “ Forty good yards him fro.”

Robin Hood and the Stranger.”

For which Robinhood gives him much credit.

The last feat noticed in the Garland, is in the ballad of Robin Hood and Queen Katharine, in which, the bard makes Clifton *cleave the willow wand at fifteen score.*

In the shooting match between Robin Hood and Guy of Gisborne: Robin Hood is made to *cleave the prick-wand at three score rood.*(10)

To look upon these two last most extraordinary feats of skill in the long-bow in any other light, than as the produce of fancy; or, if ever performed, at the *most*, as the effect of chance: would be extending our faith beyond reason. Robin Hood and his men were, doubtless, excellent marksmen: hunger, we can easily imagine, often gave certainty to their shafts; and within a *reasonable* distance, we may agree with Drayton, that

“ Of these Archers brave, there was not any one,
 “ But he could kill a deer, his swiftest speed upon.”

Poly-Olbion, Song 26.

Though it is probable, that they kill'd the deer chiefly by stealing upon them unawares, a method, which woods and forests greatly favour.

(10) This song is inserted in Dr. Percy's *Reliques of ancient Poetry*; and is given in the *New Garland*. In the old ballad of *Adam Bell, Clym of the Clough and William of Cloudesty*, we have an account of similar *marvellous* feats in archery. *Ibid.*

The only feat of skill on record, at all similar to what the Garland affords, is noticed by Drayton; for which, he does not, it is true, give us any authority; but since he is remarkable as a *poet* for rejecting fiction, and resorting to fact; we may suppose that he had ground for his assertion. He tells us, that the old men encouraged the young, to enlist under the banner of Henry V. on his intended expedition to France, (which was afterwards rendered famous by his great victory at Agincourt), by pointing out to them, the feats of their ancestors at the battles of Cressy and Poitiers: and makes a father address his son, thus,

“ And boy, quoth he, I’ve heard thy Grandfire say,
 “ That once he did an English archer see,
 “ Who shooting at a French *twelve score* away,
 “ Quite through the body *stuck him to a tree.*

Bat. of Agincourt.

Supposing this shot to have been a *chance* one, we do not see any reason whatever to impeach it upon the ground of impossibility. Indeed, we must go so far as to admit, that an expert archer might have performed the feat by *design*. The distance was certainly within the compass of the bow; as the statute of 33 Hen. VIII. forbids any person above the age of twenty-four, to shoot at any mark of *eleven score* yards or *under*, with any prick-shaft or flight arrow; which is sufficient evidence, that twelve score yards was not an *uncommon* distance for the range of an arrow; and the force of a sheaf arrow from a strong bow, would, at that distance, pierce many parts of the body through and through. If we credit Shakspeare, whose veracity and accuracy have seldom been called in question, we have a corroborating testimony of the probability of this remarkable fact; for in speaking of a *good* archer, he observes that, “ he would clap in the *clout* at *twelve score*, and “ carry a forehand shaft *a fourteen and fourteen and an* “ *half.*” *Second part of King H. IV. act 3, scene 2.*

Mr.

Mr. Moseley has quoted from Giraldus Cambrensis, three instances of extraordinary feats in archery, performed by Welch bow-men, about the time of Hen. II. The one, that during a siege, it happened, that two soldiers running in haste towards a tower, situated at a little distance from them, were attacked with a number of arrows from the Welch; which being shot with prodigious violence, some penetrated through the oak doors of a portal, although they were of the breadth of *four fingers in thickness*. And that the heads of these arrows were afterwards driven out, and preserved, in order to continue the remembrance of such extraordinary force in shooting with the bow.

The other two happened also in a battle, at the time of William de Breusa, as he himself relates. A Welchman, having directed an arrow at an horse-soldier of his, who was clad in armour, and had his leathern coat under it; the arrow, besides piercing the man through the hip, struck also through the saddle, and mortally wounded the horse on which he sat. Another Welch soldier, having shot an arrow at one of his horsemen, who was covered with strong armour, in the same manner as the before mentioned person, the shaft penetrated through his hip and fixed in the saddle: but what is most remarkable is, that as the horseman drew his bridle aside in order to turn round, he received another in his hip on the opposite side, which passing through it, he was firmly fastened to the saddle on both sides. (11) Mr. Moseley has also mentioned some

(11) The Welch historian adds, " that the bows, with which the Welch achieved such exploits, were not made of horn, of white wood, or yew; *solum ex ulmellis silvestribus*; they were neither handsome nor polished, but rude and misshapen; yet were they stiff and strong; not so well calculated to cast far, as
" to

some surprising instances of skill, in the use of the bow, exhibited by Persian archers, (noticed by Chardin and Tavernier in their Travels). *Moseley*, p. 325. To which we may add an observation of Sir Thomas Herbert's: "at this day (says he) a Persian is of little repute in archery, unless he can in full career, cleave an orange, which hangs in a string athwart the hippodrome; (and when past the mark) with another ready arrow can strike the rest, turning in his short stirrups and morocco saddle) backwards." *Travels into Persia, Indostan, and the East. Description of the Persian Monarchy and other parts of Asia.*

Modern archery has, indeed, nothing to boast of, similar to the before noticed feats reported of Robin Hood and his men. However, there are now living, many very skillful bowmen, who would not have disgraced the corps of Sherwood Rovers. Of the various societies of modern archers, no one has, upon all occasions, signalized itself more, than that of the Toxophilites, who, at the grand meeting of the societies of archers of England, (on the 27th of May, 1791, at Blackheath) bore off the best prize. Among its members, it can boast of one,* who, shooting two arrows at each end, has put *twenty successive* arrows into a four-foot target, at one hundred yards; and *twelve* arrows into the compass of *two feet* at *forty-six* yards, (within the space of

"to give a weighty blow." *Itiner. Cambr.* c. 3. p. 835. Mr. Warrington in his *History of Wales*, translates the words *ulmellis silvestribus*, "*sight twigs joined or twisted together.*" It is difficult to conceive, that twigs *twisted* with the nicest art, could make a bow of any strength. They would probably answer the purpose better, if laid *straight* and bound together: but the word *ulmellis* seems capable of a more satisfactory interpretation, and, with submission to the learned in grammar and antiquity, may, I conceive, be construed, with the English words, *common elm*, or *elm plants*; which will leave nothing for conjecture.

* Mr. Waring.

one minute). Another *, who (shooting two arrows at each end) has put *ten successive* arrows into an *eight-inch* paper at *thirty* yards; and *fifty-two* arrows (out of an hundred) into a four-foot target, at *one hundred* yards. And two † who have, at the *same end*, put *both* arrows into an *eight-inch* paper, at *six score* (an hundred and twenty yards): feats, which, in all probability, Robin Hood himself never surpassed; and some perhaps will add, *probably* too never achieved (12).

The following *Target-Card* shews the shooting (in the *Toxophilite* ground) for the *Prince's* annual bugle, by those who have won it in the years 1795, 1796, 1797.

ARCHERS NAMES.	Gold.	Red.	Inner white.	Black.	Outer white.	Number of hits.	Total value.
	9	7	5	3	1		
1795. Mr. Brady - - - - -	4	17	19	24	26	90	348
1796. Mr. Crunden - - - - -	6	10	17	24	20	77	301
1797. Mr. Shepheard - - - - -	6	16	23	17	26	88	358

Double ends 42. Arrows shot 168.

N.B. The lengths were 60 yards, 80 yards, and 100 yards, shot *alternately*. The *value* of the hits in each circle is marked by the figures 9. 7. 5. 3. 1.

*Mr. Crunden. † Mr. Troward, Mr. H. Greene.

(12) Among the archers of *this* day, Mr. Anderson must not be forgot; whose excellence in Archery has (both in this country and in Flanders) been a subject of admiration; and given him an indisputable title to many prizes. He is one of those, in Ascham's words, *by nature apt for archery*; and who might well be ranked

“ With Scathlock, John, or honest Brand

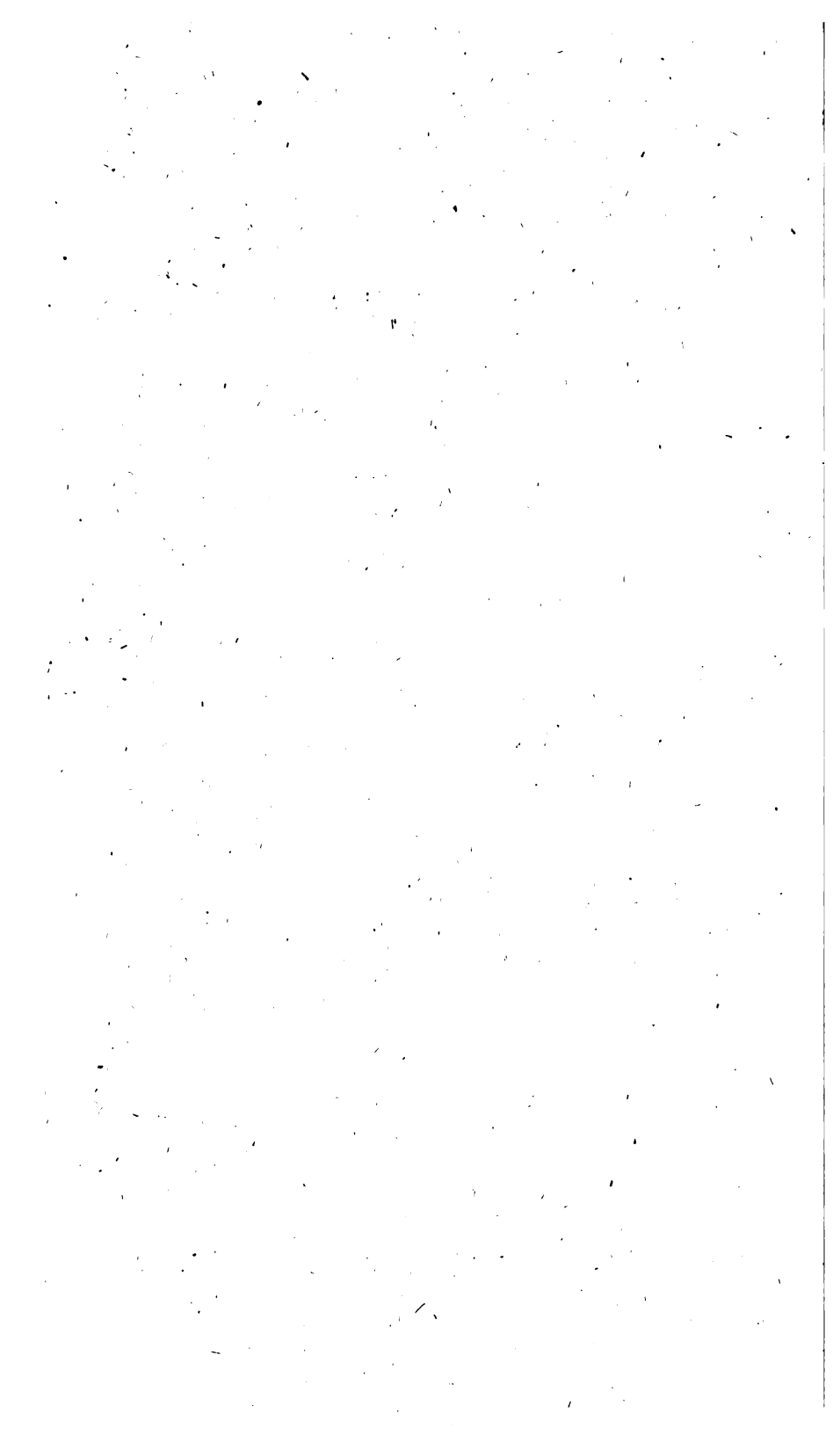
“ That hath the *happy hitting hand*.”

Notes to the New Garland.



PART IV.

THE ART AND PRACTICE OF ARCHERY, INCLUDING A COMMENT UPON THE TOXOPHILUS OF ASCHAM.



CHAPTER I.

OF THE INSTRUMENTS OF ARCHERY,

ASCHAM introduces the practical part of his treatise by informing us, “that all things which belong to shooting are outward; of which, some are peculiarly appropriate to each individual archer: and others are general and common to all archers; as time and place serve.”

Under the first of these divisions he enumerates,
The *Bracer—Shooting-Glove—String—Bow*, and
Shaft.

Under the second;
The *Weather* and the *Mark*.

It may, perhaps, be as well to leave these heads in the order in which Afcham has placed them; and here only observe, that modern archers make use of three other instruments, which must be referred to his first division, viz.

A *Belt—Tassel* and *Grease-Pot*.

CHAPTER II.

OF THE BRACER.

*Use of the Bracer—Form and Materials of the ancient
Bracer—Modern Bracers.*

“ **A** BRACER, says Ascham, serves two purposes :
 “ one, to save the arm from the stroke of the
 “ string when loosed upon it, and the coat from wear-
 “ ing; and the other, that the string gliding sharply
 “ and quickly off the bracer, may make a sharper
 “ shoot. For if the string should light upon the bare
 “ sleeve, the strength of the shoot would stop and die
 “ there. But that it is best, in his judgment, to give
 “ the bow so much bending, that the string need never
 “ touch the arm; and consequently, that a bracer should
 “ become needless: as was practised by many good
 “ archers with whom he was acquainted, and who did
 “ not use any bracer. That in a bracer three things
 “ should be attended to; that it has no nails in it, that
 “ it has no buckles, and that it be fastened on with laces
 “ without tags. For the nails will cut in sunder the
 “ string, before the archer is aware of it, and so put
 “ the bow in danger. Buckles and tags at unawares
 “ will scratch the bow, a thing not only unsightly but
 “ perilous, by giving birth to frets. And thus, a
 “ bracer is only used that the string may have a ready
 “ passage.”

From these observations it seems, that Ascham does
 not

not mean to say that the bracer possesses any particular quality, whereby it can, independently, *add* any degree of *sharpness* to the shoot; but only that it has that effect; *comparatively* and when contrasted with the non-elasticity of the coat sleeve.

But in order to determine how far the bracer answers to the *second* purpose noticed by Ascham; we must first ascertain, precisely, the instant in which the arrow *quits* the *string*, after it is loosed: for if the arrow leaves the string *before* the latter touches the arm, then the bracer cannot possibly serve this *second* purpose. On the other hand, if the arrow does not quit the string till the *latter* has *touchèd* the bracer; then it will be a question, how far the jar, which the string receives the instant it falls upon the bracer, checks or impedes the force, or diverts the direction of the arrow. However, it is apparent, that the arrow is projected from the string, as soon as the latter reaches the point or line from which it is *drawn*: consequently, when the bow is braced *high*, or the archer, in holding it, turns his wrist somewhat *inwards*, the string can never touch the arm.

The form or material of the bracer is not noticed by Ascham. His annotator (Mr. Bennett) observes, that this account of the bracer is somewhat obscure, and that it seems to have been a kind of close sleeve laced upon the arm. And he remarks, that those who write of things well known, seldom extend their care to time in which they may be known less. This observation, although evidently not made by one acquainted with archery, may account for many of the deficiencies which are observable in the *Toxophilus*: yet, as archery was, at the time Ascham wrote, falling fast into decay, and he appears to have taken great pains to revive the art from its languid state; it should seem, that the circumstance

might have led him to have been the more particular in the *minutiae* of it.

We may well suppose, that the ancient bracer was very similar, in material and form, to that which is used at this day. The modern bracer is composed of a piece of stout leather, polished on the exterior side. In form, it is either oval or like the half of a coat sleeve. The colour is either black or brown. The size of the bracer depends upon that of the arm, and the manner of holding the bow; for good archers (who hold their bows always steadily and alike when they loose the arrow) find that the string generally strikes nearly in the same place, and can therefore shoot with a small bracer: but in shooting with much elevation (as at Rovers), the arm cannot be so well guarded by a very small one. Some modern archers have made use of a plate of *horn* fastened on the bracer; while others have glued small pieces of *hard wood* upon woollen cloth, having the sides opposed to the string made round, in order that the string might have the swifter passage in its return: but the leathern bracer is the most commonly used.

More might be said of the bracer, but as archery yet flourishes, and this part of an archer's accoutrements is very simple and generally known, the young archer is referred to the bow-makers who sell them.

CHAPTER III.

OF THE SHOOTING-GLOVE.

Use of the Shooting-Glove—Ancient Shooting-Glove—Modern Shooting-Gloves—Materials—Fingers used in drawing the String—Handle of the Bow formerly waxed—Now covered with Velvet, Shag or worsted Lace.

“ A SHOOTING-GLOVE, says Afcham, is
 “ chiefly to save a man’s fingers from being
 “ hurt; that he may be able to bear the sharp string to
 “ the utmost of his strength. When a man shoots,
 “ the *might* of his shoot lies on the *foremost* finger and
 “ on the *ringman*; for the middle finger, which is the
 “ longest, like a lubber starts back, and bears no
 “ weight of the string in a manner at all. Therefore,
 “ the two other fingers must have thicker leather, and
 “ that must have thickest of all, whereon a man loofeth
 “ most: and for sure loofing, the foremost finger is most
 “ apt, because it holdeth best; and for that purpose
 “ nature hath, as it were, yoked it with the thumb.
 “ Leather, if it is next the skin, will sweat, wax hard,
 “ and chafe; therefore, *scarlet*, on account of its softness
 “ and thickness, is good to sew within the glove (1).

(1) Afcham does not, I presume, mean that a scarlet *dye* communicates any peculiar degree of *softness* to cloth; but that scarlet cloth, of a fine texture, was well suited to this purpose. And that *fine* cloth, of *any* colour, would answer equally as well.

“ If

“ If that is not sufficient, but the finger is still hurt ;
 “ you must take a cerecloth, covered with a mixture of
 “ fine virgin wax and deer’s suet, and put next your
 “ finger, and then put on your glove. If still you feel
 “ your finger pinched, leave off shooting ; both because
 “ then you will shoot ill, and, by little and little hurting
 “ your finger, it will be long ere you will be able again
 “ to take up your bow. A new glove plucks many
 “ a shoot, because the string goes not freely off :
 “ and therefore the fingers must be cut short, and
 “ trimmed with some ointment, that the string may glide
 “ well away. Some, by holding the nock of their
 “ shaft hard, rub the skin off their fingers : for this
 “ there are two remedies ; one, to have a goose-quill
 “ split and sewed against the nocking (betwixt the
 “ lining and the leather), which too will much help
 “ the shoot : the other, to have a roll of leather
 “ sewed betwixt the fingers, at the setting on of the
 “ fingers, which will keep them so much apart, that
 “ they will not hold the nock so tight as they did.
 “ The shooting-glove has a *purse*, which serves to put
 “ fine linen cloth and wax in ; two things necessary to
 “ a shooter. Some men use gloves, or other such like
 “ thing, on their *bow-band*, to prevent its being chafed,
 “ because they hold so hard. But that commonly
 “ happens when a bow is not round, but somewhat
 “ square : fine wax will do very well in such a case, to
 “ lay where a man holds his bow.”

Thus speaks Ascham of the shooting-glove : but,
 in modern times, various inventions for guarding the
drawing fingers from the effect of the string, have been
 made use of ; of which every archer uses that one
 which, upon experience, he finds suits him best. The
 following are the most generally used : viz.

1. The

1. The *shooting-glove*; which consists of finger-stalls fastened to thongs buttoned round the wrist; and may be used with or without a glove.
2. *Finger-stalls*; sewed to a common glove.
3. The *tab*; which is a piece of *flat* leather, into which the fingers are let, and which lies on the *inside* of the hand.

The best leather for each of the above, is what is called *horse-butt* leather, dressed on that side which is used outwardly.

We may here notice, that Ascham speaks of *three* fingers being used in drawing the bow. Shooting with *two* fingers only is much used in *modern* archery; and probably was practised in Ascham's time, although he has omitted to mention it. It is said, by some very excellent archers of this day who shoot with only the two first fingers, to be the most scientific mode of shooting, and to insure an easier and cleaner loose, and consequently more certainty, than shooting with three fingers: but in roving and shooting with very strong bows, three fingers have, with most men, been deemed to possess the greater power, and accordingly are then generally used (2).

As to the holding the bow: wax must certainly unite the hand to the bow very firmly. However, for at least a century past, the handle of the bow has been

(2) Soft and fleshy fingers being not so well calculated to loose the string cleanly, without being sometimes hurt by it; it may be found necessary, for those who have such fingers, to ease the two first by using the third finger with them. But when the third (or *ringman* as Ascham terms it) is very long or stiff, it will be found often to hang too much on the string; and therefore should be used as little as may be. The Turks, Persians and Moguls, who use the horn bow, draw with their *thumb* only.

covered

covered with velvet, shag, or worsted lace, which serves sufficiently well to fix the bow firmly in the hand; especially as most archers wear a glove on their bow hand.

The *Purse* noticed by Ascham as forming *part* of the *shooting-glove*, must surely have been very inconveniently placed. A waxed cloth to rub the bow and string; with a small file to trim the head and nock of the arrow; spare strings, &c. generally attend an archer: but in these days, he would never think of putting them into his *shooting-glove*.

CHAPTER IV.

OF THE STRING.

Importance of good Strings—Whether the String should be made of Hemp or Silk—Strings how made—Different Effects of thick and thin Strings—Of whipping Strings and preventing them from soon wearing out.

ASCHAM says but little of the string, contenting himself with observing, “that, although apparently a trifle, it is of much importance; as a bad string breaks many a good bow, and nothing half so many: and that because an inexperienced man may be more easily deceived in the choice of his string, than of his bow; that stringers should be the more diligently looked after, by the proper officers.”

Whether the string should be made of good hemp, as they were in his time, or of flax or silk, Ascham leaves to the determination of the stringers.

It cannot be collected either from record or tradition, that any other than hempen strings have been used for English bows. Indeed silk was not brought into England in any quantity till the sixteenth century: yet a *very old* ballad (which mentions English archers) has the following line;

“Theyr stringes of *silke* ful sure.”

Adam Bell, &c. Part ii. l. 126. *Percy's Reliq. of anc. Eng. Poetry.*

If

If silk was used, the string must either consist of a number of threads bound at intervals (as those used with the Turkish, Persian, and Tartar bows, in which case it would be too thick for the nock of our arrows); or of raw silk twisted, which probably would answer for this purpose, if the fibres were long enough, and the elastic quality of silk could be diminished. The Italian hemp is observed to make the best strings, being stronger in texture and having longer and finer threads than most other kinds. We may recollect, that Sir John Smith (*ante*, Part i. Ch. ii. sec. i.) observes, that the strings, even of strong war-bows, when made of good hemp, did seldom break.

The string is made of the longest threads of the hemp, twisted very tight; and afterwards, as Sir John Smith notices, rubbed with a kind of water-glue, to preserve it from wet. The *eye* (which is that part of the string that occupies the *upper* horn of the bow) is first made; and is somewhat the thickest part; the other end is generally without any eye (though strings have lately been made with *two* eyes, which answer well enough): and, when put on the lower horn, is made into a twisted knot or noose, termed, and much used by those employed in moving timber, a *timber bitch*: as the tighter it is drawn, the more securely it holds.

Ascham makes a distinction, which appears to be worthy of attention, between great and little (he means *thick* and *thin*) strings; the *great* string, says he, "is more *safe* for the Bow, more sure to *prick with*, "but of *slower cast*: and the *little* string directly the *reverse*; not so safe, therefore to be taken more care "of, lest, by being long used, it break the bow: "more fit to shoot *far*, than apt to prick *near*." Therefore, when you are acquainted with the nature both of the great and small strings, you must fit your
bow

bow according to the *occasion* of your shooting; and (as no doubt Ascham meant) to the *strength* of your bow. For in shooting great distances, as at *rovers* and *flights*, when a longer arrow is used than at short lengths, and the bow is much elevated, the string must be strong, to resist the great tension and jar which it is to sustain. With respect to the large string shooting the *surest*, it may be observed; that when the string is small, but strong enough to hold the bow, the *whipping at the nocking point* may be made as thick as the nock of the arrow will admit of, by which means, the thin string may, possibly, become more certain in the cast.

Bow strings are always *whipped* (that is wrapped) at the *nocking point*, and a little above and below it, generally the breadth of the fingers used in drawing, with fine twine or silk, first waxed. This whipping answers two purposes; that of filling the nock of the arrow (which should always set rather *tight* on the string) and saving the string from wearing at that place. Some archers also whip the *eye* and *noose* of the string and a little below each, adding a slight covering of gum or glue to the whipping, for the latter purpose. And in whipping, are careful, when the string is sufficiently stretched (for most new strings will give a little) to whip the precise point on which the arrow should lie, (which is called the *nocking point*) with *white* and on each side with *coloured* silk or thread, that they may always nock exactly. *Catgut* and *silver-wire* have, by some modern archers, been tried for this purpose: but, being harder than twine or silk, they have been found often to *burst* the nock of the arrow, when that goes on tight; and catgut, unless first moistened, is difficult to whip on the string.

The nocking part of the string should be waxed before it is whipped, that the whipping may hold the better:

better: and afterwards, the whole string should be waxed, and also now and then rubbed with bees-wax or white wax, (though the former is most generally used) to prevent its collecting moisture and untwisting: the latter inconvenience is remedied by retwisting the string at the bottom end.

After the string is put on, and so stretched that it does not want altering; the eye and noose, if not whipped, may be slightly rubbed with moistened Indian glue, which will prevent their fraying. And the eye of the string may be fastened to the upper horn, by means of a piece of twine or silk, carried through a hole in the latter: which will prevent the string from coming off continually at the lower horn, and thereby untwisting. Fine glove-leather or any kind of tape or binding, wrapped round the eye of the string, will preserve it from being cut by the nock of the horn.

CHAPTER V.

OF THE BOW.

SECTION I.

Woods proper for Bows—Value of Yew as a Bow-wood—Superior Value of foreign Yew—New Construction of the Bow—Origin of the Invention—Newly imported Bow-woods—Metal Bows.

WE now come to what Ascham, with reason, terms the *chief* instrument of archery, the bow: though perhaps, strictly and mechanically speaking, the bow and arrow constitute but *one* complete instrument, of which each is but a *component* part, and useless when disjoined. The same observation, indeed, applies to the string. The bow, on account of its *nature* and *importance* will, in its independent and severed form, deserve a minute description and attention.

After noticing various kinds of bows, used by different nations; Ascham proceeds to enumerate the several kinds of *woods* proper for English bows. Among which, he observes, that “*Brazel* (3), elm, wych” (he

(3) This word is, perhaps, a misprint for *hazel*: for, admitting that *Brazil*-wood was imported into England in Ascham’s time: yet, it was too brittle to make a self-bow. But the former supposition seems the most satisfactory; as the statutes on archery do not mention *Brasil*, but often notice *hazel* as a bow-wood. Thus, the statute of the 33 H. 8. c. 9. enacts, “that every bowyer (living without the City of London) for one bow of yew, shall make four of elm, wych, *basil*, ash or other wood, apt for the same.”

means wych-elm) “ and ash, are by experience,
 “ found to make very *indifferent* bows; and that
 “ *yew*, (which was in his time and had long been
 “ generally used by the English, and bore the best
 “ price even among the Romans (4) for the pur-
 pose

(4) It does not appear, that during the period the Romans retained the dominion of the world, they had any other archers than what were Auxiliaries: all or most of which were Cretans, who, as was observed, used the Scythian bow; and we find, it was the sort of bow, upon which they relied for victory, in the sixth century. (*Supra*, part 1. ch. 1. sec. 2.) This and the great Tartar bow seem to have had continuance among them long after the division of the Empire. It was, no doubt, the latter, in the use of which the Emperor Gratian exhibited so much skill. *Gibbon*, vol. 3. p. 4. But we are told, that after the great slaughter of the Goths at the battle of Naissus (anno domini 251), a select body of the Gothic youth was received among the imperial troops. *Ib.* vol. 1. p. 351. In the Reign of Constantine, according to Mr. Gibbon, the introduction of the barbarians into the Roman armies became more universal. (vol. 2. p. 48.) And we learn that the Emperor Alexius had Scandinavian guards. In a former part of these tracts (*part 1. note 8.*) an attempt is made to trace the use of the *wooden* bow, among the inhabitants of the north; who, there is reason to suppose, were acquainted with this *primeval* bow, in very early times. Upon referring to the authority, which Ascham made use of when he observed that *yew* bore a high price, among the Romans as a bow-wood; it is evident, that he suffered himself to be misled, and has quoted his author (Virgil) very imperfectly in the following *half* line:—“ *Taxi torquentur in arcus:*” (which is the 458 line in the second book of the *Georgics*.) For he has omitted to notice the most important word in the whole line, which stands thus: “ *Ityræas taxi torquentur in arcus.*” So that we find Virgil does not say, that the Romans used the bow of *yew*, but that the *Itureans* did. This people (who inhabited a part of Palestine near Cælosyria) were celebrated archers, and formed part of Pompey’s auxiliary troops at the battle of Pharsalia. *Lucan Lib. 7. l. 230.* The Philistines, indeed, are frequently noticed in sacred history, as men very skilful in the use of the bow. And to this ancient people, who appear to have been a very warlike nation, the *invention* of the bow and arrow has been ascribed. *Universal Hist. (anc. part) vol. 2. p. 220.* The use of this *wooden* bow was, no doubt, extended to several of those tribes which Mr. Pinkerton, in his *Dissertation on the origin of the Scythians*, thinks proceeded westward, and peopled Germany, Italy,

“ pose of bow-making), was the *best* of all others for
“ a bow” (5).

The superior value of *foreign yew* as a *bow-wood* is recognized by statutes passed in the Reigns of Edward IV: and Richard III. which direct that bow-staves shall

Italy, Gaul, and the countries bordering on the Baltic. Although we do not find much to guide us in our opinion, as to the time when the Romans became acquainted with or used the wooden-bow; yet have we satisfactory evidence of their having been acquainted with its value in the fourth century. For Vegetius (a Roman General who lived in that period, and wrote his book on military affairs in the Reign of Valentinian), in treating of the different weapons proper to be used in the Roman army, speaks of the *wooden* bow; and with a seeming preference in comparison of other bows, in the following terms: “ *propè tertia, vel quarta pars juniorum, quæ aptior potuerit reperiri, arcubus lignis, sagittisque lusoriis, ad illos ipsos semper exercenda palos.*” *Lib. 1. Chap. 15.*

(5) The wood of the *palm-tree* seems formerly to have been a favourite material for bows, among many nations. *Moseley*, p. 51. But Afcham observes, that “ we had no experience of it.” And, speaking of the *cornus*, (of which the Lycians made their bows) says, “ As concerning the name of it in English, I can sooner “ prove that other men call it false, than I can tell the right “ name of it myself.” Mr. Moseley calls it the *cornel tree*. Afcham adds, “ it is as hard as horn, and very fit for shafts.” Afcham, quoting Heroditus, informs us, that the Indians made very strong bows of a large *reed*. But no doubt, Heroditus alludes to the *bamboo*, of which bows are still made in many parts of the East. The inhabitants of Maxadavar shoot arrows, from bows of this wood, a very great distance. *Turner's Narrative of the Embassy in Tibet* in the year 1783. Printed 1800. We are told, that the bows of the Laplanders, which are so strong that the stoutest Norwegian cannot bend them, are made of *fir* glued upon birch. Experiments have been tried of late years, to make a good bow with *fir*, but it totally failed to answer the purpose. Probably, if *fir* is used by the Laplanders, it is bent when it is green, and when the sap is rising. Mr. Curtis, in his description of the uses of the *laburnum* (*Botanical Magazine*, vol. 5. Pl. 175), adds a note, wherein he observes, that Matthiolus speaks of the wood of *that tree*, as being particularly used for making the best kind of bows. Mr. Waring, who made the experiments, above noticed, with *fir*, also tried the effect of *laburnum* for this purpose, but with no better success. He made some bows of the *ilex*, which answered better.

be imported from Venice, and particularly by the statute of the 8 Eliz. c. 10. which regulates the price of bows, and directs that when a bow of English yew is sold for 2s. a bow of *foreign* yew may be sold for 6s. 8d.

From the time when archery was first introduced into Britain, to the days of Ascham, we do not find, that any other bow, than that formed of *one piece* of wood, was ever used. Had any other been known, no doubt Ascham would have taken notice of it, in his *Toxophilus*; but his silence upon the subject may afford us a reasonable assurance, that, in this kingdom, no other was then used or known. Since the time of Ascham, a most important discovery in archery, by means of a new method of constructing the bow, has been made in this country. It is an observation no less true than trite, that *necessity* is the mother of *invention*; and we know, by experience, that some of the most valuable discoveries and inventions in the arts have been owing merely to *accident*: so it has happened with archery. We find that, in the Reign of Queen Elizabeth, a complaint was made to government that the foreign merchants, who by an act of parliament passed in the twelfth year of the Reign of Edward IV. ch. 2. and a subsequent one in the first year of the reign of Richard III. ch. 11. were obliged, with every butt of Malmsey or Tyre wine, to import bow-staves, (*four* by the first and *ten* by the last mentioned act) had long neglected to pay attention to these acts: and that, when called upon to perform the injunction laid upon them, they alledged, that the importation of bow-staves had *long been disused*; and that the country, from whence they were brought, was then in the hands of the Turks. See *Stow's Survey of London*, vol. 2. b. 5. ch. 13.

cb. 13 (6). As the use of the musket was then gaining ground, and, indeed, soon afterwards entirely superseded that of the bow in war; we may suppose, that very few, if any, bow-staves were imported after the Reign of Elizabeth:

(6) Malmsey wine was chiefly the produce of Crete, but the Venetians were in possession of that island, from the middle of the twelfth or beginning of the thirteenth to the middle of the seventeenth century. So that, had the yew, which they had been accustomed to bring into England, grown in Crete, the merchants would hardly have ventured to have made a false allegation. Before the Portuguese discovered a passage to India by the Cape of Good Hope, the Venetians purchased the commodities of the East at Alexandria and other parts of the Levant, and distributed them all over Europe. Hence, we may conclude, they brought the bow staves from those parts, and particularly from Tyre. In the Statute of 33 H. 8. (c. 9.) we find mention of *elk yew*, which Mr. Barrington supposes to mean *elb yew*; the statute of the 13 Eliz. c. 14. respecting the importation of bow-staves, including the merchants from the east parts and the Hans Towns. And Sir John Smith observes, that the *Easterlings* had great quantities of yew. *Harl. MSS.* The *Easterlings* or *Easterland* merchants were a company of merchants called commonly, in Queen Elizabeth's time, merchants of Elbing; because there they first seated themselves. *Stow. Survey of London*, vol. 2. b. 5. c. 17. We also find mention of *Spanish yew*, of which our bows are sometimes said to have been made. *Stow* informs us, that the people of Castile purposely destroyed their woods, and provided by law that no such wood should be preserved. However, against the reply of the merchants, it was urged, that the Italians should be compelled to bring in bow-staves from the parts adjoining to Venice and thereabouts; because the *finest* and *best* yew came from thence. *Survey of London*, vol. 2. b. 5. ch. 13. The yew tree is a native of most parts of Europe; but yew of the growth of the Eastern countries seems to have been the most esteemed for the purpose of bow-making: possessing, probably from the warmth of climate, a cleaner texture and greater elasticity, than that which is found in colder regions. Yet, English yew, even to this day, occasionally affords some very good self-bow staves.

The yew tree was, no doubt, during the reign of military archery in this country, much cultivated in England. Lord Lyttelton says, that Fitz Stephen, speaking of the forest of Middlesex, takes notice, that it was full of yew trees; the growth of which was particularly encouraged in those days, and for many succeeding ages; because the wood of them was esteemed the best for making bows. Vol. 3. p. 274. But it is observable,

Elizabeth; although the long-bow still continued to be used, as an instrument of *amusement*. In all probability, archery would insensibly have died away, or been very languidly practised in this kingdom after that period; had not the bow-makers, for want of foreign yew, hit upon the following expedient (7). Finding that English yew was, in general, too full of knots to make good bows of itself; they tried the effect of uniting a piece of tough and spirited wood to the yew: the experiment exceeded their expectation, (for it brought the *inside* of the tree into use), and Kelsal of Manchester, the oldest and best bow-maker of his time, asserted, that after *back'd*-bows (for so bows of *two* pieces were called upon this discovery, to distinguish them from the first sort of bows, which from that time received the title of *self*-bows) began to be used, they were

that Fitz Stephen does not particularize *yew* trees, but only speaking generally of this forest, uses the words, "*salus nemorosi.*" See *Fitz Stephen's Descript. of London with a commentary. Quarto edit. 1772. p. 26. note 25.* Indeed, it has frequently been supposed, that the old yew trees, sometimes seen at this day in church yards in England, were originally planted there for the purpose of *archery*. But some have assigned another reason for their being found in such places: namely, that in ancient times, the yew was, on Palm Sunday, substituted for the *Palm*. See a *Paper on this subject in the Gent. Mag. for the year 1779. vol. 49. p. 578.* The author of that paper mentions an *opinion*, to which he did not incline, that trees had often been planted in church yards to *defend the church from the force of the wind*. However this opinion is supported by the words of the statute of the 35th Edw. I. (*Stat. 2.*)

(7) Whether our English artificers can fairly lay claim to *originality of invention* in this discovery, may admit of some doubt: since it appears, that the Laplanders, as Scheffer informs us, have, for a long period of time, constructed their bows of *two* pieces of wood; fastened together with a strong glue made of the skins of fish. *Schefferi Laponica. cap. 22. p. 244.* This glue is, no doubt, the *isinglass*, the use and excellent quality of which, as a glue, is well known in this country; and particularly by the bow-makers. The first *back'd*-bows, that appeared in England, were made by the Kelsals of Manchester, about the end of the sixteenth century.

deemed

deemed so much preferable to self-bows, that for one of the latter, he constantly made fifty of the former (8). For some time after this new method of constructing bows came into practice, yew was used for the belly of the bow: *fustic*, a wood brought from Hispaniola, was afterwards tried, and was found to make a much quicker bow than yew. And, of late years, the bowyers have selected from the different kinds of woods, imported into this country chiefly for the use of cabinet-makers and inlayers, some which make excellent bows: namely, a species of West India cocoa-tree; and a wood, called by Mr. Waring, who prizes it beyond all other for backed-bows, *dark-ruby*; which almost rivals the fustic in the quickness of its cast, without partaking of the brittleness of that wood.(9).

(8) The back'd-bow is not confined to a *single* back; a *double* back, or rather an intermediate slip of quick casting wood, has been found to answer with yew exceedingly well. The art of uniting two pieces of wood, in the construction of the bow, has given birth to a further experiment in archery. Bows have been made consisting of *four* pieces: (two of them being half-lengths and united to form the belly; the third being very short, and occupying the center of that belly; and the fourth being the full length, and forming the back): and thus put together, they have been found to make a very quick shooting bow.

(9) Notwithstanding the great repute, in which, according to Mr. Kelsal, back'd-bows were held, and the excellence at which the bow-makers have arrived in the construction of them; yet, many excellent archers give the preference to the *self-yew*-bow; particularly when made of *foreign* yew. Some remarkable fine staves of foreign yew (said to be of the growth of Switzerland) were imported into England, a few years ago; and which, at this day are in the highest estimation. In ascertaining the different *merits* of the back'd-bow, and the self-bow; it may be observed, that the former is, by some, thought to be more pleasant and easy in drawing, particularly in the *last inch*, and of quicker cast than the latter. Yet we know, by experience, that the best modern self yew-bows have never been exceeded in *certainly* or *length* of cast, by the best modern back'd-bows. In this comparison we may remark, that the *roundness* of the self bow seems to be an equivalent to the peculiar construction of the back'd bow. On one account, bows made of the *hard* woods have the advantage of the yew bows; the latter being liable to *chrysal*, a circumstance which scarcely ever happens to the former.

Self-bows have lately been made of *Canada yew*, *Lance-wood* and *Cocoa-tree*; and although bows of these woods, in general, stand well, and are not often liable to fret or chrysal; yet they by no means rival, even the English yew, in spirit and pleasant drawing.

As to bows made of *metal*; Ascham tells us, "that
 " scripture makes mention of *brass* bows; and that *iron*
 " bows and *steel* bows had been of long time, and
 " also were in his time, used among the Turks: but
 " that they must needs be unprofitable. For if brass,
 " iron, or steel have their own strength and power, they
 " are far above man's strength; and if they are made
 " equal to man's strength; their power to shoot with
 " is gone."

There have been long-bows of steel made in this country, by way of *experiment*; some of which do now exist. One of them was, a few years since, tried at Lord Aylesford's Ground, in Warwickshire: its power was computed to be about *sixty pounds*, but it could not be used with ease or good effect (10). The use of steel-bows is attended with considerable danger. Some years ago, a gentleman received a severe bruise, by the breaking of one when drawn. With respect to the bows of the ancients, which by the poets are called

(10) In a former part of these Tracts (*Part I. ch. 3, sec. 3.*) it has been suggested, that had the bow continued a military weapon in this country, it would, in all probability, have derived new powers, or at least, those which it is acknowledged to possess would have been increased, by means of that perfection, which philosophy and the arts have now attained. Possibly, the present methods of working in and tempering horn and steel might, under the skill of modern artificers, lead to something highly beneficial to archery; either by connecting those two materials with wood, or by using them separately and independently. The trial seems worthy the effort of genius: for should it succeed, the bow might again become the superior and *all-conquering* weapon of war.

golden bows and silver bows; we have sufficient reason to believe, that the poets, in speaking of the bow, used those words *metaphorically*. The ancient bows, particularly those used by the eastern nations, were, probably, covered (as those used by the Turks, Persians, and inhabitants of the East are at this day) with a *lacker* of various colours, intermixed with leaf gold and silver. Yet possibly, the ends of the bows of the ancients were sometimes finished with a plate of silver or gold. See *Homer's Description of the Bow of Pandarus. Pope's Homer. Iliad. B. iv. l. 143.*

SECTION II.

CHOICE OF THE BOW:

Rules—Defects to be avoided—Parts of Trees used in Bow-making—Observations.

IN the *choice* of a bow, Ascham furnishes us with the following observations: by way of introduction to which, he says, “ that as a bow of yew must, for shooting at the pricks, be made perfect, because that mark is certain, and most certain rules can be drawn from it; so, that shall serve the purpose of his remarks.”

- i. “ That it be *small, long, heavy, (11) and strong*; lying *straight* not winding; not damaged with *knot-gall, wind-shake, wen, fret, or pinch.*

(11) It is observable, that the *lightest* woods have the *quickest* cast. This observation applies not only to bows made of yew, but also to those made of *other* woods; of which latter the *fustic*, being the lightest, possesses this quality of quickness in a superior degree.

2. “ The

2. " The best *colour* of a bow is when the back
 " and belly in working are much *alike* (for such
 " oftentimes in wearing proves like virgin wax or
 " gold): having a fine long grain, even from one
 " end of the bow to the other: the *short* grain,
 " although it sometimes proves pretty good, is for
 " the most part *brittle*."
3. " That it have *plenty* of *wood* in the *band*; for
 " if the ends of the bow are stiffish, the belly must
 " of necessity soon fret."
4. " Every bow is made either of a *plant*, of the
 " *bough*, or of the *bole* of a *tree* (12). The
 " *bough* is commonly very *knotty*, and full of
 " *pins*; *weak*, of *little strength*, will soon follow
 " *the string*, and seldom wears to any good
 " colour: yet, for children and young beginners it
 " may serve well enough. The *plant* proves fre-
 " quently well, if it be of a good and clean growth;
 " and, for the power of it, is quick enough of
 " cast: it will ply and bend far before it breaks.
 " The *bole* of the tree is the most free from knot
 " or pin, possessing a fast and hard wood, by rea-
 " son of its full growth: *strong* and *powerful* in
 " the *cast*, and best for a bow, if the staves are
 " cleft even, and afterwards wrought, not *across*
 " the wood, but as the grain and straight growth
 " of the wood *leads*: or else, by all reason, it
 " must soon break, and that in many shivers.
 " This must be considered in the rough wood,
 " and when the bow-stave is first wrought and
 " shaped; for, in dressing and trimming it up for
 " a bow, it is too late to look to it."

(12) It is said, that both the bow and the arrow should be taken from the side of the tree which faces the *east*: the grain of the wood, on *that* side, being the finest and driest.

To these observations, Afcham adds, " that he does
 " not intend to meddle much with the *making* of a
 " bow, lest he should seem to enter into another man's
 " business: but advises bowyers to *season* their staves
 " well, and to give them the necessary *beatings* and
 " plenty of *tillerings*: and, with respect to the points
 " upon which he has touched, recommends the archer
 " to trust to an honest bowyer to put a good bow into
 " his hands, somewhat looking himself to the tokens
 " he has pointed out: and not to flick for a little
 " more money for a *good* bow, than another would
 " give: for, that a *good* bow, *twice* paid for, is better
 " than a *bad* bow *once* broken" (13).

These remarks appear to be so sufficient and plain, that little need be added by way of illustration: but on this head, one observation occurs, which will, by experience, be found true; namely, that the small defects (as *frets* or *shakes*) in a bow, particularly in one that has been much used, are best discovered when it is *bent*,

(13) At the time of the late revival of archery, not more than one or two bow-makers could be found; and they lived in the North of England, and had not been in much practice for many years. The family of the Kelsals of Manchester, (who were always reputed the best bow-makers in England, and whose bows are in great repute at this day) had followed the trade for many centuries, and was nearly extinct. Fortunately for the art, Mr. Waring, of Leiceſter Houſe, had ſtudied it under old Kelfal; and was therefore enabled to purſue his rules in the formation of the bow: an ignorance of which has rendered abortive the attempts of many modern bow-makers. Mr. Waring's own ingenuity, which was ſecured to him by patent, has greatly improved upon Kelfal's method of conſtructing the back'd-bow, by means of a very mechanical engine: the uſe of which has enabled him to give his bows a ſuperior power, elegance and effect. And in juſtice, it ſhould be obſerved, that archery is greatly indebted to him for numerous experiments in the art: and for the diſcovery, ſelection and uſe of woods, obtained with a difficulty and expence that have deterred many others from the uſe of them, which make remarkably fine and valuable bows.

and

and by looking at it attentively in the *sunshine*; and *passing* the thumb and fore-finger over it: which latter act alone, once or twice repeated, will in general detect them: so critically true, in this respect, is the sensation by the touch.

With respect to Afcham's third Observation, "that a bow should have plenty of wood in the hand," it may, indeed, be added, that a bow, which has not a *prominency* in the *center*, will neither possess a *quick* nor a *far* cast: which most desirable qualities in a bow will be found to reside chiefly in those which are full in the hand, and regularly, and with nice proportion and symmetry, tapered to each horn.

SECTION III.

OF PROVING THE BOW.

How a good bow may be known and proved—How it is to be altered—Reasons and Observations.

IN the next place, Afcham gives us a method of *trying* and *proving* a bow, before we trust to it: "by shooting in it in the fields, and *sinking* it with *dead heavy* shafts; looking where it *comes* most, and providing for that place betimes, lest it pinch and so fret." "When (says he) the bow has been thus shot in, and appears to contain good shooting-wood; it must again be taken to a skilful and trusty workman, to be cut *shorter*, *scraped* and *dressed* fitter, and made to come *circularly round*: and it should be *whipped* at the

“ the ends, but with discretion, left it snap in sunder,
 “ or else fret, sooner than the archer is aware of. He
 “ must also *lay* it *straight*, if it be *cast* or need require:
 “ and if it be made flat, he must make it *round*; by
 “ which means it will shoot *faster* for *far* shooting, and
 “ also be *surer* for *near* pricking.”

Ascham carries his admonition so far, as to say,
 “ that a bow, which at the first buying, without any
 “ more proof or *trimming*, is *fit* and *easy* to shoot in,
 “ will neither be *profitable* to last long, nor yet *pleasant*
 “ to shoot well.” And, indeed, although frequent alteration of a bow, particularly as bows are now made with great nicety, may sometimes prove unnecessary and injurious; yet, experience proves, that a perfect bow is not made *at once*.

With respect to a bow being made *round*, we must recollect, that Ascham speaks of a *self-bow*; which, it seems, was made round as well at the *back* as in the belly: but back'd-bows have almost always a *flat* back, to prevent their *casting*.

It was an old custom to *whip* a bow at each *end*, and a little over the horn, with fine thread or silk: in order, as is supposed, to preserve the glue of the horn from being affected by wet, which might unsolve it. But this practice is now not known; and, if good glue is used in fixing the horn, and the bow is not kept in a *damp* place, it seems quite unnecessary for that purpose.

SECTION IV.

OF THE HANDLE.

Position of the Handle—Difference of Opinion on this Head—Observations.

IT has been mentioned, that, in Ascham's time, the middle of the bow was *waxed*, in order to fix it firmly in the hand; and, that of late years, a covering of velvet, shag, or worsted lace, had been used instead of wax. The only point of importance, respecting the handle of the bow, is the *position* of it, which Ascham has not noticed. The English bow-makers have, generally, placed the *upper* part of the handle from an *inch* to an *inch and a quarter* above the exact center of the bow; which of course makes the lower limb so much longer. The reason for thus placing the handle is, they alledge, in order to make *both* limbs act *equally*: the pressure, particularly when three fingers are used in drawing, being most on the *lower* limb: but the bow-makers in Flanders, who make no other than self-bows, on this account make the lower limb the *strongest*; and place the *upper* part of the handle *precisely* in the *center* of the bow; insisting, that an arrow is best cast from the *center*: while the English bow-maker contends, that when the lower limb is the *strongest*, it must of necessity be the first *at home*; and consequently, that as both limbs cannot in that case act equally, they cannot *cast* equally. This difference, in the position of the handle, has

has been the subject of much discussion among modern archers. Some of them take the medium, placing the upper part of the handle from one half to *three quarters* of an inch above the center: while others adopt the Flemish custom. Indeed, it should seem, that as the *point* on the *string* from which we draw, must always form a *central point*; the placing the center of the bow *out* of that line, must (by creating *two* centers of action, unless the bow is constructed with very great nicety to meet this principle,) cause an *erroneous* effect. Consideration too, must sometimes be paid, to the different manner in which men *hold* their bows, and make the *fulcrum*: some making it high, others low, and others in the center of the hand.

SECTION V.

OF THE HORNS.

Roundness to be observed in forming the Nock of the Horns—Method of placing the Nocks of the Horns formerly used in Scotland—Ornaments for the upper Horn.

ASCHAM has said no more on this head, than “that the nock in the horn should be made *round*, “to prevent its cutting the string.”

In forming the nock, there was, formerly, some difference between the English and Scotch methods. The old Scotch bowyers, even to the middle or close of the last century, made the nock of the upper horn on
the

the *upper* or *bow-band* side, and that of the lower horn on the *under* or *shaft-band* side only; in order, as it is said, that the arrow might go cleaner and more freely from the bow. The English bowyers, disregarding this method as of no particular advantage, have always made the center of both nocks precisely in the *center* of the back of both horns, bringing each nock *equally round* towards the belly of the bow.

The upper horn of the bow may be shaped to a very pleasing and picturesque figure, in imitation of the head of some animal. This practice is very ancient. (See *engravings of the Saxon and Dacian bows in Moseley, Pl. i.*) The head of the Aries (or battering ram) of the ancients, so much admired in sculpture, cannot fail to afford a desirable ornament to the bow. The horns of the Flemish bows are often thus ornamented.

SECTION VI.

LENGTH OF THE BOW.

Mr. Barrington's Observations respecting the standard Length of the Bow considered—His Errors on this Head pointed out—Statute of 5 Edward IV. cited—Remarks on that Statute—Observations on the proper length of the Bow.

ASCHAM has omitted to inform us what was the proper *standard length* for the bow. He first directs us to choose it *long*: and, after proving it, to have it cut *shorter*; but *how short* he does not mention.

Mr.

Mr. Barrington tells us, that the regulation of the Irish statute of Edward IV. viz. "That the bow shall not exceed the height of the man, is allowed by archers, to have been well considered: and as the arrow should be half the length of the bow, this would give an arrow of a yard in length to those only, who were six feet high." In perusing this observation of Mr. Barrington's, it must occur, notwithstanding we shall find it received as good authority by Mr. Moseley, and other late writers on archery, that it is by no means satisfactory: for it gives to a bow of *five feet six inches*, the common height of a man, an arrow of *two feet nine inches*; which, surely no archer ever thought of attempting to draw to the *bead* in a bow of only *twice* its length. Unfortunately for Mr. Barrington, his Tract on Archery is, throughout, replete with errors. Upon referring to the statute in question, (which is the 5 Edward IV. c. 4.) we shall find it penned in the following words; viz. "that every Englishman, and Irishman that dwell with Englishman, and speak English, that be betwixt sixteen and sixty in age, shall have an English bow of his own length, and one *fistmele* at the least betwixt the necks;" [sometimes in old MSS. spelt *nicks* and *fistmele* called *handful*] "with twelve shafts of the length of *three quarters of the standard*." Had Mr. Barrington consulted this statute, he would, surely, have deemed the words particularized too important to be passed over unnoticed; and must have seen the error of his own opinions, or of the opinions of those from whom he borrowed upon this occasion. We cannot estimate the breadth of an ordinary man's fist at less than four inches: but the statute adds "*at the least*," so that, according to this statute, the bow for a man *five feet six inches* high, was to be nearly if not quite *six feet* be-

twixt the *nocks*. In the present state of archery, when the length of the arrow does not often exceed twenty-nine inches; we seldom use bows, longer than five feet ten inches; more frequently those which are an inch, and, generally, those which are two inches shorter. But, circumstances considered, five feet nine inches seems to be a very fit length for a bow; when the arrow is not shorter than twenty-seven, or longer than twenty-nine, or, at the *most*, thirty inches. It is indeed, said, that a bow of *five feet eight inches* (or two inches shorter if the bow will stand) will cast an arrow, of the length of twenty-seven inches, *further* than a longer bow will cast the same or a longer arrow.

CHAPTER VI.

OF ARROWS. (14)

SECTION I.

*Different parts of a Shaft—Woods proper for Steles—
Rules to be observed in making Steles—Woods pro-
per for War-Arrows—Woods used for Steles in
modern Archery—Their different Qualities.*

“ **A** SHAFT,” says Ascham, “ hath *three* principal
“ parts, the *stele*, the *feather*, and the *bead*; of
“ which each must be severally spoken of.”

(14) Arrows have been used for various purposes. Mr. Moseley has enumerated several uses, to which the arrow was applied by the ancients; as *divination*, *soothsaying*, and by way of *communication* and *signal*. Pliny gives us the following account of a most extraordinary power, which the ancients ascribed to them. “ *Sagittas corpore educas, si terram non attigerint, subjectas cubantibus, amatorium esse, Orpheus et Archelaus scribunt? Hist. Mundi. Lib. xxviii. cap. 4.* A not unsimilar and magical power was assigned to arrows, by the bigots in this country, in the reign of Queen Mary. Scot. in his *Discovery of Witchcraft*, mentions *enchanted archers*; particularly a poor fellow at Malling, in Kent, who by one of Queen Mary’s justices was punished, for shooting with flies or familiars, or *enchanted arrows*, because he could win two or three shillings a day at the butts.

Mr. Moseley has given us an ingenious method of firing a gun, by the discharge of an arrow. *Moseley*, p. 209.

“ Steles are made of various woods: as

“ Brafil.	“ Birch.	“ Black-thorn.
“ Turkey-wood.	“ Ash.	“ Beech.
“ Fustic.	“ Oak.	“ Elder.
“ Sugar-chest.	“ Service-tree.	“ Asp.
“ Hornbeam.	“ Alder.	“ Sallow.” (15)

“ These woods, as they are most commonly used, so they are the most fit to be used; yet some one fitter than another, for different men’s shooting; as shall be told afterwards.”

“ A stele must be well seasoned, to prevent its casting; and should be made as the grain lies, and as it grows, or it will never fly clean. A knotty steel may be suffered in a large shaft, but is not fit for a small one; both because it will never fly far, and is ever in danger of breaking. It does not fly far, because the strength of the shoot is hindered and stopped at the knot: as a stone cast into an even still water, will make the water move a great space; yet if there is any whirlpool in the water, the moving ceases when it comes to the whirlpool: which is not unlike a knot in a shaft, if it is considered well. So every thing, the plainer and straighter it is in its *own nature*, the fitter it is for moving far. Therefore, a stele which is *hard* to stand in a bow, without knot and straight, (I mean not *artificially* strait as

(15) Among the Eastern nations, a stiff reed or bamboo was formerly the most used for arrows; which induced Pliny to observe, that the *reed* had conquered *half* the world. (See *ante*, part 1. note 58.) The Cornel tree was not much less celebrated for this service. *Aschan*. The ancient Scythians used deal. *Moseley*, p. 117. Among the Turks, deal is much used for arrows at this day. The Indian reed or bamboo does not answer for our bows, being knotty and seldom strait; and, indeed, being of equal thickness, it has not substance enough in the chest to *stand* (to use the archers term) in the English bow.

“ a F”

“ a Fletcher makes it, but *naturally* straight as it grows,) is the best to make a shaft of; either to go clean, fly far, or stand surely in any weather (16).

“ Now, how large, how small, how heavy, how light, how long, how short, a shaft should be, (particularly for every man, seeing we must talk of the *general* nature of shooting,) can not be told; any more than a rhetorician can appoint any one set of words or figures, fit for every matter: but even as the man and matter requireth, so the fittest is to be used. Therefore, as concerning these contrarieties in a shaft, every man must avoid them, and draw to the *mean* of them; which mean is best in all things.

(16) Afcham, probably, alludes to the method used by the Fletchers, of making the wood straight, by means of *heat*, termed by them *setting*. The straightness of an arrow is a very essential point, in its proper formation; and may be ascertained by twirling the arrow over the thumb nail: if it spins smoothly, it is straight, if otherwise, not. This method seldom fails to afford a true criterion of its value and merits for flight. An eminent writer on gunnery (Robins) has given us the following curious and philosophical account of the aberration of a *crooked* arrow. “ If (says he) a bent arrow, with its wings not placed in some degree in a spiral position, so as to make it revolve round its axis as it flies through the air, were shot at a mark with a true direction, it would constantly deviate from it, in consequence of being pressed to one side by the convex part opposing the air obliquely. Let us now suppose this deflection in a flight of an hundred yards to be equal to ten yards. Now, if the same bent arrow were made to revolve round its axis once every two yards of its flight, its greatest deviation would take place when it had proceeded only one yard, or made half a revolution: since, at the end of the next half-revolution, it would again return to the same direction; it had at first; the convex side of the arrow having been once in opposite positions. In this manner it would proceed during the whole course of its flight, constantly returning to the true path at the end of every two yards; and, when it reached the mark, the greatest deflection to either side that could happen, would be equal to what it makes in proceeding one yard, equal to $\frac{1}{100}$ th part of the former, or 3.6 inches, a very small deflection when compared with the former one.” *New Principles of Gunnery*, 1742.

“ Yet if a man happens to err, in any of the ex-
 “ tremes; it is better to err in want and scantiness, than
 “ in too great excess. As it is better to have a shaft
 “ a little *too short*, than *over long*; somewhat *too light*,
 “ than *over-heavy*; a little *too small*, than a *great deal*
 “ *too big*. And to err in these contraries cometh
 “ much, if men do not attend to the *sort* of wood
 “ whereof the shaft is made: for, some wood is *proper*
 “ for this *excess*, some for this *scantiness*, and some for
 “ the *mean*: as *Brasil*, *Turkey-wood*, *fustic*, *sugar-chest*,
 “ and *such like*, make *dead*, *heavy*, *lumpish*, *hobling shafts*.
 “ Again, *alder*, *black-thorn*, *service-tree*, *beech*, *elder*, *asp*,
 “ and *fallow*, (either on account of their weakness or
 “ lightness) make *hollow*, *starting*, *scudding*, *gadding*
 “ shafts. But, *birch*, *hornbeam*, *some sorts of oak*, and
 “ *some sorts of ash*, being both strong enough to stand
 “ in a bow, and also light enough to fly far, are best
 “ for a *mean*. And although I know, that some men
 “ shoot so strong, that the *dead* woods are *light* enough
 “ for them; and others so weak, that the *loose* woods
 “ are *heavy* enough for them; yet, generally speaking,
 “ for the most part of men, the mean is the best.
 “ Thus, no wood *of its own nature* is either too light,
 “ or too heavy; but as the shooter himself makes it
 “ comparatively so. For, that shaft which, one year, is
 “ too light and scudding for a man; for the same rea-
 “ son, the *next* year, may chance to be heavy and hob-
 “ ling. Therefore, I cannot express, except generally,
 “ what is the best wood for a shaft; but let every man,
 “ when he knows his own strength and the nature of
 “ every wood, provide and fit himself accordingly.
 “ Yet, as concerning *sheaf-arrows* for *war*; as I sup-
 “ pose, it were better to make them of good *ash*, and
 “ *not* of *asp*, as they are now a days. For of all other
 “ woods, that ever I proved, *ash*, being big, is *swiftest*,
 “ and

“ and again *heavy* to give a great stroke; which *asp*
 “ will *not* do. What heaviness doth in a stroke, every
 “ man by experience can tell: therefore, ash, being
 “ both swifter and heavier, is more fit for sheaf arrows,
 “ than *asp*” (17).

Thus far speaks Ascham on the woods proper for shafts. In modern archery, only *five* kinds of woods are commonly used for arrows: *four light*, viz. *deal*, *asp*, *arbele* and a species of *light* wood, (probably *poplar*) brought from Flanders: and *two heavy*, viz. *lime*, and *Jamaica lance-wood*. Of the first kind, the Flemish arrows are in great repute: it is said, they are made of that part of the tree which faces the *east*, being consequently the *driest*. Deal (that is the *yellow* or *red* deal with the turpentine in it) makes a very good arrow, but is apt to wear and splinter. Asp being lighter than this kind of deal, is the more used of the two. The arbele, in appearance and quality, so nearly resembles the asp, that scarce any difference is perceivable in these two woods: however, the asp is the *stiffest*, and the arbele the most *spongy*. Lime is an excellent wood for arrows: but unless highly dried, in which case it becomes brittle, it is somewhat too heavy for many bows, when used at the *target*. It makes a very good *roving* arrow; as does *lance-wood*, which, being much heavier, is seldom used for any other kind of shooting. Flight arrows are generally made of deal, asp or light lime, footed with lance-wood, or other hard wood. But, for *very small* and *light* flights, deal seems to be the most eligible; as, being the stiffest wood, it stands best in the bow.

(17) Asp, being a very light wood, is certainly not so well adapted for *war* arrows. Arrows have, in modern days, been made of ash: but they were very indifferent and by no means equal to those made of lime; which for *war*, seems greatly preferable to ash.

SECTION II.

OF WEIGHING AND PAIRING ARROWS.

Arrows weighed and paired in former Times—Now weighed by Troy-weight—Advantages of this Method—Scale of Weight for Arrows used in different kinds of Shooting—Consequence of Shooting with Arrows of unequal Weights.

ASCHAM is silent respecting the *weight* of arrows: yet, the practice of weighing each arrow *individually*, against a certain *standard* weight, seems to have been very ancient: the custom or by-law of the city of London (noticed in *Part 3, note 9*) making mention of a *pound* arrow. It is said, that old Kelsal, of Manchester, only *paired* his arrows; weighing one against another by means of a double loop at each end of a stick, which was made the beam of a balance. That our ancestors paid considerable attention, not only to the weight, but also to the *merits* of each arrow, (which could only be ascertained by a careful trial) we may collect from the following authorities:

“ Their arrows *finely pair'd*, for timber, and for feather,
“ With birch and brazil piec'd, to fly in any weather.”

Drayt. Poly-Olb. Song 26.

“ And Clifton with a *bearing* arrow,

“ Hee clave the willow wand.” (18)

Robin Hood and Queen Catherine. *Garland.*

Arrows

(18) The inhabitants of some other parts of the world, where archery is still in use, pay a similar attention to the *merits* of their arrows. Captain Turner (speaking of the inhabitants of Buxadewa

Arrows are now weighed with the same weights as standard silver, and marked accordingly: so that an arrow equal to five shillings troy or silver-weight, is called an arrow of *five shillings*. This method is attended with many advantages: among others, it enables us to pair arrows to a very great nicety, and to determine instantly, what arrow we shall use for any *bow* and any *length*. By this means too, a closer connection is made between the *light* and *heavy* woods.

It may be proper to notice here the different weights, according to which arrows are usually made, for the various distances and kinds of shooting; observing, that, in *archery*, distance is measured by *yards* or (as seems to have been the most ancient practice) by *roods*, the rood consisting of seven yards and an half, *north country measure*: and, that distance is termed *length*.

THE SCALE.

<i>Lengths.</i>		<i>Weight of Arrows.</i>				
		s.	d.	s.	d.	
4 Roods (30 yards)	from about	4	0	to	6	0
8 ditto (60 ditto)	ditto	3	6	to	5	6
12 ditto (90 ditto)	} ditto	3	0	to	4	6
16 ditto (120 ditto)						

Roving arrows are much *heavier*, and *flight* arrows much *lighter*, than others; the former generally weighing from *five* shillings to *ten* and even *twelve* shillings; and the latter seldom *exceeding* *four* shillings. Yet, the above noticed weights are by no means *arbitrary*; but, as Ascham has justly observed, “ every man must use

dewar in Tibet) informs us, that Guap the father of the present Lama, has arrows famed for their remote and steady flight; which have names inscribed on each of them, and places assigned to them in a quiver in separate cells. *Account of an Embassy to the court of the Teshoo Lama, in Tibet, in the year 1783.* (Printed 1800.)

“ such

“ such an arrow as most *suits* him, and is best adapted “ to the *nature* and *power* of his bow.” In another respect, the weight of an arrow is an object of attention: for, if an archer, after shooting for some time (particularly at butt or target distance) with two arrows of *equal* weight, changes one of them for another of much *greater* or much *less* weight; he will, if he looses equally, immediately find, that the *heavier* arrow of the two will fall *short* of, and the *lighter* one fly *over* the mark: and that it will require some little practice and skill, to keep both to the mark; especially if that is at any distance. On which account, in *archery*, *three* arrows are called a *pair*; that, if one is broke, lost, or injured, the archer may have two (the number used at a time) left of equal weight.

SECTION III.

LENGTH OF THE ARROW.

Length of the Arrow not noticed by Afcham—Opinion respecting the Length of the Arrow compared with that of the Bow—Length of Flemish Arrows—Reasons—Length of Arrows used in distant Shooting.

NEITHER does Afcham notice the *length* of the arrow. It has long been a received opinion among archers, that, when the bow is of the length of *five feet eight inches* from nock to nock, the best length for the arrow, if used at *less* than *roving* distances, is *twenty-seven inches* including the *pile*: and it may here
be

be observed, that, in speaking of the length of arrows in general, the *pile* is *included* in the measure. Conformably with this opinion, arrows have, for many years past, been made in England. The Flemish arrows are *one inch* longer, probably on account of their bows, which are self-bows, being, in general, longer than our backed bows; and, consequently, *following the string* more. In roving and shooting great lengths, we generally use a twenty-eight, sometimes a twenty-nine, and even a thirty inch arrow. For, when the bow, in shooting, is much elevated, the archer finds the range and power of his drawing arm much increased.

We frequently find mention of a *standard* arrow: (See *Remembrance of a Shooting*, (anno 1583) by *W. M. in Wood's Bowman's Glory. Stow's Survey of London*, (1598) p. 77. *Robin Hood's Garland*.) This, no doubt, was the sheaf or war-arrow, made after a certain scale or pattern, long preserved in the exchequer, but also long lost and forgotten. Among the numerous manuscripts in the Cotton and Harleian collections, relating to orders in war, I have not been able to find one which affords any description or account of the *standard* arrow. Most of those orders (particularly those issued in the reign of Edward III.) direct a certain number of arrows [*competentes*] to be made, without any injunction respecting their length or size. In the old ballad of Chevy Chace and in the *Garland*, we read of arrows being used, some of which were a *cloak yard* and others an *ell* long. Ascham tells us, "that, at the battle of Agincourt, the army of Hen. V. consisted of such archers (as the Chronicle says) that most part of them drew a yard." Clement Edmonds says, that in the reign of Henry V. the English bowmen did *commonly* shoot an arrow of a yard long *beside* the head. Similar facts are mentioned of the Cornish Rebels

Rebels in the time of Henry VII. by Hollinshed. *Cbron.* p. 782; by Lord Bacon, in his *Life of that Monarch*; and by Carew, in his *Survey of Cornwall*, and other historians. Yet some men, in these days, have doubted the truth of such reports: while others admit the facts, but contend that the cloth yard was, at the time spoken of, only *thirty* inches. An accurate attention to this subject will convince us, that there seems to be very little ground to dispute the veracity of such authorities.

The statute of the Staple, made in the 27th year of Edward III. (c. 10.) Enacts, "that there shall be but one weight, measure and *yard* throughout the realm." And the statute of the 18 Henry VI. c. 16. declares, "that there shall be but one measure of *cloth* through the realm, by the *yard and the inch*, and not by the yard and handful, according to the London measure." And, by a subsequent statute (4 Edw. IV. c. 1.) broad cloth was to be measured by the *yard and inch* containing the breadth of a man's thumb. To carry this part of the subject still further, it may be noticed, that among the Cotton MSS. (marked *Claudius, D. 2.*) is a very ancient statute (which will be found in the Appendix to Runnington's Statutes at large, p. 27) without any date, intituled "Compositio ulnarum et perticarum:" in which it is declared, "*tres pedes faciunt ulnam.*" After various searches among ancient manuscripts, for the purpose of ascertaining the truth of the facts in question, I have been able to find only the following one, which applies to the investigation; and which will, I apprehend, be deemed of sufficient authority to satisfy all doubt upon the occasion. It is an extract from a MSS. intituled "*Affairs from Public Records. Defence of the State in the time of King Edward III. both by Sea and Land, gathered out of the Records by Robert Cotton.*"

“ 9th Year of } “ 2 Octob. Rex mandavit maiori et
 the Reign. } “ vicecomitibus comitatis illius, emi
 “ et p’videre faciant CCC arcus bonos
 “ et sufficientes, ac cordas ad eos com-
 “ petentes: nec non quatuor dolia fa-
 “ gittaru’ longitudinis *unius ulne*, de
 “ bono et sicco maeremio; ac capita
 “ pro sagittis illis bene acerata, et
 “ *falas** largas habentia. Et quod pre-
 “ dict’ arcus &c. libe’nt’r constabu-
 “ lar’ Turris Lond’, vel eius locu’
 “ tenenti per indentur’. m. 10.

Mus. Brit. Bibl. Cott. Julius, c. 4.

Plut. 2 F.

It is true, that only *very long* bows would carry so long an arrow; and that only *very long armed* men could draw it to the head. So that this length could not be a general standard for the army, but only for the tallest archers. And Sir John Smith tells us, that, in his time, it was the usual practice for the soldiers to chuse their first sheaf of arrows, and to cut those shorter, which they found too long for their use. *Answer to Mr. Barwick.* The statute of the 5 of Edward IV. (see *ante*, p. 145) directs the arrow to be “ *three quarters of the standard.*” If this statute means three quarters of the *English ell*, then the arrow would be of the length of thirty-three inches and three-quarters: but if it refers to the *English yard*; then, the arrow would be exactly twenty-seven inches. In all probability, the statute refers to this latter measure, in which the pile or head of the arrow is included: as the arrows used in England and Scotland have time out of mind, uniformly been twenty-seven inches, including

* Probably *alas*.

the pile. An ancient English arrow is now a very great rarity. Mr. Waring is in possession of a number of arrows, made precisely after an ancient barbed sheaf or war arrow, which he procured; and which appears from the shape of the head, to have been in use when armour was worn. They are two feet four inches long, from the nock to the point of the head; (the latter being two inches), are made taper-shaped, and weigh about seven shillings. In the Leverian Museum is an *iron* arrow, twenty-nine inches long (including the head) and barbed, which was dug up, some few years since, near the ruins of Harwood Castle in Yorkshire. To follow conjecture respecting its use; it may, from its durable quality, have been kept as a *standard* arrow for the North of England.

SECTION IV.

FORMS OF ARROWS.

*Different forms of Steles suited to different Shooters—
Reasons and Observations—Principles of Arts
drawn from Observations on the Wisdom of Pro-
vidence in the Formation of Animals.*

“ **A** GAIN,” says Ascham, “as no wood can be en-
“ tirely fit for *all* sorts of shafts; so cannot one
“ *shape* of the stele be fit for *every* shooter. For those
“ which are small breasted, and large towards the head,
“ (called by their likeness *taper-fashion, rusb-grown,*
“ and by some merry fellows *bob-tails,*) are fit for those
“ who shoot *underband*: because they shoot with a *soft*
“ loose,

“ loose, and force not a shaft much in the breast,
 “ where the weight of the bow lies; as may be per-
 “ ceived by the wearing of every shaft. - Again, the
 “ *large breasted* shaft is fit him, who shoots right *before*
 “ him; or else the breast, being weak, would never stand
 “ that strong powerful kind of shooting. Thus, the
 “ *underband* must have a *small* breast, to go clean away
 “ out of the bow; and the *foreband* must have a *large*
 “ breast, to bear the great power of the bow. The
 “ shaft must be made *round*, nothing flat; without gall
 “ or wen, for this purpose. Because, roundness, whe-
 “ ther you take example in heaven or in earth, is the
 “ fittest shape and form for quick motion; and for the
 “ soon piercing any thing: and therefore, Aristotle says,
 “ that nature has made the rain round, that it might
 “ the more easily enter through the air.”

In illustration of this remark of Ascham's, we may notice how often the principles of human arts are derived from our observations upon the wisdom of Providence, in the formation of animals, and in the various gifts and instincts which are bestowed upon them. We may, as the poet says, “ *learn of the little Nautilus to sail,*” and “ *of the Bee to build the vaulted dome:*” and draw, with success, our rules of archery from the rules of *nature*. We see, that birds and fishes are larger in their middles than at their extremes, in order that they may float upon and move through their elements with facility. Hence, it should seem, that a *breasted* (or high *chested*) stele is best calculated for *distant* flight, by *floating* longer in the air, than one tapered or made heavy towards the pile. Modern archers use the breasted steles for most lengths, and particularly for flights; and, indeed, except for very *short* lengths or in a *rough* wind, that is the form most generally preferred.

SECTION V.

OF PIECING SHAFTS.

Reasons—Origin—Utility.

ASCHAM observes, that “*piecing* a shaft with
 “ brazil, holly, or other heavy woods, is to make
 “ the *pile-end* proportionally heavy with the *feathers*
 “ in flying, for the stedfaster shooting. For, if the end
 “ was full heavy with lead, and the wood next it light,
 “ the head end would ever be downwards, and never
 “ fly straight. In *piecing*, two *points*” (by point, As-
 cham probably means *pile*, i. e. the length of the pile).
 “ are sufficient to prevent the moistness of the earth
 “ penetrating too much into the *piecing*, and so
 “ loosening the glue. Therefore, many points are more
 “ pleasing to the eye, than *profitable* for the use. Some
 “ used to piece their shafts in the *nock*, with brazil or
 “ holly, to counterweigh with the head: and I have,
 “ says he, seen some for the same purpose, bore a hole
 “ a little beneath the *nock*, and put lead into it. But
 “ yet none of these means are at all necessary; for the
 “ nature of a feather in flying, if a man mark it well,
 “ is able to bear up a wonderful weight. And I think
 “ such *piecing* was first introduced, when a good archer
 “ had broken a good shaft in the feathers; and, on ac-
 “ count of the partiality he had for it, was loth to lose
 “ it: therefore he would piece it. And then, by and
 “ by, others, either because it looked smart, or because
 “ they would imitate a good archer, cut their *whole*
 “ shafts

“ shafts and pieced them ; a thing, in my opinion, more
 “ expensive than useful.”

Upon the subject of *piecing* arrows, Ascham speaks with discernment; for, generally speaking, it is only a *favourite* arrow that is worth the experiment and expence. Most arrows, when pieced, lose somewhat of their original spirit, and become more sluggish. Lime, pieced with *lance-wood* or other *bard* wood, makes a very good *roving* arrow.

SECTION VI.

OF THE NOCK.

Nocks of Arrows differently made—Advantages and disadvantages of different Nocks considered—Observations on the double Nock.

“ **T**HE *nock* of the shaft,” says Ascham, “ is differently made; for, sometimes it is large and full,
 “ sometimes handsome and small: sometimes wide,
 “ sometimes narrow; sometimes deep, sometimes shallow, sometimes round, and sometimes long: some
 “ shafts have one nock, and others have a double nock; each of which hath its advantage. The large and
 “ full nock may be well felt, and many ways saves a shaft from *breaking*. The handsome and small nock
 “ will go *clean* away from the hand; the wide nock has no advantage, but, on the contrary, often *breaks* the
 “ shaft, and *slips* suddenly out of the string: while the narrow nock avoids both these harms. The deep
 M “ and

“ and long nock is good in *war*, for sure *keeping* in the
 “ string. The shallow and round nock is best for our
 “ purpose in *pricking*, for *clean* delivery of a shoot.
 “ And double nocking is used for double *surety* of the
 “ shaft.”

Modern archery is unacquainted with the *double* nock ; but it is supposed to have been a *cross* nock : in which case, one of the feathers must have *run on the bow*. Probably, this expedient was confined to arrows used in *war* : and, certainly, it was better that an archer, when in the field, should have the feather of his arrow run on the bow, than his shaft rendered useless by a broken nock. And yet, it is difficult to conceive how an arrow could be useful, if *one* of the nocks was broke : the breaking of the nock often extending as far as the *feather*, which must, in general, destroy the intention of the double nock.

The nock is made by the insertion of horn into the end of the shaft. Sometimes the nock is made of solid horn : and sometimes of the wood and horn, the latter is the least liable to burst.

In an old manuscript in the British Museum, (apparently containing detached extracts from Ascham) is the following observation, “ shafts *pointed* in the *nock* “ are more pleasing than profitable.”

SECTION VII.

OF THE FEATHER.

Importance of the Feather—Observations on the Feathers of different Birds—Their different Properties in Archery—Value and Use of the Goose-feather in former Days—Merits of the Turkey-feather—Observations on the Feathers of the Goose—Difference of Feathers in the same Wing—Reasons for paying Attention to the Colour of the Feather—Feathers the most esteemed when dropped.

AFTER observing, that neither wood, horn, metal, parchment, paper, or cloth, but only a feather is fit for a shaft; Ascham tells us, “ that the *feather* is of no “ small importance (19), and that it requires great at-

(19) Arrows *without feathers* cannot fly far, and are greatly affected by the wind. Ascham informs us, that among the ancients, the Scythians (according to Heroditus) were the only people known to use arrows without feathers. Many African tribes use such arrows at this day: but as they are generally infected with poison, they are chiefly used against near objects. In the Turkish quivers we sometimes find unfeathered shafts, which, being larger at the nock and tapered from that to a very fine point, fly but a very little way from the strongest bow. Possibly, they may be used, in teaching young shooters the method of drawing and loosing the arrow with ease and dexterity; and in order to save them the trouble of following a feathered arrow, in its distant flight. This sort of arrow might afford a curious and not unamusing contest of skill in *far* shooting. It is said, that if a light shaft is feathered at *both ends*, the wood being lightest at the pile-end and the feather trimmed low at the nock-end and high at the pile-end, and shot against the wind, that it will *return back again*. And, that a shaft feathered in the *middle* will, in its flight, make a *right angle*.

“ attention. If you observe,” says he, “ the feathers of
 “ all sorts of birds, you will see some so low, weak, and
 “ short; some so coarse, harsh, and hard; and the rib
 “ (which is the hard quill that divides the feather) so
 “ brittle, thin and narrow; that it can neither be drawn,
 “ pared, nor yet well set on: and, except it be a
 “ swan’s feather for a *dead* shaft, which I know some
 “ good archers have used; or a duck’s for a *flight*,
 “ which lasts but one shoot; there is no feather but
 “ that of a goose, which hath all advantages in it. And,
 “ certainly, at a *short* Butt, which some men are ac-
 “ customed to use, the *peacock* feather doth seldom
 “ keep up the shaft, either straight or level, it is so
 “ rough and heavy: so that many, who have taken them
 “ up for the sake of their gay appearance, have laid
 “ them down again for the sake of utility. Therefore,
 “ for our purpose, the *goose* feather is the best, for the
 “ best shooter”(20).

At

(20) Ascham observes, that as to the feathers of *eagles*, where-
 with the unerring shafts of Hercules are reported to have been
 feathered: “ the eagles fly so high, and are so rare and difficult
 “ to come at, that no regard had been paid to them.” In what
 estimation the feathers of those birds have been held in the East,
 we may learn from the following anecdote.

“ Opposite to the town of Babadagy, which is the seat of the
 “ Basha of Silistria, there is a mountain higher than the rest.
 “ There are found in the neighbourhood of this city, eagles (called
 “ *Giujigien* by the Turks and Tartars) which are larger than
 “ all other birds; and in so great plenty, that the bow-makers, all
 “ over Turkey and Tartary, are from thence furnished with fea-
 “ thers for their arrows; although there are not above twelve
 “ quills (and those in their tails) that are fit for that use, which
 “ are commonly sold for a Leonine. They are reckoned better
 “ for that purpose than all others: and a skilful archer does not
 “ care to use any other. If a man has several arrows in his quiver,
 “ made with other feathers, and but *one* among them fledged with
 “ a quill of one of these eagles; that *one* remaining untouched
 “ will *eat* all the rest to the wood. And it seems to have been
 “ upon

At the time Ascham wrote, turkeys were, perhaps, not very common in England (21): or, if they were, yet it is probable, that the merits of the *grey-goose wing*, so much celebrated both by our historians and poets as the archers *sheet-anchor*, were so well known and so much valued by the archers, that *turkey* feathers were not thought of, for arrows. However, the turkey feather is, perhaps, of little less value for the purpose of archery, than the goose feather: particularly as the former creates some variety, at least, in arrows; which we find Ascham approves of; observing, that “when you are acquainted with the *properties* of *different* feathers, you may fit your shaft according to your *shooting*, because no one rule can suit every man.” The *Flemish* arrows are chiefly feathered with turkey feathers; and they have, of late, been adopted by our English fletchers. Nor have I ever heard the use of them condemned. They certainly possess a much stronger texture than goose feathers, and seem to be less affected by wet or moisture, which is unquestionably an advantage (22). In variety and strength of colour, some of them being (in the naturalist’s phrase) beautifully *barred*, they far exceed those of the goose; and they appear to take a dye much better.

“upon account of this strength, that the Tartarian name of *Giujien* was given to that kind of eagles.” *Hist. of the Ottoman Empire*, by *Demetrius Cantimir*, p. 319, note.

(21) An old couplet says,

Turkeys, carp, hops, piccarel and beer } 1524.
 Came in to England all in one year.

(22) Goose feathers, after they are put upon the shaft, are generally covered lightly with gum-water, in order to give them a greater degree of stiffness, than what is natural to them. By which means they fly better and resist moisture the more. It is said, that if feathers are slightly washed with a solution of *gum-copal* in spirits of *turpentine*, (in the proportion of one third of the former to two thirds of the latter), that they will become impenetrable by moisture and wet; and, that such a varnish will not impede the flight of the shaft, or otherwise injure the feather.

“ The *old* goose feather,” continues Ascham, “ is
 “ *stiff* and *strong*; good for a *wind*, and fittest for a *dead*
 “ shaft: the *young* goose feather is *weak* and *fine*, best
 “ for a *swift* shaft; and it must be trimmed at the first
 “ shearing, somewhat *big*; for, with shooting, it will
 “ fettle and *fall* very much. The same thing, although
 “ not so much, is to be considered in a goose or a
 “ gander. A *fenny* goose, as her flesh is blacker,
 “ coarser and more unwholsome; so is her feather, for
 “ the same cause, coarser, harsher, and rougher: and
 “ therefore, I have heard very good fletchers say, that
 “ the *second* feather in one is better than the pinion in
 “ the other.”

“ Betwixt the wings is little difference, but you
 “ must have *different* shafts of *one* flight, feathered with
 “ *different* wings, for *different* winds: for, if the wind
 “ and the feather go both *one way*, the shaft will be
 “ *carried* too much. The pinion feather, as it hath the
 “ first place in the wing, so it hath the first place in
 “ good feathering. You may know it, before it is
 “ pared, by a *bought* which is in it; and again, when it
 “ is trimmed, by the thickness above and at the
 “ ground; and also, by the stiffness and fineness, which
 “ will carry a shaft better, faster and further, as a fine
 “ sail-cloth doth a ship.”

Notwithstanding this opinion of Ascham's respecting
 the pinion-feather; modern fletchers hold, that the
pinion-feather is fit only for a *low feathered* shaft, being
 crooked and stiff; and, that the second, third, fourth and
 other feathers in the wing, have the preference, accord-
 ing to their positions: but, that the fifth and following
 feathers are weak, and seldom to be made use of.

“ The *colour* of the feather is least to be regarded,
 “ yet somewhat to be looked to: for a good white you
 “ have

“ have sometimes an ill grey. Yet surely, it stands with
 “ good reason to have the *cock-feather* - black or grey,
 “ as it were to give a man warning to nock right. That
 “ is called the *cock-feather* which standeth *above* in right
 “ nocking; which if you do not observe, the other
 “ feathers must necessarily *run on the bow*, and so spoil
 “ your shoot.”

In shooting at the Butts, *white* feathers have the
 advantage of being more easily discernible, at the longer
 lengths, when they light in the Butt, than dark coloured
 ones.

The feathers of the gander are, for the most part,
 white, and those of the goose black or grey.

In the choice of a feather, fletchers prefer those which
 are *dropped*, to those which are plucked.

SECTION VIII.

OF SETTING ON THE FEATHER.

*Feathers should be drawn and pared with Care—
Cautions and Reasons—Observations and Rules for
using Long and Short Feathers—Opinion respecting
the Inclination or Incurvation observed in setting
on the Feather—How far adopted by other Nations
—Circularity the Primum Mobile in Archery.*

ASCHAM, speaking of the setting on of the feather, says “ you must look that your feathers are not drawn too hastily, but pared even and straight with care. The fletcher is said to *draw* a feather, when he hath but one sweep at it with his knife; and then he planeth it a little, by rubbing it over his knife. He pareth it, taking time and care to make every part of the rib apt to stand *straight* and *even* upon the stele. This thing, if a man take not heed of it, he may, perhaps, have cause to say of his fletcher, as in dressing of meat is commonly said of cooks; and that is, *that God sendeth us good feathers, but the Devil naughty fletchers*. If any fletchers heard me say thus, they would not be angry with me, unless they were bad fletchers; and yet, those fletchers ought rather to amend themselves for doing ill, than be angry with me for saying the truth. The rib in a *stiff* feather, may be *thinner*, for so it will stand cleaner on; but, in a *weak* feather you must
“ leave

“ leave a *thicker* rib: or else, if the rib (which is the
 “ foundation and ground wherein nature hath set every
 “ division of the feather) is taken too near, it must
 “ needs follow, that the feather will fall and *drop* down;
 “ just as any herb doth, which hath its root too closely
 “ pared by the spade. The *length* and *shortness* of the
 “ feather serves for *different* shafts; as a *long* fea-
 “ ther, for a *long, heavy* or *big* shaft; the *short* feather
 “ for the *contrary*. Again, the *short* feather may stand
 “ *further*, the *long* feather *nearer* the nock. Your fea-
 “ ther must stand *almost straight* on, but yet in such a
 “ manner, that it may *turn round* in flying.”

Some modern archers hold this opinion with Ascham; namely, that each feather should be set on *inclining* to the right or to the left hand, according to the nature of the wing; the extreme, nearest to the pile, of each feather, being about one *quarter of an inch* out of a *direct* line: which method is said to have been an ancient practice, and well calculated to produce that rotatory motion in the arrow, which gives certainty to its flight. While others disregard it, as of little or no use. At present therefore, arrows are feathered sometimes straight, and sometimes with an inclination.

The Chinese-Tartars often carry this inclination almost *round* the arrow: but neither the Persians or Turks feather their arrows otherwise than in *straight* lines.

And here,” continues Ascham, “ I consider the won-
 “ derful nature of shooting; which standeth altogether
 “ by that fashion, which is most apt for *quick moving*;
 “ and that is by *roundness*. For first, the bow must
 “ be gathered round; in drawing it must *come round*
 “ equally: the string must be round: the stele must be
 “ round: the best nock round: the feather shorn some-
 “ what round: the shaft in flying must turn round:
 “ and

“ and if it flies far, it flieth a *round compass*; for either
 “ above or beneath a round compass, hindereth the fly-
 “ ing. Moreover, both the fletcher in making your
 “ shaft, and you in nocking your shaft, must take
 “ heed that *two feathers run equally* on the bow. For,
 “ if one feather runs alone on the bow, it will soon be
 “ worn, and will not be able to match with the other
 “ feathers: and again, at the loose, if the shaft be
 “ light, it will *start*, and if it be heavy it will *bobble*.”

“ And thus as concerning the setting on of your
 “ feather.”

SECTION IX.

OF TRIMMING THE FEATHER.

*Rules to be observed in Trimming the Feather—
 Plucking of Feathers—Flight-Arrows how fea-
 thered.*

“ **T**O shear a shaft *high* or *low*, must be as the shaft
 “ is, heavy or light, great or small, long or
 “ short. The *swine-back'd* fashion makes the shaft
 “ *deader*; for it gathers more air than the *saddle-back'd*;
 “ and therefore, the saddle-back is surer for *danger* of
 “ *weather*, and fitter for *smooth* flying. Again, to shear
 “ a shaft *round*, as they were wont sometimes to do, or
 “ after the *triangle* fashion, which is much used now-a-
 “ days, both are good. For *roundness* is apt for flying
 “ of its own nature, and all triangular shapes, the sharp
 “ point going before, are also naturally apt for quick
 “ entering; and therefore saith Cicero, *that cranes taught*
 “ *by nature, always observe in flying a triangular form,*
 “ *because that is so apt to pierce and go through the air.*”

“ Last

“ Last of all, *plucking* of feathers is of no avail, for
 “ there is no certainty in it; therefore, let every archer
 “ have such shafts, that he may both *know* them and
 “ *trust* them upon every *change* of weather. Yet, if
 “ they must needs be plucked, pluck them as little as
 “ can be; for so shall they be less inconstant.”

“ And thus” says Ascham, “ I have knit up in as
 “ short a space as I could, the *best feathers, feathering,*
 “ and *shearing* a shaft.”

All flight arrows have the feathers very *short*, and cut
 very *low*; generally not *longer* than *three inches*, nor
higher at the *nock-end*, than *half an inch*. On very *short*
 and *light* flight arrows, they are cut proportionally
 shorter and lower.

SECTION X.

OF THE HEAD.

*Origin and Use of the Head—Different kinds of Heads—
 for Pricking—Observations on the Use and Effect
 of each—Materials of Heads—Comparison between
 the different Effects of sharp and blunt Heads sup-
 ported by Experiment.*

“ **N**CESSITY,” says Ascham, “ invented a shaft-
 “ *head*: first, to save the end from *breaking*, then
 “ it made it *sharp*, to *stick* better; afterwards, it made
 “ it of *strong* matter to *last better*: last of all, the expe-
 “ rience and wisdom of men have brought it to such
 “ perfection, that there is no one thing so useful belong-
 “ ing to artillery, either to strike a man’s enemy forer
 “ in war, or to shoot nearer the mark at home, than is

“ a proper head for both purposes. For, if a shaft
 “ wants a head, it is worth nothing for either use (23).
 “ Therefore, seeing that heads are so necessary, they,
 “ of necessity, must be attended to. *Iron* and *steel* are
 “ the fittest for heads.”

“ Now, with respect to heads for *pricking* (24),
 “ which is our purpose, there are several kinds: some
 “ are blunt heads, some sharp, some both blunt and
 “ sharp. The *blunt* heads men use, because they per-
 “ ceive them to be good to *keep a length* with. They
 “ keep a good length, because a man pulls them no
 “ further at one time than at another: for, in feeling
 “ the plump end always equally, they may loose them
 “ equally: yet, in a *wind* and *against* the *wind*, the
 “ weather hath so much power on the broad end, that
 “ no man can keep any sure length with such an head.

(23) An arrow *without a head* will not fly to any considerable distance, particularly if the pile end of the shaft does not *outweigh* the nock-end. Lord Bacon, indeed, tells us (what must require extraordinary faith in his opinion to credit) that an arrow, without an iron point, will penetrate to the depth of *eight inches* into a piece of *wood*, when shot from a Turkish bow; while another arrow, *having an iron point*, will not penetrate near so deep. See *Expt. Solitary*, 701. *Nat. Hist.* We read that Lord Clifford fell in the battle of Towton; an arrow *without an head*, shot from a bow of some one laid in ambush, having pierced through his throat, and stuck in his neck. *Speed*, p. 687.

(24) Ascham observes, that “ the heads of the English arrows
 “ were better in war, than either forked heads or broad arrow
 “ heads; for, the end being lighter, they flew a great deal faster,
 “ and gave a severer stroke.” Those used when armour was
 worn, were solid, and nearly heart-shaped, with small barbs and
 ridged. In a preceding section (Part. 4. Chap. 6. Sec. 3.)
 is noticed an order for arrows issued in the Reign of Edward III.
 which directs that the wings or beards of the heads shall be made
large. Mr. Moseley has given Plates of a variety of arrow-heads,
 for war. They are taken chiefly from those engraved in P re
 Daniel’s *Histoire de la Milice Francoise*; and seem to have been, for
 the most part, arrow-heads used by the French, and particularly
 by the cross-bowmen.

“ Therefore

“ Therefore, a *blunt* head, in a *calm* or *down* wind, is
 “ very *good*; otherwise none worse.”

“ Heads sharp at the end, without any shoulders,
 “ (I call that the *shoulder* in a head which a man’s
 “ finger shall feel before it comes to the point) will
 “ pierce quickly through a wind, but yet the *sharp*
 “ head has two disadvantages; the one, that it will keep
 “ *no length*: it keeps no length, because no man can
 “ pull it with certainty as far at one time as at
 “ another; it is not drawn with certainty so far at one
 “ time as at another, because it wants the *shouldering*;
 “ wherewith, as with a sure token, a man may be
 “ warned when to loose: and also, because men are
 “ afraid of setting the sharp point in the bow. The
 “ other disadvantage is that, when it is lighted on the
 “ ground, the small point shall every time be in dan-
 “ ger of being *hurt*, which thing, of all others, will
 “ soonest make the shaft to lose the length.”

“ Now, since blunt heads are good to keep a length
 “ with, yet bad for a wind: sharp heads, good to pierce
 “ the weather, yet bad for a length: certain head-
 “ makers (dwelling in London) perceiving the advan-
 “ tages of *both* kinds of heads joined with an incon-
 “ venience, invented new files and other instruments;
 “ wherewith they brought heads for pricking to such
 “ perfection, that all the advantages of both heads
 “ should be united in one, without any disadvantage at
 “ all. They made certain kinds of heads, which men
 “ call *high-ridged*, *crested* or *shouldered* heads, or *silver-*
 “ *spoon* heads (on account of the likeness such heads
 “ have to the knob end of some silver spoons). These
 “ heads are good, both to *keep a length* and also to
 “ *pierce* a wind: to keep a length, because a man may
 “ with certainty pull them to the shouldering every
 shoot,

“ shoot, and no further. To pierce a wind, because
 “ the point, from the shoulder forwards, breaks the
 “ weather, as all other sharp things do. So, the blunt
 “ shoulder serves for the sure keeping a length: the
 “ point also is always fit for piercing in rough and
 “ troubled weather.”

With respect to the *materials* for heads, (which when not used in war are termed *piles*) it may be noticed, that the modern Flemish fletchers make many heads of *horn*, which answer extremely well; but they are chiefly used for the two *short* lengths; namely, the four-rod length, and the eight-rod length.

Ascham's observation, that *sharp* heads pierce the wind better than *blunt* ones, deserves some consideration; and may require further experiment. The following trial to prove the justness of his opinion, was lately made. Six arrows, of *equal length* and *weight*, were constructed with very great nicety; *three* of them having *sharp* piles; and the other three of them having that sort of pile, which Ascham mentions to have been made by the London head makers (now called a *roving pile*): the first three were shot against the latter, several times, the wind being very gentle; and, the result was, that the *blunt* piles always flew *further* than the *sharp* ones, by about *fifteen yards*.

SECTION XI.

OF SETTING ON THE HEAD.

Rules for setting on the Head—Reasons why the short Head is better than the long Head.

“ **H**EADS, says Afcham, should be set *full on* and
 “ *close on*. Full on, is when the wood is beat
 “ hard up to the end or stopping of the head. Close
 “ on, is when there is left enough wood on every side
 “ the shaft to fill the head: or when it is neither too
 “ small nor yet too large. If there is any fault in any
 “ of these points, the head, when it lights on an hard
 “ stone or ground, will be in danger either of breaking
 “ or being otherwise injured. Stopping the head with
 “ lead, or any thing else, is now needless: because,
 “ every *silver-spoon* or *shouldered* head is stopped of
 “ itself. *Short* heads are better than long: for first,
 “ the long head is worse for the maker to file straight
 “ equally every way: again, it is worse for the fletcher
 “ to set straight on: thirdly, it is always in more dan-
 “ ger of breaking when it is on.”

CHAPTER VII.

OF THE BELT, TASSEL AND GREASE-POT.

Their different Uses.

THESE articles have already been enumerated among the necessary appendages of an archer.

The *Belt* (to which the tassel and grease-pot are suspended) is furnished with a *Well* to receive the arrows for immediate use.

The *Tassel*, which is made of worsted, (generally green,) is used for the purpose of wiping the arrows after they are drawn from the ground.

The *Grease-Pot* (which is made of wood or horn) is filled with a composition of *suet* and *white wax*, to be put occasionally upon the fingers of the shooting-glove, to render them more pliant, and cause a ready and easy loofe.

Instead of the tassel and grease-pot; the archers, in former times, were, as Afcham tells us, always provided with a piece of cloth and some deer's suet.

CHAPTER VIII.

OF SHOOTING IN GENERAL.

SECTION I.

*General Observations—Faults observed in Archers—
Ascham's Five Points of Archery.*

“ HE that would attain high perfection in shooting,” says Ascham, “ must needs begin to learn it in his *youth*; the omitting of which thing in England causes both fewer shooters, and also, that every man that is a shooter to shoot worse than he might, if he were taught. But the not having used shooting in his youth should *discourage* no man that is wise. For, wisdom may work the same thing in a man, that nature doth in a child.”

“ A child, by three things, is brought to excellence. By *aptness, desire* and *fear*. Aptness makes him pliable like wax, to be formed and fashioned even as a man would have him. Desire, to be as good or better than his fellows, and fear of them whom he is under, will cause him to take great labour and pains with diligent heed in learning any thing: whereof proceedeth, at the last, excellence and perfection. A man may, by wisdom in learning of any thing, and especially to shoot, have three like advantages also: whereby he may, as it were, become young again,

N

“ and

“ and so attain to excellence. For, as a child is apt
 “ by natural youth, so a man, by using at the first
 “ *weak* bows far underneath his strength, shall be as
 “ pliable and ready to be taught fair shooting, as any
 “ child: and *daily use* of the same shall both keep him in
 “ fair shooting, and also, at the last, bring him to strong
 “ shooting. And, instead of the fervent desire, which
 “ provoketh a child to be better than his fellow; let a
 “ man be as much stirred up with *shame* to be *worse* than
 “ all other. And, the same place that *fear* hath in a
 “ *child*, to compel him to take pains, the same hath
 “ *love of shooting* in a *man*, to cause him to forsake no
 “ labour, without which no man nor child can be
 “ excellent. And thus, whatsoever a child may be
 “ taught by aptness, desire and fear; the same thing, in
 “ shooting, may a man be taught by weak bows,
 “ shame and love.

“ The best shooting is always the most graceful
 “ shooting; and Crassus sheweth in Cicero, that as
 “ gracefulness is the chief point and most to be sought
 “ for in all things, so gracefulness alone can never be
 “ taught by any art or craft, but may be perceived well
 “ when it is done, not well described how it should
 “ be done. If a man would set before his eyes five or
 “ six of the best archers that ever he saw shoot; and of
 “ one learned to *stand*; of another to *draw*; of another
 “ to *loose*; and so take of every man what every man
 “ could do best; I will venture to say, he would come
 “ to such gracefulness, as never man came to yet.
 “ But faults in archers do exceed the number of archers,
 “ which are caused by the use of shooting, without
 “ teaching.”

“ All the discommodities,” says Ascham in the quaint
 Phrasology and curious Orthography of the sixteenth
 century, “ whiche ill custome hath grafted in archers,
 “ can

“ can neyther be quycklye poullèd oute, nor yet fone
 “ reckened of me, they be so manye.

“ Some shooteth his head forwarde, as though he
 “ woulde byte the marke: an other stareth with hys
 “ eyes, as though they shulde flye out: an other wink-
 “ eth with one eye and loketh with the other: some
 “ make a face with wrything theyr mouth and counte-
 “ nauce so, as though they were doying you wotte
 “ what: an other blereth out his tongue: an other
 “ byteth his lypes: an other holdeth his neck a wrye.
 “ In drawing, some fet such a compasse, as thoughè,
 “ they woulde, tourne about and *blysse* (25) all the
 “ feelde: other heave theyr hand nowe up now downe,
 “ that a man cannot decerne wherèat they wolde shote:
 “ an other waggeth the upper ende of his bow one way,
 “ the neyther ende an other waye: an other wil stand
 “ poyntinge his shafte at the marke a good whyle, and,
 “ by and by, he will gyve him a whip, and awaye *or a*
 “ *man wite* (26): an other maketh such a wrestling with
 “ his gere, as though he were able to shoote no more as
 “ longe as he lyved: an other draweth softly to the
 “ myddes and, by and by, it is gon you cannot know
 “ how: an other draweth his shafte lowe at the breaſte,
 “ as though he woulde shoote at a rouyng marke, and,
 “ by and by, he listeth his arm up pricke heyghte: an
 “ other maketh a wrynchinge with his backe, as though
 “ a man pynched hym behynde: an other coureth
 “ downe, and layeth out his buttockes, as though he

(25) “ This alludes to the actions of the Romish Priest in public benedictions. This passage may explain a very obscure phrase in Spenser, who calls waiving the sword in circles, *bleſſing the sword.*” Bennet’s *Aſcham. Note.*

(26.) In modern phraseology, this expression would be *ere a man is aware.*

“ shoulde shoote at *crowes* (27): an other fetteth for-
 “ warde his lefte legge, and draweth backe with head
 “ and shoulders, as though he pouled at a rope, or els
 “ were afrayd of the marke: an other draweth his
 “ shafte well, untyll within two fingers of the head, and
 “ than he stayeth a lyttle, to looke at hys marke, and,
 “ that done, pouleth it up to the head, and lowseth: which
 “ waye, although summe excellent shooters do use, yet
 “ surely it is a faulte, and good mennes faultes are not
 “ to be followed: summe drawe to farre, summe to
 “ shorte, summe to slowlye, summe to quicklye, summe
 “ holde ouer longe, summe lette go ouer sone, summe
 “ sette theyr shafte on the grounde, and fetcheth him
 “ upwarde; an other pouleth up towarde the skye,
 “ and so bryngeth him downwardes.”

“ Ones I sawe a manne whyche used a brasar on his
 “ *cheke*, or ells had scratched all the skynne of the one
 “ syde of his face with his drawynge-hand: an other I
 “ sawe, whiche, at euerye shoote, after the loose, lyfted
 “ up his ryght legg so far, that he was euer in jeoper-
 “ dye of faulyng: summe stampe forwarde, and summe
 “ leape backwarde. All these faultes be eyther in the
 “ drawynge, or at the loose; with many other mo,
 “ whiche you may easilye perceyue, and so go about to
 “ avoyde them.”

“ Nowe afterwarde, whan the shafte is gone, men
 “ haue manye faultes, whyche euell custome hath
 “ broughte them to, and specially in cryinge after the
 “ shafte, and speakyng words scarce honest for suche
 “ an honest pastyme. Such words be verrye tokens
 “ of an ill mynde, and manifeste signes of a man that
 “ is subiecte to immesurable affections. Good mennes
 “ eares do abhor them, and an honest man therefore
 “ wyl auoyde them.”

(27) “ That man holdeth his bow like a *crow-keeper*.” *Shakf. Lear.* Act. iv. sc. 6.

“ And

“ And besydes those whiche must nedes haue theyr
 “ tongue thus walkinge; other men use other fautes;
 “ as some will take theyr bow and wrythe and wrynche
 “ it, to poule in his shafte, when it flyeth wyde, as yf
 “ he draue a carte. Some wyl gyue two or three
 “ ftrydes forward, daunfing and hoppyng after his
 “ shafte, as long as it flyeth, as though he were a mad
 “ man. Some, which feare to be farre gone; runne
 “ backward; as it were to poule his shafte back;
 “ an other runneth forward whan he feareth to
 “ be short, heauynge after his armes, as though he
 “ woulde helpe his shafte to flye. An other writhe
 “ or runneth asyde, to poule in his shaft strayght. One
 “ listeth up his heele, and so holdeth his foot still, as
 “ long as his shafte flyeth. An other casteth his arm
 “ backward after the lowse. And an other swynges
 “ hys bowe aboute him, as it were a man with a staffe
 “ to make roume in a game place. And manye other
 “ faultes there be, which nowe come not to my remem-
 “ braunce.”

“ Thus, as you have hearde, many archers, wyth
 “ marryng theyr face and countenaunce, wyth other
 “ partes of theyr bodye, as it were menne that shoulde
 “ daunce antiques, be farre from the comelye porte
 “ in shootyng, which he that woulde be excellent must
 “ looke for.

“ Nowe ymagen an archer that is cleane wyth-
 “ out al these faults, and I am sure every man would
 “ be delyghted to se hym shoote.”

Having thus given us a pretty long catalogue of
 archers faults; Ascham, in the next place, tells us, that
graceful shooting consists of these things; of

Standing, Nocking, Drawing, Holding, and Loofing.

These five principal heads (which are now generally
 termed *Ascham's Five Points of Archery*) will be arranged

under different sections; in order to their being the more distinctly noticed and clearly understood. But, as an archer, after having furnished himself with a bow, must begin with *stringing* and *bracing* it; some observations upon those two heads, seem to be very necessary for his information, before he proceeds to apply the arrow to the string. And stringing the bow first offers itself to our notice: in treating of which Ascham will be our guide.

SECTION II.

OF STRINGING THE BOW.

Cautions—Different Effects of the high and low Bend—Rule for ascertaining the proper Bend—Of Stringing a Bow that is cast—Position of the String to be attended to.

“ **I**N stringing your bow,” says Ascham, “ you must observe the proper length of it. For if the string is too short, the bending will give, and at last slip and endanger your bow. If too long, the bending must of necessity be in the small of the string, which, being hard drawn, must consequently snap in sunder, to the destruction of many good bows. Besides, you must see that your bow is well nocked, lest the sharp edge of the horn cut the string in two. And that commonly happens when the string, at the bottom horn, has but one twist to hold itself by. You must also observe to set your string straight on, or else one end of the bow will writh contrary to the other, and break the bow. When the string begins, never so little, to wear, trust it not, but cast it away ;
“ for

“ for, it is 'an ill saved half-penny that costs a man a
 “ crown.”

“ Also, in stringing your bow, you must have regard
 “ to an high or a low bend, for they are directly con-
 “ trary in their purpose. The low or small bend has
 “ but one advantage, which is in shooting *quicker* and
 “ *further* than the other: the reason of which is, that,
 “ when the bend is low, the string has a longer space
 “ to act in before it parts with the shaft. The high
 “ or great bend possesses many advantages: for it
 “ makes the drawing and shooting easier, the bow
 “ being half drawn. It does not require a bracer, for
 “ the string, being at a great distance from the bow,
 “ seldom if ever reaches the arm: And, for the same
 “ reason, will scarcely ever hit a man's clothes. It
 “ does not injure the shaft-feather, as the low bend
 “ often does: and it admits of a man seeing his mark,
 “ much better than the latter. Therefore, let your bow
 “ have a very good bend, a *shaftment* and *two fingers*
 “ *at the least.*”

It has long been the custom, to ascertain the due bending or (as it is now generally termed) *bracing* of the bow by placing the fist perpendicularly on the interior upper end of the handle, raising up the thumb as high as it will reach. If the string touches the extremity of the thumb, the bow is deemed to be well braced; if it is higher or lower than the extremity of the thumb, it must be altered accordingly. By the *shaftment*, Ascham means either that part of the shaft or arrow which is occupied by the feathers, or else, that part of it which extends from the nock to the point of the feathers nearest the pile. Both the measure by the thumb thus extended, and this shaftment (if the feathers are not set very far from the nock) will be found to be about six inches, which is supposed to be a sufficient

bracing for common lengths. For very long lengths, the measure of the bending may be half an inch or one inch lower: but when bows bend forwards, or (in the archers phrase) *follow the string* very much, they necessarily enlarge the bending, and carry the string further from the bow.

If a bow is cast on one side (which will soon be discovered by looking down it when it is braced), let the string at that end of the bow which is cast, lie most on the convex side, which will tend to bring the bow into its proper line, and in some degree remedy the defect while it exists. This position of the string should be occasionally attended to, during the time of shooting, lest it should alter. And, the same occasional attention should, *in general*, be paid to the string; as the noose will sometimes slip a little awry although the bow is not cast; and, if the nock of the upper horn is not made true, the eye of the string will incline to one side, and make the bow crooked,

SECTION III.

OF BRACING AND UNBRACING THE BOW.

Ancient and Modern Methods.

THERE are two ways of bracing, and two of unbracing, the bow. The old method of bracing was performed by resting the lower horn of the bow upon the ground (the belly of the bow being turned towards the archers body); and whilst one knee pressed the belly outwards and the inside of one hand supported the upper end of the bow, the string was slipped into the nock, with the other hand. The modern way of performing

performing this, is to set the lower horn of the bow on the ground (the bow being held obliquely and the back turned towards the archer's body) against the inside of one foot, turning the toe of that foot a little inwards to prevent its slipping; and to pull up the bow strongly at the handle with one hand, whilst the wrist of the other hand, placed almost perpendicularly, presses down the upper limb of the bow, and the thumb and knuckle of the fore-finger of the latter hand carries the eye of the string into the nock. When the bow is very strong, by quickening the motion of the bracing-hand the bracing will become easier. This method of bracing a bow is not common to all archers. Some extend their finger, and others both the thumb and finger, bearing upon the palm of the hand or brawny part of the thumb, to bring the string into the nock. But herein, as well as in many other points in archery, an archer will find it necessary to consult ease and his own particular strength. The bow may be unbraced by holding it in the same position, pressing down the upper limb in the same manner, and unhinging the eye of the string with the thumb and forefinger; or, by placing the lower horn on the ground, keeping the bow in an oblique position, and pressing the belly, at the handle, outwardly with one hand; whilst the interior side of the other hand supports the upper limb of the bow, and the fore-finger of that hand unhinges the string.

In Strutt's *Horda-Angelcynnian* (vol. ii. pl. iii. fig. 15.) will be found engravings of ancient Norman Archers, one of which is seen bracing his bow according to the ancient custom above noticed.

If the bow is somewhat too powerful for the archer *alone* to brace, he will be able to brace it with ease, by the assistance of another person placing his finger on the
upper

upper horn, and bringing that downwards at the time the archer pulls up the bow at the handle and carries the string into the nock: or, by placing the upper horn of the bow under any kind of ledge or other support, and keeping it from slipping away, by pushing the lower horn towards the ledge strongly with his foot, whilst his hand carries the string into the nock.

SECTION IV.

OF STANDING.

Rules to be observed in ascertaining the proper Position and Attitude of an Archer—Authorities—Remarks and Instructions—Reference to the Frontispiece—Characteristics of Archery—The Archer's Attitude a Subject of Admiration.

“ **T**HE first point in shooting,” says Ascham, “ which requires the attention of the shooter, is to take such a footing and *standing* (28) as shall be both pleasing to the eye, and advantageous to his purpose: setting his countenance and all other part of his body in such a

(28) What Ascham here terms *standing*, he might with propriety have called *position*, *figure*, or *attitude*: for, his observations upon this head embrace more than the mere *footing*; and, in a subsequent part of his work (see *post*, sec. 12.): he again makes use of this word *standing*, in a more confined sense, and to signify barely the *footing*. On which account I have, for the sake of distinction, ventured to substitute the latter for the former word, as the head of the section referred to.

“ manner

“ manner and position, that both all his strength may
 “ be employed most to his own advantage; and his
 “ shot made and managed to other men’s pleasure and
 “ delight. A man must not go hastily about it, for that
 “ is rashness; nor yet make too much ado about it, for
 “ that is over-care: one foot must not stand too far
 “ from the other, lest he stoop too much, which is un-
 “ becoming; nor yet too near the other, lest he should
 “ stand too straight up; for so a man shall neither use
 “ his strength well, nor yet stand stedfastly. The mean
 “ betwixt both must be kept, a thing more pleasant
 “ to behold when it is done, than easy to be taught
 “ how it should be done.”

Ascham, having before enumerated all the faults, in
 his recollection, usual among archers, (most of which
 do not seem to have been *gentlemen’s* faults; for, we
 may suppose that he took many of his hints from
 clowns, and the inferior classes of people who came to
 shoot with their betters) has, in the next place, given us
 an hasty sketch of the true posture which an archer should
 adopt. But this part of archery requires much expla-
 nation, although, as Ascham justly observes, it is most
 difficult to be taught or described by the pen. How-
 ever, by way of confirmation to Ascham’s remarks,
 and the better to explain this part of archery, which
 merits great attention, two authorities occur: the first
 is taken from Bishop Latimer; who, in his sermon
 (quoted p. 80.) says, “in my time, my poore fa-
 “ ther was as diligent to teach me to shute, as to
 “ learn any other thinge: and so I thinke other menne
 “ dyd theyr children. He taught me howe to drawe,
 “ howe to *laye my bodye in my bowe, and not to drawe*
 “ *with strength of armes*, as divers other nations doe;
 “ but with strength of the bodye.” And the other from

Nicoll’s

Nicoll's London's Artillery; wherein he describes the proper figure of an archer, thus,

“ Setting his *left leg somewhat forth before,*
 “ His arrow with his right hand knocking sure,
 “ *Not stooping, nor yet standing streight upright,*
 “ Then with his left hand little 'bove his light,
 “ Stretching his arm out, with an easy strength
 “ To draw an arrow of a yard in length.”

The archer should not oppose his *front* but his *side* to the mark; by which means he not only eyes it better, but also gives a greater scope to his drawing arm.

By *laying the body in the bow*, is meant the *inclination* of the *head* and *chest* a little forwards: but the archer must bend as little as possible from the *waist*, and must beware of inclining to his *left side*. This inclination forwards, not only enables him to bring his bow-arm more in a direct line with his drawing-arm, and to see his mark better; but also, at the same time, frees his chest, coat and hat (which latter should be turned up on the shaft-hand side) from the string, in its return: and, when the bow-arm is brought forward, the string will not catch the upper edge of the bracer; which young archers often perceive, without being able to discover the cause or to remedy the fault. His knees should be *straight*, not bent, his hams being extended, but possessing an *easy* firmness; and he should keep his feet *flat* and *firm* upon the ground, without resting more upon one leg than on the other; for, a partial bearing upon one leg tends to render him unsteady, and to enervate his whole action. Yet, it has been observed, that the most perfect archer of this day was accustomed to lay a *little* more stress upon the *right* than upon the left leg. His left foot should be advanced a little before the right; the outside of the former should be almost parallel to the mark, whilst the

the latter may retain its common easy position. The heels may be about five or six inches apart.

It is, perhaps, more within the power and compass of the *pencil*, than the pen, to express and do justice to this part of archery; and therefore, the young archer is referred to the figure which forms the frontispiece to these tracts (the production of a celebrated modern artist). The design of this figure is to aid the foregoing verbal description, by conveying to the eye as accurate a representation as the pencil can well command, of the true position and attitude of an archer, drawing his bow *at a point blank mark*. It is not, indeed, an easy task for the greatest artist to express correctly and unitedly all the characteristic points of a perfect archer, in the act of drawing the bow and loosing the arrow: which form a display of *strength, ease, coolness, resolution, or fixed design, dexterity and vigour*, that most evidently indicate the united effort of the body and the mind; and form that model of gracefulness, the attainment of which is so pointedly recommended by Ascham.

In the archer's attitude, manliness and strength first strike us: for there is scarcely a muscle in the whole body, which does not perform a part in this united action. To these we see joined a natural ease, so necessary to give a proper scope to the due exertion of bodily strength, and which is supported by a coolness that carries with it the idea of pains and attention, and prognosticates success: the expectancy of which is heightened by an apparent firm and steady resolution or fixed design, highly portrayed in the *eye*, which seems *riveted* to the mark and looking in the center of *that* for the arrow which is *not yet loosed*. Lastly, we observe that critical niceness and dexterity, added to an
energy

energy and vigour in loosing the arrow, so essentially necessary to crown the whole.

The figure of an archer drawing his bow has always been a theme of admiration; as most justly conveying a true idea of the strength, elegance and dignity of the human form.

Captain Turner, whose travels have been quoted a little before (page 152, *note*), speaking of the archery of the Booteans, of whose skill in the use of the bow he was an eye-witness, makes the following remark. It "was," says he, "impossible to behold their sport without admiration; for, besides the striking peculiarities in the person and dress of a Bootean, the act of drawing the bow exhibits, in my opinion, one of the most graceful attitudes of muscular exertion: the fencing school has not one that displays an athletic figure to greater advantage." *Embassy in Tibet, Part 2. Ch. 1. p. 180.*

The archer's attitude did not fail to excite the talents and emulation of the greatest artists in former ages; to which, the productions of the ancients, still in existence, will bear ample testimony. The poet, the painter, the sculptor and the engraver appear to have been equally indebted to archery, for many of their exquisite performances (29).

So

(29) The following trifling occurrence led me to consider the great loss sustained by the *poet* and the *painter*, on the disuse of the bow. Passing a few days ago, through a principal street in London, I observed upon the pavement, the endeavors of a poor wounded soldier to attract the notice and charity of passengers, by some rude designs in chalk: among his figures was a *leg*, which he had represented as transfixed by a barbed arrow. Upon questioning him, whether he had ever received a wound in that part from an arrow, he answered in the negative: but added, that he had received a *bullet* in the same part, which passed through his leg; and that he had substituted the *arrow* by way of *symbol*. This circumstance brought to my recollection, that *greater artists* had

So great has been the success of Homer in his description of the archer drawing his bow, (See *Iliad*. 4. l. 123. &c.) that the great and "illumin'd" Gibbon, when quoting the passage, exclaims, "how concise—
" how just—how beautiful is the whole picture! I see
" the attitudes of the archer—I hear the twang of
" his bow."

SECTION V.

OF NOCKING.

*Nocking the easiest part of Archery—Cautions—
Method of preventing irregular Nocking—Of
Handling the Bow.*

" **T**O nock well," says Ascham, " is the easiest point
" of all; and therein is no art, but only constant
" attention to nock truly, not setting the shaft either
" too high or too low, but exactly strait a cross the
" bow. Inconstant nocking makes a man lose his
" length. And besides, if the shaft-hand is high and
" the bow-hand low, or the contrary; both the bow
" is in danger of breaking, and the shaft, if it is small,

had, upon similar occasions, been compelled to resort to this *symbol*. The artist, who designed the medal struck upon the late escape of the King from the pistol of a maniac, despairing to represent that weapon and its bullet so as to be *picturesquely* suitable to the ideas he wished to convey, has, I observe, boldly used the poor soldier's *symbol*, and designed an *arrow* broken by a shield, supported by an invisible arm. In the battle of Hastings, the poet describes the appearance of the arrow, after it had transfix'd the body, in many different ways. *Rowley's Poems*.

will

“ will start; if great, it will hobble. You must always
 “ nock the *cock-feather upwards*: and be sure the string
 “ does not slip out of the nock, for then all is in danger
 “ of breaking.”

It has been already remarked, that several modern archers, in order to prevent irregular nocking, whip the precise *nocking point* of the string with silk of one colour, and whip on each side of that, with silk of a different colour, the breadth of the drawing-fingers.

In order that the arrow may fly true to the mark; care should be taken, that the nocking-part of the string, when whipped, *fills* the nock of the shaft so tight as to prevent the arrow moving, without being liable to burst the nock of the arrow.

“ When,” says Ascham, “ you have fixed your shaft
 “ in the bow, you must take the latter exactly in the
 “ middle, or else you will lose your length, and risk
 “ the breaking your bow.”

By the *middle*, Ascham here means, that the *upper part* of the bow-hand should be upon the upper part of the handle of the bow, in a line with the nocking point on the string. The arrow should rest between the bow and the first joint of the fore-finger (but pressing against the bow); which finger may be raised a little, in order to make a better socket or groove for the arrow to lie in: and, the end-joint of that finger should be bent inwards.

SECTION VI.

OF DRAWING.

Drawing the best part of Shooting—Rules and Remarks.

“DRAWING well,” Ascham observes, “is the best part of shooting. And it is better to draw to the ear (whereby, Procopius observes, men shoot both stronger and longer) than to the breast. Leo, the Emperor, would have his soldiers draw *quickly* in *war*, for that makes a shaft flie apace.”

“In shooting at the pricks, hasty and quick drawing is neither sure nor graceful. Therefore, to draw easily and uniformly; that is to say, not moving the hand first upward, and then downward, but always after one and the same manner, till you come to the ridge or shouldering of the head, is best both for advantage and gracefulness.”

There is some difference among archers in the mode of drawing. Some extend their bow-arm completely, before they begin to draw; others extend it gradually as they draw, which certainly is the easiest method. Ascham has observed that, in his time, some, and those very good archers, drew their arrows within about two inches of the pile, then paused for a moment and corrected their aim, and afterwards drew home and loosed. But he deems this method a *fault* or *shift*, insisting that the drawing and loosing should be but *one continued action throughout*.

We must suppose, that Ascham was a proficient in the art, upon which he wrote, particularly as he gave up much of his time to the practice of it: and therefore, that he would not have hazarded a decided opinion upon this point, unless he had himself experienced the justness of his remark; and had found that his opinion was supported by the concurrence and practice of excellent archers. Yet it must be observed, that at this day, several of our best archers practise and approve of this very *fault* or *shift* (if Ascham will have it so). Other very good archers draw within two inches of the pile, and then draw and redraw (in a manner playing with and humouring the bow within those two inches) till they loose.

It is a principal rule in shooting, that the arrow should *always* be drawn *home*, in the manner Ascham describes; whether it is shot at a *short* or a *long* length. He has before; (See *ante*, Chap. 6. Sec. 10) explained the meaning of the *shoulder* of the head of the arrow. And by what he observes in this place, it should seem, that, in his time, the archers drew very near to the *point* of the head or pile. Perhaps it is best to do so, but it is not every archer that can (particularly when he uses the sharp or sugar-loaf pile) draw so near the extreme point of the pile, without being in danger of setting it in his bow. On which account, many archers do not draw beyond where the pile is joined to the wood: that is to say, they do not draw beyond the *wood* of the arrow.

We must recollect, that Ascham has cautioned us against making too great a *circle* with the body, and pointing the arrow very high or very low, *when we draw*. The foregoing rule for *standing* being observed, the archer will find, that as his side is turned to his mark, his arms in drawing will move in the arc of a circle.

circle. If he holds his drawing-hand about the height of his *waist*, he will bring it round to his mark in an easy curve.

SECTION VII.

OF HOLDING.

How Holding is to be performed—Position in which the Bow should be held.

“**H**OLDING,” says Afcham, “must not be long; for it puts a bow in danger of breaking, and also spoils the shoot: it must occupy so little time, that it may be perceived better in the mind, when it is done, than seen with the eye, when doing.”

By *holding*, Afcham *here* means, holding the *string*, when the bow is drawn up.

He has not noticed the *position* in which the bow should be held, at the time of shooting. In all or most of the prints of ancient archers, we see it held in a *perpendicular* position: (See the engravings to Strutt’s *Horda Angel-cynnan*.) This was certainly the most convenient position in battle, and it has been generally continued to this day. However, several of the best archers of this day hold their bows *somewhat obliquely*. Yet, for shooting straight, the former position should seem to be the most certain: and it must be observed, that the more distant the mark, the more perpendicularly must the bow be held.

SECTION VIII.

OF LOOSING.

Rules to be observed in Loosing.

“ **L**OOSING must be performed much in the
 “ same manner as holding. So quick and
 “ hard, that it be without any twitches: so soft and
 “ gentle, that the shaft fly not as if it was sent from a
 “ *bow-case*. The mean betwixt both, which is per-
 “ fect loosing, is not so hard to be followed in shooting,
 “ as it is to be described in teaching. For clean loos-
 “ ing, you must be careful of not hitting any thing
 “ about you. And remember to hold your hand
 “ always the same height on your bow, that you may
 “ keep the length truly.”

To loose well is the most difficult point in shooting; and most difficult, as Ascham observes, to be explained on paper: but, as good shooting depends greatly upon the *loose*, it is that branch of the art which must be studied with attention and practised with pains. The material points to be attended to in performing this movement, are—holding the bow-arm very firm at the moment of loosing, making, it as it were, a *vice* (upon which the steady flight of the arrow much depends):—bringing the elbow of the drawing-arm round;—and loosing *while drawing*, without making any pause *immediately* before the loose.

“ If,” says Ascham, “ you follow these precepts in
 “ standing, nocking, drawing, holding and loosing, they
 “ will

“ will, at last, bring you to excellent and successful shooting.”

It may be proper, at the close of the last of the foregoing five principal points in archery, to offer the few following remarks, applicable to all of them.

There is observable, in the practice of all arts, a great difference in the *manner* in which men perform their labours and operations. The cause is very apparent. Scarcely any two men will be found alike. We see how materially they differ from each other, in mental and bodily powers; and, how variously nature *characterises* their actions. Some are strong, some weak; some are quick, others slow in their actions. Objects, says Aristotle *in his Poetic*, may be the same, and the imitation performed by the same means, and yet in a *different* manner. These differences appear very forcibly to us in archery. But, independent of this remark, some allowance must be made for human errors. A perfect archer is, indeed, not every day's object. Ascham, speaking of his *own* times when archery was more generally practised than it is in these days, has told us, that if a man would set before his eyes *five* or *six* of the fairest archers that ever he saw shoot; and of *one* learned to *stand*, of *another* to *draw*, of *another* to *loose*, and so take of *every* man what every man could do best, he would, no doubt, arrive at such perfection as *never man came to yet*. He has also observed, that *good* archers have their *faults*. Daily experience proves to us, that bad instruction and ill example have, in all human actions, a rooted and prevailing influence. The greatest beauty is often marred by a blemish. We must therefore, in contemplating and feeling the effects of the former, not overlook or become insensible to the latter: and, upon all occasions, be particularly careful to distinguish *principle* from *custom* and *habit*, however well disguised

the latter may be. An attention to this rule, will be our surest guide to true and unerring excellence in archery.

SECTION IX.

OF SHOOTING AT MARKS.

First Lessons.

WHEN the archer has attained such a command over his bow, as to be able to brace and unbrace it; and to stand, nock, hold, draw and loose with *ease* and *dexterity* (30), he may proceed to shoot at a mark.

In modern archery, the first and shortest distance is thirty yards, the archer then proceeds to sixty; which latter distance is said to be a key to and to command *all* lengths. But, perhaps the Persian and Turkish me-

(30) The Persians, according to Chardin, attained to a very great degree of dexterity in these principal points. They shot, says he, into the air, as high as the bow would carry, endeavouring to excel each other in the height of the shoot. The art consisted in holding the bow properly, drawing and loosing the string with ease, without suffering the left hand which held the bow and was fully extended, or the right hand which handled the string, to shake in the slightest degree. And, that the instructors deemed the exercise well performed, when, the bow being held in the left hand stiffly stretched out, the string was drawn, with the thumb, to the ear, as it were to hang it there. Afterwards, says he, they learned to shoot at a mark. When, it was not only necessary to hit it, but also that the arrow should fly straight and firm, without tottering. Lastly, they learned to shoot with force and weight. Tom. 2. Ch. 12.

thod

thod is better: according to which, the learner is first to practise at twenty and even *ten* yards, at which distances an archer may become so expert as to hit the smallest mark.

SECTION X.

OF ELEVATION.

Observations on Elevation—Highest Point of Elevation—Different Methods made use of by Archers to obtain due Elevation.—Remarks.

ASCHAM has but barely dropped an *hint* upon this head, in observing “ that the arrow should “ fly a *round compass* ;” that is, in a parabola or curve; which implies the necessity of giving a degree of elevation to the bow: but the due extent of that elevation is a point of some difficulty, and depends chiefly on the judgment of the eye. If the elevation is too low, the arrow must fall short; and if too high, it must fly over the mark. In shooting at moderate lengths, the lower the elevation can be made, the more certain is the shoot; for, the more the arrow in its flight loses the track of a parabola or curve, and approaches to an angle, the less likely is it to fall upon the mark: and, the higher it ascends, the more it is liable to be affected by the wind. It is on this account, that a strong armed archer has the advantage of the weak-armed one: the former, by drawing a stronger bow, can reach his object

with a much less degree of elevation, than one who is constrained to shoot with a weak one. Yet, it must be observed, that some archers shoot (and by custom very well too) with an higher elevation than what the bows they shoot with require.

In shooting very great lengths, the bow must often be raised to the highest point of elevation that can extend the flight of a projectile. This elevation has been ascertained and fixed at forty-five degrees. But it seems, that an error of a degree above or below 45° , will not produce a sensible one in the distance: because, the sines, within a degree of 90° , differ very little from the radius, and those sines, near the elevation of 45° , are as distances. *Doctrine of Projectiles*, by William Starrat. Dublin, 1733.

In order to ascertain the due degree of elevation, some archers make use of the *knuckles* of the bow-hand as a guide and gradation or scale of height, raising or depressing the bow, and carrying the eye along a first or second knuckle, according to their idea of the distance, or the fall of their last-shot arrow. To bring this method to a greater nicety, others have drawn lines, in different colours, upon the glove of the bow-hand, answering to twice the number of the knuckles, (one line falling upon the center of each knuckle and another between each knuckle). Mr. Mason, in his *Considerations on the Long-bow and Pike*, suggests the following ingenious reflection to determine the distance of such objects as men and horses; namely, with the arm extended and the bow braced, to compare the height of objects from head to foot, at different distances; as they appear in comparison of the altitude of the upper part of the bow, when looking over the hand. And, he observes, that by settling the memory of this in
the

the eye, or noting the general marks of the variations, the archer can always determine the distance with considerable precision. It would be placing *archery* too much in the back ground, and entering too deeply into the science of optics, particularly the doctrines of fallacious vision and apparent magnitude, to prosecute this discussion further.

The advantages to be derived from the use of the methods of ascertaining the due degree of elevation before noticed, result, possibly, more from *habit*, than from *principle*; particularly as the parabolic *theory* of projectiles seems to be giving way to *practice* and *experiment* (31). The eye is an organ of wonderful power; and, as it is *taught*, so it continues to exercise its functions. And therefore, as he who is instructed to read Hebrew without points, will read it with, at least, equal facility with one who has always been accustomed to the use of such helps: so, the archer, who is at first instructed to shoot without having recourse to such means, (which may often mislead him through geometrical nicety), will shoot as well, or, possibly, better, without relying upon them; particularly, as some of those methods seem to have a tendency to detach the eye from the mark, upon which it should *always*, in shooting, be *fixed*.

When this elevation should *begin*, must depend upon these circumstances; namely, *distance—strength* and *spring* of the bow—and the *loose*. In modern archery, we generally shoot *point blank* at a *thirty-yard* mark. If the bow we use is very weak, and without much spring, it may, even at this short length, require some trifling degree of elevation. On the contrary, if it is

(31) See this subject examined and explained by the authors of the *Encyclopædia Britannica*, *Tit. Projectiles*.

pretty strong, or has a quick return, and is sharply loosed, it may enable us to shoot point-blank somewhat further.

SECTION XI.

OF THE WIND AND THE WEATHER.

Necessity for an Archer to understand and study the Nature of the Wind, and to become well acquainted with the Flight of his Arrows—Difference of the Seasons—Effect of the Weather upon the Bow and the Archer—Effects of the Wind in Archery—Course and Nature of Winds—Cautions to be observed in shooting near the Sea Coast and Rivers affected by a Tide.

“ THE greatest enemy of shooting,” says Ascham, “ is the *wind* and the *weather*; whereby the true “ keeping of a length is principally hindered. If this “ was not so, men, by teaching, might be brought to “ wonderful near shooting. And therefore, as in fail- “ ing the chief point of a good master is to know the “ tokens of a change of weather, and the course of the “ winds; that thereby he may the better come to the “ haven: even so, the best property of a good shooter “ is to know the nature of the winds, with him and “ against him; that thereby he may shoot nearer to his “ mark. Wise masters, when they cannot obtain the “ best haven, are glad of the next: so, good shooters “ who

“ who cannot, when they would, hit the mark, will labour to come as nigh as they can.

“ A good archer will, first, with attentive practice and marking the weather, learn to know the nature of the wind; and with prudence will measure in his mind, how much it will alter his shot, either in length-keeping, or else in straight-shooting. And so, with changing his standing, or taking another shaft, which he perfectly well knows will be fitter for his purpose (either because it is lower feathered, or else, because it is of a better wing) will so, manage with judgment his shot, that he shall seem rather to have the weather under his rule, by good caution and attention, than the weather shall appear to rule his shaft by any sudden changing. A shooter, who puts no difference, but shoots in rough and fair weather alike, shall always *put his winnings in his eyes*. Therefore, in shooting, there is as much difference between an archer that is a good *weather-man*, and one that knows and notices nothing about it; as there is between a blind man, and one who can see.”

“ Thus, with respect to the weather; a perfect archer must first learn to know the sure flight of his shafts, that he may be bold always to trust them. Then must he learn, by daily experience, all kinds of weather; the tokens of it when it will come; the nature of it when it is come; the diversity and altering of it, when it changes; and the decrease and diminution of it, when it ceases.”

“ He that would understand perfectly the wind and the weather, must put differences betwixt times. For diversity of time causes diversity of weather. As, throughout the whole year, spring, summer, autumn and winter; so, in one day, morning, noon, afternoon and evening, both alter the weather, and change
“ not

“ not only the power of the bow, but the strength of
 “ a man also. And to know that this is so, is suffi-
 “ cient for an *archer*: nor is it necessary for him to
 “ search into the cause, why it should be so, which
 “ belongs to a philosopher. In considering the
 “ time of the year, a wise archer will follow a good
 “ sailor. In winter and rough weather small vessels for-
 “ sake the sea: so likewise, weak archers, using small
 “ and hollow shafts with bows of little power, must
 “ be content to give place for a time. And this I do
 “ not say to discourage any weak shooter: for, as there
 “ is no better ship than a galley, in a smooth and
 “ calm sea; so, no man shoots more gracefully or
 “ nearer his mark, than some weak archers do, in a
 “ fair and clear day. Thus, every archer must know,
 “ not only what bow and shaft is fittest for him to shoot
 “ with, but also what *time* and *season* is best for him
 “ to shoot in. And, if the weather is too bad for your
 “ shooting, leave off for that day, and wait a better
 “ season.

“ In every one of the times before mentioned, the
 “ weather alters; sometimes it is windy; sometimes
 “ calm; sometimes cloudy; sometimes clear; some-
 “ times hot; sometimes cold; sometimes the wind is
 “ moist and thick; sometimes dry and smooth. A little
 “ wind, in a moist day, stops a shaft more than a good
 “ whisking wind in a clear day. And, indeed, I have
 “ observed, when there has been no wind at all, the air
 “ so misty and thick, that both the marks have been
 “ surprisngly large. And once, when the plague was in
 “ Cambridge, the down-wind twelve score mark, for
 “ the space of three weeks, was thirteen score and an
 “ half; and into the wind, being not very great, a
 “ great deal above fourteen score.

“ The wind is sometimes plain up and down, which
 “ commonly is most certain, and requires the least
 “ knowledge

“ knowledge; wherein an indifferent shooter, with indif-
 “ ferent instruments, if he can shoot home, may make
 “ the best shift. A side-wind tries an archer and good
 “ gear very much. Sometimes it blows a-loft; some-
 “ times close to the ground; sometimes it blows by
 “ blasts; sometimes it continues in one blast; some-
 “ times an archer will find a full side-wind, sometimes
 “ a quarter-wind (32) and more with him: or, on the
 “ contrary, against him; which may be discovered by
 “ casting up light grafs; and may be easily learnt
 “ by a very little observation and experience.”

“ To see the wind is impossible, so fine and subtil
 “ is the nature of it: yet, I once had an opportunity-
 “ of observing the nature of the wind, by attending to
 “ a drift of loose snow, over a plain of frozen snow, in
 “ a clear day. Sometimes the wind was not more
 “ than two yards broad, and would carry the loose snow
 “ as far as I could see: another time the snow would
 “ blow over half the field at once: sometimes the
 “ snow would tumble softly, and, by and by, it would
 “ fly surprisingly fast. And this I perceived also, that
 “ the wind goes by streams and not wholly together.
 “ For, I could see one stream within a score of me;
 “ then, the space of two score, no snow would stir;
 “ but, at a like distance, another stream of snow, at
 “ the very same time, would be carried likewise, but
 “ but not equally; for, the one would lie still, while
 “ the other flew apace, and so continue: sometimes
 “ more swiftly, sometimes more slowly, sometimes
 “ broader, sometimes narrower, as far as I could
 “ see. Nor did it fly straight; but sometimes it turned
 “ this way, sometimes that, and sometimes it ran

(32) Ascham distinguishes the archer's winds thus, *up-wind*,
down-wind, *side-wind*, *full side-wind*, *side-wind-quarter*.

“ round

“ round in a circle. And again, the snow would be
 “ lifted clean from the ground up into the air, and by
 “ and by, it would be all laid close upon the ground,
 “ as though there had been no wind at all: imme-
 “ diately, it would rise and fly again. And what was the
 “ most wonderful; at one time, two drifts of snow
 “ flew, the one out of the west into the east, the other
 “ out of the north into the east. And, by means of
 “ the snow, I observed two winds, the one cross over
 “ the other like two high-ways. And again, I could
 “ hear the wind blow in the air, when nothing was
 “ stirred on the ground. And, when all was still
 “ where I rode, not very far from me the snow was
 “ lifted up wonderfully. This experience made me
 “ more surpris'd at the nature, than skilled in the
 “ knowledge, of the wind: but yet, thereby I learned
 “ perfectly, that it is no wonder at all, that, in the wind,
 “ a man loses his length in shooting, seeing, that in so
 “ many ways, the wind is variable in blowing.”

“ The more uncertain and deceitful the wind is,
 “ the more heed must a wise archer give, to under-
 “ stand the changes of it. He that doth mistrust, is
 “ seldom deceived. For, although thereby he shall
 “ not attain to that which is best; yet, by such means,
 “ he shall at least avoid that which is worst. Besides
 “ all these kind of winds, you must observe if any cloud
 “ appears and gathers by little and little against you; or,
 “ if a shower of rain is likely to fall upon you; for
 “ then, both the driving of the weather and the thicken-
 “ ing of the air increates the mark: when, after the
 “ shower, all things are, on the contrary, clear and calm;
 “ and the mark, for the most part, new to begin again.
 “ You must take heed also; if ever you shoot where
 “ one of the marks, or both, stand a little short of an
 “ high wall, for there you may be easily deceived.

“ If

“ If you take grafs and caft it up, to fee how the
 “ wind is, you will frequently fuppofe that you fhoot
 “ down the wind, when you are fhooting directly
 “ againft it. And the reafon is plain: for the wind,
 “ which comes indeed againft you, rebounds back
 “ again at the wall, and whirls back to the prick and
 “ a little further, and then turns again; as violent
 “ water againft a rock or high beach. So that, the
 “ grafs caft up will fly that way which, indeed, is the
 “ *longer* mark; and deceive quickly a fhooter that is
 “ not aware of it. And this I have repeatedly experi-
 “ enced, when fhooting at marks ftanding within walls;
 “ as thofe at Norwich and York. And therefore, in
 “ fhooting at marks fo fituated, I made ufe of the
 “ following expedient: I firft went to the middle dif-
 “ tance between them, which was an open place, and,
 “ with a feather or light grafs, found out as well as I
 “ could, how the wind was: that done, I went to the
 “ prick as faft as I could, and according as I had found
 “ the wind when I was in the mid-way between the
 “ marks; fo, I was fain to be content to make my fhoot
 “ as well as I could.”

“ You muft alfo be very obfervant when you fhoot
 “ near the *fea-coaft*, although two or three miles from
 “ the fea; for there careful attention will mark ex-
 “ traordinary changes, in the cleareft day. The fame
 “ remark may be made by the fide of a river, efpe-
 “ cially if it is affected by a tide; where, whoever fhall
 “ pay a diligent attention to the tide and the weather,
 “ fhall eafily bear away the prize he fhoots for.”

SECTION XII.

OF THE FOOTING.

Footing or Standing in the Wind, the best means of counteracting its Effects.

“ **H**AVING thus marked the weather, you must,” says Ascham, “ pay much attention to your *standing*, that, by comparing the one with the other, you may regain by the latter what you lost by the former. And, in a *side wind*, you must stand somewhat *across* into the wind; by which means you will shoot the surer.”

In the preceding Section, we find Ascham calling our attention to the winds; in the present, he has given us an excellent rule for counteracting their effect upon the arrow.

It is usual, with several archers, to make what they term an *allowance* for the wind, shooting *wide* of the mark and on the side on which the wind lies, in order that the wind may *carry* the arrow to the mark. This requires very great judgment and nice shooting indeed, to be of any advantage; and frequently deceives. The young archer should be particularly cautioned not to trust too much to the wind: for, great reliance upon *that* will not only bring him frequent disappointment at any one time, but also may lead him to contract an habit of trusting more to the wind than to his shooting; by which means he will always shoot with much uncertainty. *Standing in the wind* and shooting through it,

it, will be found far more *certain* than leaving the shaft to be *guided* by the wind: for, by this means we render unnecessary, or, at least, greatly contract our allowance for it.

Ascham must frequently have experienced the good effect of this part of archery; for he adds, "this point well known and properly managed in shooting gains more advantage, commendation, and praise to an archer, than any *other thing* besides."

SECTION XIII.

OF TAKING AIM.

Observations.

"OF giving aim," says Ascham, "I scarcely know what to say. In a strange place, it takes away all opportunity of *foul play* (33), which is the only praise of it; yet, in my opinion, it hinders the knowledge of shooting, and makes men more negligent, which is dispraise. Though aim be given, yet observe, that at another man's shoot you cannot well take aim, nor even at your own; because, the weather will alter, even in a minute, and that at one

(33) I confess, that I do not comprehend what Ascham means by *foul play* in giving *aim*; particularly, as archery, of all other pastimes, seems capable of affording the *least opportunity* for foul play. In these days it is received and adopted as the most gentlemanly recreation, and is attended by the most liberal and mannerly society; who have no cause to exclaim with the poet, *procul 6 procul este profani*.

P

" mark

“ mark, and not at the other, and affect your shaft in
 “ the air, when you shall perceive no wind on the
 “ ground; as I myself have seen shafts tumble aloft in
 “ a very fair day.”

SECTION XIV.

OF KEEPING A LENGTH.

Cautions and Remarks.

“ **W**HEN,” says Ascham, “ you have taken good
 “ footing; before you set your shaft in the bow,
 “ observe whether it has any earth or wet adhering to
 “ it; for either of them will cause it to lose the
 “ length. You must also attend to the head, lest it
 “ should have received any hurt in the last shoot; for,
 “ by lighting upon a stone, the head will sometimes
 “ be injured, the shaft crooked, and the feather da-
 “ maged; the least of which accidents will occasion a
 “ man to lose the length. And therefore, they must
 “ be noticed when the shaft is taken up, and remedied,
 “ by making the head smooth, which will assist its
 “ flight. For which purpose, every archer carries about
 “ him a file, a stone, fish-skin, and a piece of cloth.”
 “ To look at the shaft head, at the loose, is the
 “ greatest help in keeping a length that can be; but
 “ it hinders excellent shooting; because a man cannot
 “ shoot perfectly straight, unless he looks at his *mark*;
 “ was I to shoot at a line, and not at a mark, I would
 “ always look at my shaft end.”

“ Now

“ Now, if you mark the weather *diligently*, keep your
 “ standing *exactly*, hold and nock *truly*, draw and loose
 “ always *alike*, and keep your elevation *correctly*, you
 “ will never miss your length.”

SECTION XV.

OF SHOOTING STRAIGHT.

*Observations—Different means to shoot straight used
 by different Archers—Different ways of looking at
 the Mark—Nature and Powers of the Eye—Causes
 of not shooting straight—Remedy—Necessity of
 keeping the Eye always fixed upon the Mark.*

LASTLY, says Ascham upon the subject of shoot-
 ing, “ it only remains for you to shoot *straight*.
 “ As the weather belongs principally to the keeping a
 “ length, (yet a side-wind belongs also to shooting
 “ straight), even so, the nature of the prick is to shoot
 “ straight. The length or shortness of the mark is
 “ always under the rule of the weather: yet, there is
 “ somewhat in the mark worthy the notice of an
 “ archer. If the pricks stand on a straight and plain
 “ ground, they are the best to shoot at. If the mark
 “ stands on an hill-side, or the ground is uneven, with
 “ pits and windings between the marks, the eye must
 “ think that to be straight, which is crooked. The
 “ effect of this is seen in painting, and it is enough for
 “ an archer to notice and attend to it. The chief rea-
 “ son why men do not shoot straight, is because they
 “ look at their *shaft*. And this fault arises, when a
 P 2 “ man

“ man is not taught to shoot when he is young. If he
 “ learns to shoot by himself, he is afraid of drawing
 “ his shaft through his bow; and therefore always keeps
 “ his eye upon his shaft, and custom confirms him in
 “ this fault. Men continue longer in this fault, be-
 “ cause they find it so advantageous in keeping a
 “ length; and yet, to shoot straight, they use several
 “ devices. Some fix their eye upon a tree or hill
 “ beyond the mark, or else notice some plain object
 “ between the marks: others find out some mark a
 “ bow wide of the prick, and then take care to keep
 “ themselves on the hand upon which the prick stands:
 “ a method which possesses a greater advantage, than
 “ those are apt to believe, who have not tried it.
 “ Some, and those very good archers [as has been
 “ before noticed] in drawing, look at the mark, until
 “ the shaft is drawn nearly to the head; then they
 “ look at the shaft, but at the very loose, with a second
 “ sight, they find the mark again. But this method as
 “ well as those before noticed, are but shifts, and are
 “ not to be followed in shooting straight. For to
 “ have the eye *always* on the mark, is the only
 “ way to shoot straight; and, I apprehend, so ready
 “ and easy a way, if it be learned in youth, and con-
 “ firmed by use, that a man will never miss therein.
 “ Men doubt what way is best in looking at the
 “ mark; whether betwixt the bow and the string;
 “ above or beneath the hand; and many other ways:
 “ yet, it is of little consequence, which way a man
 “ looks at his mark, if he shoots gracefully. The
 “ diversity of men’s standing and drawing is the cause
 “ of their looking at the mark different ways: yet, they
 “ all lead the hand to shoot straight, if nothing else pre-
 “ vents it. So that *gracefulness* is the only criterion for
 “ looking at the mark.”

“ Some

“ Some wonder, why, when the eye is fixed on the
 “ mark, the hand should go straight: but let them
 “ recollect, that the eye commands, as it were, all the
 “ members of the body. This is apparent in many
 “ things, but most evident, in fencing and fighting; in
 “ which a man shall read in the eye of his antagonist,
 “ where he intends to strike him. Therefore, an
 “ archer who learns to look at his mark when he is
 “ young will always shoot straight. What prevents a
 “ man, who looks at his mark, from shooting straight,
 “ are, a side wind; too strong or too weak a bow;
 “ a weak bow-arm; the feather running too much on
 “ the bow; a large-breasted shaft for one who shoots
 “ under-hand, because it will hobble; a small-breasted
 “ shaft for one who shoots over his hand, because it
 “ will start; a pair of winding pricks; and many other
 “ things, which an archer must notice and learn to
 “ amend.

“ If a man would leave off looking at his shaft, and
 “ would learn to look at his mark, he may make use of
 “ the following expedient; which a good shooter told
 “ me he once did. Let him take his bow at night, and
 “ shoot at *two lights*; when he will, from necessity, be
 “ compelled to look always at his *mark*, and never at his
 “ shaft; and this method once or twice used, will cause
 “ him to forsake looking at his shaft. Yet, must he
 “ be very careful not to *set* his shaft in his *bow*.”

Ascham means that *both* eyes should be fixed on the
 mark, as archers do not shut one in shooting.

I cannot, perhaps, finish this chapter on shooting,
 more to the archer's satisfaction, than by giving him
 the two following extracts, relative to the subject. The
 first is from Vegetius; and the other is taken from a
 book printed at the commencement of the seventeenth
 century.

“ Great attention should be given, that the young
 “ archer holds his bow with caution and skill, occupy-
 “ ing it manfully: that his left hand is steady; that his
 “ right hand draws the string with judgment; that
 “ both his eye and his mind act together upon the
 “ object of his aim: and that, whether on foot or on
 “ horseback, he learns to shoot straight (34).

“ Shooting in the long-bowe, is both healthful
 “ for the bodie, and necessary for the common-wealth;
 “ the first extending the limbes and making them
 “ pliant, the other an able strength fit to preserve
 “ and defend his countrie. And first, for shooting in
 “ the long-bowe, a man must observe these few rules:
 “ first, that he have a good eye to behold and discern
 “ his marke; a knowing judgment to understand the
 “ distance of ground to take the true advantage of a
 “ side-winde, and to know in what compasse his arrow
 “ must flie; and a quick dexteritie to give his shaft a
 “ strong, sharpe, and sodaine loose. He must, in the
 “ action itself, stand faire, comely and upright with
 “ his body; his left foot a convenient stride before
 “ his right; both his hammes stiffe; his left arme
 “ holding his bowe in the midst strecht strait-out:
 “ and his right arme with his three first fingers and his
 “ thumb (35) drawing the string to his right eare; the
 “ nock of his arrowe resting between his for-finger and

(34) At Doctores ad hanc rem et artifices eligendi: et major
 adhibenda solertia, ut arcum diligenter ac scienter teneant, ut
 fortiter impleant: ut sinistra fixa sit, et dextra cum ratione ducatur:
 ut ad illud quot ferendum est: oculus pariter animusque
 consentiant: ut sive in equo, sive in terrâ, rectum sagittare doceant.
Vegetius, Cap. 15.

(35) The thumb is not used, but somewhat turned down in
drawing.

“ long

“ long-finger of his right hand ; and the steale of his
“ arrowe, belowe the feathers, upon the middle knuckle
“ of his for-finger on his left-hand. He shall draw
“ his arrow up close to the head, and deliver it on the
“ instant, without hanging on the string. The best
“ bowe is either Spanish or English yewe, and the
“ worst of witchen or elm. The best shaft is of burch,
“ sugar-chest or brasell; and the best feather gray or
“ white.” *Country Contentments.* (London, 1615.)
Chap. 8. p. 107. *School of Recreation.* by R. H.
1684.

CHAPTER IX.

GENERAL OBSERVATIONS AND CAUTIONS.

SECTION I.

Means of attaining to Excellence in shooting—An Art in Archery to be found out and commanded.

IN a preceding part of the *Toxophilus*, we find Ascham referring the young archer to an attentive observation and imitation of the several qualities of the best archers. Bad precepts reduced into practice, as well as bad examples, will only bring him frequent disappointment. For, as Ascham observes, “there are
 “ some who possess a very good bow and good shafts,
 “ and very good knowledge of shooting, but they have
 “ been brought up in such *evil-favoured* shooting,
 “ that they can neither shoot gracefully, nor near the
 “ mark.” And that “the want of proper instruction
 “ causes many to decline beginning to shoot, and more
 “ to leave off shooting, when they have begun.”

After having obtained good instruction and example, practice and earnest endeavours must perform the rest; for, disuse and carelessness are sore enemies to archery.

There is, as Ascham observes, “*an art in archery*,” which we must endeavour to *find out*, and to *command*.

But

But we may say with the poet; *hoc opus, hic labor est.* There are many arts, in which men are so aided by a complication of mechanical power, that the *engine*, and *not the man*, may be said to accomplish the end. This is not the case with the bow, an instrument of most simple construction; and, being so, it depends, for its operation and effect, entirely upon the constant attention and skill of man. Perhaps, no art whatever requires more attention; if we would attain high perfection in it. Like the art of music which can produce many who can perform exceedingly well upon an instrument; yet but few *Orpheus's*; so, archery can boast of many good shooters, but of few *Robin Hoods*.

SECTION II.

Of using strong Bows—General Rules for choosing the Power of Bows.

IT is a common fault (particularly with young shooters, who, in general, are fond of exerting their strength to the utmost) to use bows, which are too strong for them to manage with ease. By which means, they not only strain their muscles, but sometimes injure them so much, as to deprive themselves of the exercise of the bow for a time; and some have, from this cause, repented that they ever took it up. Independent of the observation, it is often owing to this circumstance that young shooters make little progress in the art; for Ascham observes, that, “this thing makes some to overshoot the mark, some to shoot far wide, and perchance to hurt a by-stander.”
And

And, in another place, he remarks, " that the strongest men do not always draw the strongest shot: which proves, that drawing strong lies not so much in the strength of a man, as in the use of shooting. For, that a strong man not used to shoot, has his arms, breast and shoulders, and other parts, wherewith he should draw strongly, one hindering and stopping another."

And, " the stronger the man, the more unhandsofely he shoots; and the sooner he breaks his bow." But, " that if a strong man, with use of shooting, could apply all the parts of his body together, he would then both draw stronger and shoot better than another Man. And thus, strong men, without use, can do nothing in shooting, to any purpose, neither in war nor peace; but if they happen to shoot, yet, they have done in a shoot or two. When, a weak man, that is used to shoot, shall serve for all times and purposes; and shall shoot ten shafts against the other's four, and draw them up to the point every time, and shoot them to the most advantage: drawing and withdrawing his shaft when he pleases; marking at one man and yet letting drive at another. Again, he that is not used to shoot, shall by awkwardly holding his bow and knocking his shaft, and not looking to his string in time, continually risk the breaking of his bow. Besides, he will shoot very few shafts, and those most awkwardly; some not half drawn up; some too high; some too low; nor can he drive a shot at one time, or stop a shot at another; but out it must, and often to little purpose (36)."

Bishop

(36) The following anecdote will fully prove the truth of Afscham's observations. Some few years ago, there was a strong man named Topham; who exhibited surprising feats of strength, and who happened to be at a public-house near Iffington, to which

Bishop Latimer in his sermon (before quoted) informs us, "that he had his bows bought for him according to his *age* and *strength*, and, as he increased in them, so his bows were made heavier and stronger." This method, of learning to shoot, was scrupulously attended to by the Persians, who trained up their youth to be most excellent archers. And Leo, in his *Tactics*, advises, that the bow should be somewhat *under* the power of the shooter (37).

It is not possible to lay down any precise rule, with respect to the exact power of the bow which a young archer should *first* take up, or, which is adapted to *every* man. But an observation similar to what Ascham has made, in speaking of arrows, may be very properly applied to this head: namely, that when a man knows his own strength, and the nature of his bow, he must provide and fit himself accordingly: duly considering the kind of shooting he proposes to himself, with respect to distance, which must often determine his choice. However, it may be noticed, that few men

which the Finsbury Archers resorted after their exercise. Topham considered the long-bow as a play thing, only fit for a child; upon which, one of the archers laid him a bowl of punch, that he could not draw the arrow two thirds of its length. Topham accepted this bet with the greatest confidence of winning; but, bringing the arrow to his breast, instead of his ear, he was greatly mortified by paying the wager, after many fruitless efforts. The late Mr. Constable, who communicated this anecdote, was present at the time.

(37) It seems very necessary, to caution the young archer against a serious error which has crept into Mr. Moseley's *Essay on Archery*, in the quotation of this passage from Leo: according to which quotation, Leo directs the bow to be rather *above* than beneath the power of the shooter. See *Moseley*, page 262. The original speaks thus, Τοξάρια δὲ ἑκάστον κατὰ τὸ ἴδιον ἰσχυρὸν καὶ ἔχει ὑπερ αὐτοῦ, μάλλον δὲ καὶ ἀπανάληρα. Arcus etiam singulorum *viribus idoneos, non supra vires, sed potius infra vires utentium.* *Leonis Tactics*, cap. 6.

who

who have obtained their full strength, and are in perfect health, need fear to take up one under the power of forty-eight or fifty pounds for a short length; of fifty-five pounds for a long length; and of sixty-pounds for roving or flight shooting. Ladies and boys bows possess, on the average, a power of twenty-seven pounds. Yet, we find both boys and ladies, who can use bows of thirty-two pounds weight with ease and skill. The arrows, used by ladies and boys, seldom exceed the length of twenty-four inches. And it should be observed, that an archer may often find it more suitable to his strength, inclination and purpose, to *increase* the power of his *bow*, and *shorten* the length of his *arrow*.

SECTION III.

AFFECTIONS OF THE MIND.

IT is absolutely necessary, that the young archer should take up his bow with *coolness* and *attention*; for haste and too great eagerness are qualities in an archer which must be got rid of, before he can arrive at any degree of excellence in the art. As to *anger* and other affections of the mind, Ascham cautions us much against giving way to them. No instrument whatever is more affected by the impulse of the animal spirits than the bow. It is when not only our bows, but our *nerves* are well strung, that we can do justice to the art. We must call *courage* and *confidence* to our aid, applying, to our purpose, the motto of a noble house: "*Nec temerè nec timidè.*" What good effects these two
great

great requisites in archery will accomplish, cannot be more forcibly instanced, than in the following circumstance. At the battle of Agincourt, the English archers (who although almost to a man greatly reduced in strength, by the want of sufficient and proper food, and labouring under a raging dysentery) recollecting the valour of their fore-fathers, and encouraged by their brave prince, met undismayed their enemies. And historians inform us, “with such courage had the king’s words inspired them, that though before, they could scarcely bend their bows, they were now able to draw their yard-long arrows to the head.”

SECTION IV.

OF BREAKING BOWS.

Means by which Bows are broke—by the String—by the Shaft—by Drawing too far—Remedy and Tokens of these Causes—by Frets—Observations on the Remedy for Frets—by Shooting in Winter.

“A SHOOTER,” says Ascham, “breaks his bow commonly four different ways; by the string, by the shaft, by drawing too far, and by frets.

“By the *string*; when it is either too short, too long, not safely put on, put on with only one winding or twist in the noose, put on crooked, cut asunder by a bad nock, or permitted to remain too long on the bow. When the string fails, the bow must
“ of

“ of necessity break, and especially in the middle:
 “ because both ends, having nothing to stop them, fly
 “ back so far, that the belly must of necessity rise up
 “ violently; which you will perceive by bending a bow
 “ backwards. Therefore, a bow which *follows the string*
 “ is least hurt by the string breaking (38).

“ By the *shaft* a bow is broken, either, when it is
 “ too short, and so you set it in your bow; or, when the
 “ nock breaks on account of its smallness; or, when
 “ the string slips out of the nock on account of its
 “ wideness. For you pull it to your ear, and then let
 “ it go; which must of necessity break the shaft at
 “ the least, and endanger not only the shaft and the
 “ string, but also the bow: because, the bow possesses
 “ no power to counteract its force. This manner of
 “ breaking a bow, is the most dangerous for by-
 “ standers; for, in this case, you will sometimes see
 “ the end of a bow fly twenty yards from the shooter,
 “ and most commonly (as I have often observed) the
 “ upper end of the bow.”

“ Some archers, who either do not use a bow equal
 “ to their strength, or are apt or fear to *overdraw*
 “ their arrow, and thereby either set it in, or draw it
 “ through the bow, use a piece of cork cut in the
 “ shape of a *wedge* (about an inch broad) the base
 “ of this is glued against the inside of the bow, so
 “ that the arrow may rest upon it. The cork
 “ should be covered with parchment (the green co-
 “ loured is generally used), which helps to bind the

(38) Back'd bows being, on account of their reflex form and
 tendency, more liable to break by the failure of the string than
 self-bows, which generally follow the string: it has become an
 observation, with the bow-makers, that a smart-casting back'd-
 bow which stands the breaking of the first string, adds, thereby,
 a guinea to its value.

“ cork

“ cork tighter, and makes a smooth path for the
“ arrow.

“ The bow is drawn too *far*, two ways. Either,
“ when you take a longer shaft than your own,” [or
“ what your bow will bear], “ or else, when you shift
“ your hand too low or too high for shooting properly.
“ This means pulls a back in funder, and then the bow
“ flies into many pieces.”

“ So that, when you see a bow broken, having the
“ belly risen up towards *both ends* or *one*, the string
“ brake it: when it is broken in two pieces, and, as
“ it were, *even off*, and, especially in the upper end; the
“ shaft-nock brake it: when the back is pulled asun-
“ der in many pieces, too far drawing brake it. These
“ tokens are either always true, or else very seldom
“ erroneous.”

“ The fourth cause that breaks a bow is *frets*;
“ which render a bow apt and ready to break by any
“ of the three ways before mentioned. Frets are to be
“ found in a shaft, as well as in a bow, and they are
“ very similar to a canker, creeping and increasing in
“ such parts of the bow as are the weakest (39). To
“ prevent which, your bow must be well trimmed and
“ dressed by a skilful hand, that it may come round
“ compass every where. If your bow has a knot in
“ the back, you must beware of frets, lest the parts next
“ the knot are not left strong enough to bear with the
“ knot; for, if they are not, the strong knot will fret
“ the weak places near it. Frets are at first small

(39) “ Beware,” says Ascham, “ of your shaft-heads, daggers,
“ knives and tags; lest they scratch your bow; a thing, as before
“ observed, both unfightly to look on, and dangerous by giving
“ rise to frets.” At this day, when no daggers are worn, we have
“ little else besides the shaft-head to guard the bow from.

“ pinches,

“ pinches, and (as soon as they have shewn themselves) the places about the pinches must be scraped, to make them somewhat weaker; and that as well where there is any signs of their coming, as where it is actually pinched; by which means the pinches will die away, and never increase further into frets.”

“ Frets begin often in a *pin*, for there the good wood is corrupted, and must necessarily be weak, and consequently doth fret. Good bowyers therefore *raise* each pin, and allow it more wood for fear of its fretting. Bows, most commonly, fret under the hand; not so much, as some suppose, on account of the moisture as of the *beat* of the hand (40).”

“ There is no remedy for frets, but to make the fretted place as strong or stronger than any other. To fill up the fret with small shivers of a quill and glue, which some think will answer, must be useless. For, suppose the fret to cease, yet, since the cause which made it fret before (namely weakness of the place) is not removed, it must necessarily fret again. With respect to cutting out the frets, with all manner of piecing of bows, I must entirely exclude such shifts from perfect shooting. For, pieced bows, like old houses, are more expensive to repair, than convenient for use. Swaddling a bow much with bands seldom avails, unless it is to keep down a *spell* in the back; otherwise, bands either are unnecessary when the bow is good, or useless when it is spoilt. And, although mean and poor shooters

(40) This might have been the case, when the handle was only *waxed*: but, if there is plenty of wood in the handle, is now, (especially as the handle is covered) very uncommon.

“ will sometimes use pieced and bandaged bows,
 “ because they are not able to procure better; yet,
 “ upon good consideration, they will find it least cost
 “ and more pleasure to bestow a few additional shil-
 “ lings on a new bow, than to pay a small sum for
 “ piecing an old one.”

“ There is another means, which will soon cause a
 “ bow to be broken by one of the three ways be-
 “ fore noticed; and that is, shooting in winter when
 “ there is any *frost*; which penetrates wherever there is
 “ any watery humour; as there is in woods more or
 “ less: and, it is well known, that frozen substances
 “ will sooner break than bend. To prevent an acci-
 “ dent from such a cause; the bow must, before it
 “ is used, be brought to the fire, and there, by de-
 “ grees, rubbed and chafed with a waxed cloth: which
 “ will bring it to such a state, that it may be shot in
 “ with sufficient safety. Take heed also of misty
 “ and moist weather, which will hurt a bow more
 “ than any rain. For then, you must either frequently
 “ rub it, or else leave off shooting. In the field also,
 “ when walking between the pricks, you may, either
 “ with your hand or else with a cloth, keep your bow
 “ in such a temper.”

The end of this chapter affords a favourable oppor-
 tunity, of correcting an inaccuracy in a former page.
 (Page 194). In the explanation of one of Ascham's five
 Points of Archery (*drawing*); it was noticed, that he
 had cautioned us against making *too great* a circle with
 the body. This observation is not quite correct; for, in
 truth, the left side of the archer being opposed to his
 mark, *remains so* in the action of *drawing*: the *body*
 neither making any turn, nor describing any part of a
 circle. But, in bringing the bow round to the mark,
 the archer only raises his arms from his waist, in which
 action the bow and arrow move in a circular direction.

SECTION V.

OF PRESERVING BOWS.

Of Polishing Bows—Bow-Cases—of oiling Bows.

A SCHAM observes, “ that an archer should frequently rub his bow, with a woollen cloth waxed, till it shines and glitters; which will cause it to be clean, pleasing to the eye, of a good colour, and, in time, form such a hard and slippery polish upon it, that neither the weather nor wet, can hurt it; nor any fret or pinch be able to affect it. This should never be omitted after shooting (41).

“ Bows are greatly preserved by being kept in cases, made of baize or other woollen cloth; which will preserve them in their full strength, so that they will not give in any weather. Leather, being apt to get moist, is not so good for this use. Each bow, when carried to any distance, should have a separate case, to prevent their rubbing against each other: this case should not be tight, lest it strain the bow, and cause it to cast itself. Several bows thus cased,

(41) Sir John Smith has informed us (*ante*, Part I. Chap. ii.) That, in his time, the archers made use of a composition of wax, rosin and fine tallow, for polishing their bows; which preserved them from the effects of all weathers. The *copal oil varnish* diluted with *spirits of turpentine* is known to make an admirable varnish for wood, impervious to moisture and wet; and, probably, would prove a very great preservative to bows, particularly those which are backed; the latter being the soonest injured by damp, which frequently softens the glue: and, when they are drawn, causes the back to give way.

“ may

“ may be put into one large leathern case; and thus
 “ may be carried without injury. At home, be careful
 “ not to place your bow too near a stone wall, which
 “ will make it moist and weak; nor too near a fire,
 “ which will render it short and brittle: but, the best
 “ way is to put your bows into a wooden case (42).

Bows should occasionally be rubbed with linseed oil: once in a year is sufficient. Yew will absorb oil faster than most other woods, and therefore, care must be taken not to give it too much.

SECTION VI.

OF UNBENDING AND CHANGING BOWS DURING SHOOTING.

SOME archers have thought it necessary to unbend their bows, whilst others were shooting, and in walking from one mark to the other; in order to prevent the bow losing its spring, by being kept long bent. But, this precaution is unnecessary: a good bow being found to suffer no injury in several hours shooting. When the shooting is over, the archer should never fail to unbrace his bow. On this subject, Afcham gives us the following anecdote: I had, says he, two bows, the one
 “ quick of cast, neat and elegant, fit for pleasure and
 “ profit: the other a *lug*, slow of cast and following

(42) Very convenient cases have of late years been made, which are called *Afchams*, in memory of the author of the *Toxophilus*.

“ the string; more sure to last, than pleasant to use.
 “ By accident, they were both left bent all night, and
 “ part of the next day. In the morning, I found my
 “ good bow entirely cast on one side, and as weak as
 “ water: but, as to the lug, it was not at all the worse,
 “ but afterwards shot as well and as far as ever it did.”

An archer should avoid, as much as may be, *changing* his bow or arrows, *during the shooting*; as, the change of either, particularly of the *former*, will vary his shooting: however, in moving from a long to a short length, or the contrary, it frequently becomes necessary to change the arrows, and sometimes the bow: yet, some archers use a bow they can command, at all or most lengths.

SECTION VII.

ASCHAM'S CONCLUSION.

“ **T**HESSE things,” says Ascham, “ spoken of me
 “ generally and briefelye, if they be knowen,
 “ had, and handled, shall bringe a man to suche shoot-
 “ inge, as fewe or none ever yet came unto: but,
 “ surely, if he misse in anye one of them, he can never
 “ hitte the marke; and in the more he doth misse,
 “ the farther he shooteth from his marke.”

To this we may add another remark of Ascham's, in his own words; viz. “ Againe you knowe, Hesiodus
 “ writeth to his brother Perfes, “ that all craftes-men,
 “ by contendinge one honestly with another, do en-
 “ crease theyr cunninge with their substance.” And
 “ therefore, in London and other great cities, men of
 “ one crafte most commonly dwell together; because in
 “ honeste

“ honeste striving together, who shall do best, everye
 “ one may wax both cunninger and rycher. So like-
 “ wyse, in shootinge, to make matches, to assemble
 “ archers together, to contend who shall shoote best
 “ and winne the game, encreaseth the use of shootinge
 “ wonderfully amonges men.”

Besides the emulation naturally excited by competi-
 tion, the “ *Meed of the green Archer*,” is not want-
 ing to give life to his endeavours; since there are very
 few societies, which have not their bugles, arrows, me-
 dals, and other prizes (43). Excellence in this art,
 has in no age gone unrewarded. The applause of
 numbers, and a prize from the hands of its patrons, mark
 the history of home-bred archery. In early times, the
 victor (according to the *Garland*) was rewarded with a
 gilt wreath, a silver arrow, or a pipe of wine. At the
 shootings in the times of Henry VIII. and Charles II.
 Wood tells us, the archer’s prizes were bows of gold and
 silver, pieces of plate and money. *Bowman’s Glory*. The
 general meetings of the different societies of archers in
 England, since the late revival of the art, have been
 attended with a very considerable display of grandeur.
 At the meeting on Black-heath (in the year 1791) there
 were *sixteen pair* of targets on the ground; each pair
 having its society in uniform. The novelty of the
 sight attracted such a concourse of people, that the
 shooting was much impeded; which has obliged the
 archers, on public occasions, to resort to some more
 obscure place. The prizes were *gold* and *silver* medals.
*See a further account of this meeting in Hargrove’s Anec-
 dotes, p. 100.*

(43) The Toxophilite Society are now in possession of the badge,
 noticed by Mr. Barrington, and supposed to have been present-
 ed to the Finsbury archers, by Catherine of Portugal, wife of
 Charles II.

CHAPTER X.

OF THE SEVERAL KINDS OF SHOOTING, AND THE
RULES TO BE OBSERVED THEREIN.

THERE are six kinds of shooting with the long-bow: viz.

Roving—Hoyle-shooting—Flight-shooting—Butt-shooting—Prick or Target-shooting, and Clout-shooting.

SECTION I.

ROVING.

ROVING, or shooting at rovers, is doubtless of all other, the most ancient kind of shooting; and was principally attended to in this country, during the period when the bow was a national and military weapon. It was that strong and powerful kind of shooting, the neglect of which, both Hollinshed and Ascham so much lament. Rovers, are, in fact, (as the word imports) casual and unmeasured or varied marks; generally at considerable distances, and shot at with longer and heavier arrows than those used for most other kinds of shooting. These marks are of three sorts: namely, 1st, *Ground marks*; as land marks, stones, or any other objects that are sufficiently distinct, either upon the ground

ground, or not more than a foot or two above it. 2d, *High marks*; as trees, tall bushes, &c. 3d, *Butts, and prick marks*.

This kind of shooting was greatly prized by our ancestors, as peculiarly requiring not only much skill, but also considerable strength, and a knowledge of distance; the command of which two latter qualities in archery was every thing in the field. And, so attentive was the legislature to support and encourage these important points in the use of the bow; that we find, when archery began to decline upon the use of cross-bows and fire-arms, and men began, as Hollinshed observes, "to shoot compass for pastime," an act of parliament was passed (33 Hen. 8. c. 9.) whereby, it is enacted, "that no man under the age of twenty-four years shall shoot at any standing prick, except it be at a *rover*, whercat he shall change at every shoot his mark, upon pain for every shoot, doing the contrary, four-pence. And that no person, above the said age of twenty-four years, shall shoot at any mark of *eleven score yards or under*, with any *prick-shaft* or *flight*, under the pain to forfeit for every shoot, six shillings and eight-pence." The act does not prescribe the length or weight of the arrow to be used. The same act ordered the erection of butts in every town, at which men were to shoot on Sundays and holydays.

These butts were often shot at as *roving marks*, and not, as we generally shoot at them at this day, as *standing marks*, without changing the distance at every shot; but, going the round and changing the *butt* at every shot. Dr. Mulcaster (mentioned in a preceding part of these Tracts who lived at the time the above act of parliament passed) observes, that "in roving you may use either the *butte*, or the *pricke*, by the way, for your marke, as your pleasure shall be."

The Lengths in the Finsbury Fields, which were of very considerable extent, consisted of several hundred marks, from nine score to near twenty-score yards; and were marked by stones (44), on which the names of the marks were cut: many of them exist to this day. And the Archers division of the Artillery company of London have, for centuries past, been in the habit of shooting at those marks once in every three or four years; and causing all obstructions, which prevented one mark being seen from the other, to be removed: as their charter warrants. As was observed, this kind of shooting required skill, strength, and a good eye capable of ascertaining, by a glance, pretty nearly the distance of the mark to be shot at. It was, no doubt, the shooting alluded to by Leo, in his *Tactics*; who commanded the archers to exercise themselves “in holts, hills, dales, woods and plains, to enure them to all the chances of war.” Roving has the advantage of prick shooting, by carrying our steps through an extent of country. On which account, Dr. Mulcaster, speaking of the archery of England, adds, “wherein *roving* must needs be the best and most healthfull, both for varieties of motion in diversities of soile; and, by using *all* archery in exercising one kinde.” The particular advantage to the archer, who practises roving, is, that by shooting at high elevations, frequently at an elevation of forty five degrees, he draws more towards his breast, or the point of his shoulder; and, consequently, learns to command a very strong bow, acquires a knowledge of distance, and gives a degree of more powerful exertion to his body, than most other kinds of archery

(44) See a copy of a map of some of these marks annexed to Barington's *Observations on Archery*: and the *Ayme for the Finsbury Archers*, which latter contains the names and distances of all the marks.

afford;

afford; and, in fact, pursues the means to become a perfect archer. For Carew, in *his Survey of Cornwall*, speaking of the fame of the old Cornish archers, takes occasion to remark, "that for neere and well-aimed shooting, butts made them perfect in the one, and roving in the other: for, Prickes, the first *corrupter* of archery, through too much preciseness, were then scarcely knowne, and little practised." (45)

ORDER OF THE GAME.

Rules. (46)

1. For the finding of your mark, it must be *within every man's reach*. Also the precisely naming your mark, prevents much altercation.
2. For *whites* you may have as many as you will, so they be all *forwards*; and, if you shoot at any loose white, if it be *stricken out of fight*, it is no mark.
- 3d. Although the wood of the stake be above the pin (47), you are to measure at the *pin*, if there be any; because it is put in for that purpose.
4. If you find a bush or a black; whatsoever you find *biggest* in it, being within compass of the mark,

(45) Roving is still kept up by the Toxophilite Society. Mr. Barrington informs us, that the late General Oglethorpe, in company with the old Duke of Rutland and others of considerable rank, was accustomed to shoot in the neighbourhood of London. *Observations on Archery.*

(46) All these rules (except the three last) which were always observed by the Finsbury Archers, are taken from the *Aime for the Finsbury Archers*, and the rules annexed to *Shotterel and Durfey's Poem on Archery.*

(47) The pin or peg secured the mark to the stake.

you

you are to take the *highest* part thereof for your place to *measure at*.

5. For all trees you are to measure at *foot and pole*; except, in naming them, you say, at the *nail*, or at the *bole* in such a tree: or, being a tree of so small height, that you may reach the top of it with half your bow, then you may take the highest part to measure at: but, for foot and pole, you must measure a foot above the highest ground which joins the tree.
6. If, in measuring a shoot, the difference is so small that it cannot be decided: then that competitor shall win the shoot, which is best at the *next* mark.
7. If, in measuring a shoot, by haste, the mark is stirred out of its place, he is to lose the shoot that measures it.
8. If, at first coming to the mark, you claim two, and the contrary sides *draw their arrows*: you are to win no more than you first claimed, although your partner, when he comes, *challenges more*.
9. If you name one mark and *shoot at another*, you are to loose your shoot, and the others are to follow at the mark named.
10. If your arrow *breaks*, you may measure from the nearest piece that has *wood and head*, or *wood and feather*.
11. If you have any mishap, as in nocking amiss, &c. if you can reach your arrow with your *bow*, you may shoot again; if it fly further, it is a shoot.
12. In shooting at rovers, you must stand no further from your last mark [or standing place], than you can reach with half your *bow* (48). 13. He

(48) The rule in *Shotterel and Durfey*, adds, "but at *Pricks* you are permitted to stand *two bows* before your mark, and as much
" behind

13. He who gets the cast, has the privilege of naming the *standing place* and the *next* mark, and leads.

Note, It is a *general* rule at *all* games, that the shooter who gets the cast, or his partner leads.

14. No arrow can count which is not within *five bows* (49), or *ten yards* of some part of the mark.

15. Seven is the game.

Note. As it is not always possible to know, whether the mark given, is within the reach of every shooter: and it is not always convenient to be restrained in point of distance, on account of a weak shooter; therefore, the first of the above rules is subject to this variation, viz :

That, if any shooter thinks he cannot reach the mark, he may *walk in* a reasonable distance; upon condition, that he shoots with a *flight* arrow, and draws it to the *head*. It may here be observed, that in shooting games in general, the archer is at liberty to use what sort of arrows he chuses: each archer shoots two arrows; and a forfeit is generally paid, if an archer does not distinguish his arrow, by his own *particular mark*.

“ *behind it as you please.*” However, this part of the rule seems to have been long exploded, and the former part of it is adopted in *prick-shooting* as well as in roving.

(49) The measure *by the bow* is alluded to in the following stanza.

“ The screffes men schot foll fast,
 “ As archares that weren godde,
 “ Ther cam non ner ney the marke
 “ Bey half a god archares bowe.”

Robyn Hode and the Potten. New Garland.

SECTION II.

HOYLE-SHOOTING.

HOYLE is an old north country word, signifying small eminences, as mole-hills, or thistles, docks, and other prominent marks. Hoyle-shooting is a game mentioned by Drayton; who, speaking of Robin Hood and his archers, says,

“ At long butts, short and *hoyles*, each one could cleave the
“ pin.”

Poly-Olb. Song. 26.

This sort of shooting is (strictly speaking) *roving*; as the marks shot at are at varied and uncertain distances. Indeed, it differs from roving only in this; that those distances are *always short*: sometimes not more than fifteen or twenty yards, at the fancy of the leader. This shooting is used by way of variation, to conclude and *determine* butt-shooting, when the games at the *latter* are *equal* on both sides.

ORDER OF THE GAME.

Rules.

THE 4th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, and 15th, rules for roving, are applicable to hoyle-shooting.

The mark given is never to exceed *six score*—and the nearest arrow wins.

SECTION III.

FLIGHT - SHOOTING.

FLIGHT-SHOOTING takes its appellation from the *flight*, or light arrows used in this game: which is shot without regard to *mark*, or *fixed* distance. The lightest arrows that will stand in the bow, are made use of; and, the greatest possible distance is the only object.

This kind of shooting affords opportunities of trying experiments; by comparing the flight of long, short, heavy and light, and of sharp and blunt-piled arrows, in all weathers (50): as well as the powers of different bows.

ORDER

(50) It is surprising how a well-made and well-loosed arrow will contend against, and even *gain* upon the wind. The *swiftness* of an arrow is well described by Ovid:

Swift as his words the fatal arrow flew,
The Centaur's back admits the feathered wood,
And thro' his breast the barbed weapon stood.

Met. Fab. 2. l. 26.

And Mr. Moseley has given us the following lively and picturesque description of the *flight* of an arrow:

“ The appearance of an arrow on the wing, viewed on the side, is singularly interesting. Its steady movement—the curve it describes—its ascending and descending motion—its velocity, &c. are all sources of beauty which never fail to excite agreeable feelings in the mind, and, even lead us to attribute active powers, for a moment, to the shaft. Weakness and strength are well expressed by the arrow which arrives short, or which passes far over the target; and the different degrees of swiftness perceptible in arrows, from bows of various powers, immediately associate the ideas of bodily vigour and energy, in various degrees of strength.” *Moseley*, p. 273.

A *black* arrow is best seen in the air, and the archer can trace its flight better than the flight of any other.—Arrows may be stained with

ORDER OF THE GAME.

THIS game scarcely admits of any other rule, than that the *furthest* shot wins: yet, the 6th, 8th, 10th, 11th, 12th, 13th, and 15th rules for roving seem to be applicable to this kind of shooting.

SECTION IV.

BUTT-SHOOTING.

BUTT, says Mr. Barrington, in his *Observations on Archery*, is a word signifying a mound of earth on which marks are fixed to be shot at; and is of French extraction. We find that by the stat. of the 33d H. 8. c. 9. butts were ordered to be erected throughout England.

Butts are nearly square, and built in form of a wedge. They are made with turfs of earth. Those dug from a common, where the grass is short and the roots of heath plants are matted together in it, are the best for the purpose. These turfs are laid upon each other, and rammed down hard. The length of each butt in front is generally nine feet, or little more; the height seven feet: it is four feet

with a black dye made of copperas and logwood, with a small proportion of gum-arabic. They may be polished with shamoy leather, upon which a little tripoli has been put; then rubbed with linseed oil, afterwards dried and rubbed with a woollen cloth, and covered with the copal oil varnish, thinned with spirits of turpentine.

feet deep at the base; and about one foot four inches broad at the top.

They are frequently ornamented with *crown-clods*, (as they are called); that is, turfs cut into the shape of an urn or hour-glass, one of which is placed at each corner, and one in the middle. And, it is a very old custom, for the shooter, whose arrow lodges in one of the crown-clods, to pay *six-pence* as a forfeit to the *marker* (51).

Butts are placed at various distances. Those erected by the Toxophilite Society, are in sets: each set consisting of four, and each butt being thirty yards distant from the other; forming a chain of lengths of 30, 60, 90, and 120 yards,—and so disposed, that they do not stand in the way of the archer, when shooting at any of the lengths.

Upon these butts (breast or about three feet and an half high) is placed the mark; which is a circular piece of thin white paste-board, four inches in diameter.

Since the late revival of archery, a new kind of butt (said to have been invented in Scotland) has been introduced into the Toxophilite Society, and adopted by it.

(51) The marker is a person who attends the butt-shooting; always standing by the butt shot at. His business is to mark the spot in which every arrow lights in the butt; by placing, for about half a minute, his *marker* (a small white mark fixed in a stick which he holds in his hand) close to the arrow; so that the shooters may notice it. When he removes his marker, he gives them the following signals:

For the *best* arrow —Three shakes with the marker *over his head*.

For the *second ditto* —The like *below*.

For the *paper prick'd* —He takes off his hat and bows, *once* for the *outer circle*—*twice* for the *white*—and *three times* for the *pin*.

For an *over* arrow . . . —He moves the marker briskly *upwards*.

For a *wide ditto* . . . ————— *horizontally*.

For a *short ditto* . . . ————— *downwards*.

The marker seldom attends at any mark of less than *ninety yards*.

It

It is shot, under cover, at the four-rood-length. This butt consists wholly of *straw*, laid first in trusses, and then screwed down as tight as possible: the ends are afterwards cut smooth. This is a very pleasant butt to shoot at, is durable, (if kept under cover and preserved from wet); and never injures the arrow.

ORDER OF THE GAME.

THERE are two ways of shooting at butt-marks, viz. either *with* or *without* reference to the *inches*.

1. In the first case, *no* arrow counts which is not *within the inches* (or distances allowed). These inches or allowed distances, are as follow: *four* inches at the four-rood-length; *eight* inches at the eight-rood-length; and so on, allowing *one inch* for every rood (52).
2. In the last, the arrow *nearest to the mark* wins.

The Toxophilite Society, in order to save the trouble of frequent admeasurement when the *inches* are shot, place their white or mark upon a blue or dark ground; which forms an exterior circle of as many inches in diameter as are allowed. So that, as every arrow counts which comes within the inches; so, every arrow within the inches *must* be in the *paper*. Hence, this is called the *paper-game*; and is seldom shot at any other distance than the four-rood-length.

Shooting at the inches seems to have been a very ancient practice. In the ballads of Robin Hood, we find

(52) Many have *beat the inches* at the *four* and *eight* rood-lengths. But none have been known to do that, at the longer lengths. The inches are calculated from the *outside of the mark*.

mention of a *garland*; particularly in the song of *Robin Hood and Guy of Gisborne*; and, in *The Lytell Geste of Robyn Hode*.—(*New Garland*).

In the latter, we find the following régulation for this shooting laid down :

- “ On every syde a rose *garlonde*,
 “ They shot under the lyne.
 “ *Who so fayleth of the rose garlonde*,” say’d Robin,
 “ His takyll he shall tyne.”

Seventh Fytte. v. 180.

Rules.

The 6th, 7th, 8th, 10th, 11th, 12th, and 15th rules at rovers are applicable to butt-shooting.

The arrow is always measured from that part which is nearest to the *point* of the pin.

SECTION V.

OF PRICK-SHOOTING.

IN archery we frequently find mention of *prick-shooting*.—Prick-marks and prick-shafts are noticed in the stat. of the 33d H. VIII. c. 9. before cited. The latter, we know, are arrows considerably lighter than those used in other kinds of shooting, except flight-shooting. The ancient prick-mark was frequently called the *white*; and consisted, most probably, of a card or piece of stiff white paper.

In the *Garland*, indeed, we read of *prick-wands* and *willow-wands* (probably *peeled* sticks).

One thing we may collect, which distinguishes this kind of shooting from others; namely, that the prick or mark was generally *fixed* to one spot, and at a less dis-

tance than in other kinds of shooting, and not varied during the shooting; hence the statute terms it a *standing* prick or mark. Prick being a Saxon word for *point*, seems to indicate, that this kind of shooting was chiefly confined to small marks. It was that sort of *close* shooting which the statute intended to restrain; and which, Carew observes, "required too much preciseness." Holinshed and Ascham allude to it, under the term of "shooting *round compass*:" and they agree in opinion with Carew, that it was "the *corrupter* of archery," meaning the powerful archery of the fourteenth and fifteenth centuries.

It was, probably, termed shooting in *round compass*, because it was plain up and down shooting, at two short marks. To this kind of shooting King Edward the Sixth, doubtless, alludes, in his *MS. Diary*; where, speaking of a shooting match in which he bore a part—he observes, "I lost the chaleng of shoting at *roundes*, " and wane at rovers." *Cott. MSS. Nero. c. 10. p. 55.*

The marks used in this kind of shooting have, for more than two centuries past, consisted either of a small circular piece of white paper, fixed to a post by means of a hole and wooden pin (as appears to be represented in the frontispiece to *Markham's Archery*); or of a target. The former is now *always* placed upon a butt: the latter occasionally occupies its place on the butt (where we find it placed at public shootings).—See *The Remembrance of Shootings, in the Bowman's Glory*. But is generally placed upon a frame, which gives it any degree of elevation required.

It appears by the proceedings of the Finsbury archers, that in the year 1671, they designed and presented a target to the London and Westminster archers; and, that in the year 1754, the stewards were directed, "to provide a target, or square pasteboard, covered with
" cloth;

“ cloth ; round the center of which should be drawn a
 “ circle, and about that circle, four concentric rings, to
 “ be visibly and exactly distinguished by colours : so,
 “ that the target might consist of *five* rings, valued by
 “ *fifths* : of which, the *center* was to be the *captain's*—
 “ the second or *lieutenant's* was to be 4-fifths of the
 “ captain's—the third 3-fifths of the captain's—the
 “ fourth 2-fifths—and the fifth 1-fifth. The outside
 “ was to be painted black, and called *fous*, and to be of
 “ no value.”

The modern targets are made of oil cloth, divided into rings or circles as above described : but, instead of simple *rings*, the whole diameter, or space between each ring or circle, is *coloured*. The general colours are, for the *center*, *gold* ; then *red* ; the third white (termed the *inner white*) ; the fourth *black* ; and the exterior circle (termed the *outer white*) *white* (52). These colours being generally painted upon a dark-green ground, all beyond the outer white is now termed the *petticoat* ; and, till within a few years past, it was a custom of ancient standing and merriment, that an *horn spoon* should, during the shooting, be worn by whoever last shot his arrow into the *fous* or *petticoat*. This target cloth is sewed upon a *bofs*, which is made of straw (twisted as for bee-hives) with a flat surface.

(52) The original Finsbury target seems to have been preferable to the modern one, not possessing such a glare of colours.

A few years ago, a target, upon a new principle, called a *Blazon*, was introduced from Flanders, and shot at in Mr. Anderson's ground at Holloway. It was square, and was fixed so as to have one angle upwards. Instead of circles, the face of it was divided into squares, each bearing a number, and next to every number was a cipher. The highest number was 26, placed in the center, in a small circle ; round which, in the same square, was placed number 1 ; and the next highest numbers were at the corners and on the sides. This target was somewhat larger than our common targets.

ORDER OF THE GAME.

IN ordinary shooting, colour stamps no *particular* value upon the hit; but *every* hit in *any* colour counts *one*. At other times, (as in prize-shooting), the *first* shot in the *gold*; or, the *nearest center* shot, *during the shooting*, wins. And, sometimes *every* colour bears a *proportionate* value. Thus, a shot in the gold counts 9; in the red 7; in the inner white 5; in the black 3; and in the outer white 1: the exterior circle being, according to calculation, nine times larger than the interior one; and the same proportion being observed in calculating the value of each circle. The most central shot gives the title of *captain*, the next that of *lieutenant*—of the *target*. The *greatest number of hits* gives the title of *captain*; and the next greatest number, that of *lieutenant*—of *numbers*.

The modern target distance is *one hundred yards*. It was formerly greater. At the show and shooting in 1583, it was seven score and eight yards:—and in 1681 eight score. At the Finsbury yearly target, the first distance was eleven score yards, and, at every two or three ends, it was reduced ten yards, until it was eight score, at which it remained till the shooting was finished.

The size of the target should vary in proportion to the distance: thus, at *sixty yards*, it should be *two feet*; at *eighty yards*, *three feet*; and, at an *hundred yards*, *four feet*, in *diameter*.

Rules.

THE Finsbury rule allowed an arrow to reckon in that ring *broken or depressed nearest* the center; but in the
Toxophilite

Toxophilite ground, an arrow, *dividing* two colours, can only reckon in the colour *furthest* from the center.

The 6th, 8th, 10th, 11th, 12th, and 15th rules observed at rovers, may also be observed in this shooting.

SECTION VI.

OF CLOUT-SHOOTING.

THE *clout* is a small white target, generally about twelve inches in diameter. It is fastened to a short upright stick, which is driven into the ground somewhat obliquely, till the lower edge of the clout touches, or nearly touches, the ground. The clout, in former days, was a square white cloth.

This game is noticed by Shakspere. — See *ante*, page 110.

ORDER OF THE GAME.

THE clout is placed at the distance of nine or eleven score yards. If at the latter, the distance is generally reduced *half a score every game*, till it is drawn in to *nine* score, when it remains fixed. Or (according to the practice in Scotland), the first distance is *eleven* score, for *five double ends*; the next *ten* score, for the like number of double ends; and, the last distance is *nine* score yards.

Rules.

THE rules for this game are the 6th, 7th, 8th, 10th, 11th, 12th, 14th, and 15th rules used at rovers.

The shot must be measured from the *center* of the clout.

SECTION VII.

OF SHOOTING FOR PRIZES.

THE old custom, among the Finsbury archers, in shooting for prizes at the target, was, that the *first* shot in the *gold*, or interior circle, won. This custom probably took place, when the targets were fixed at greater distances than they are at present. But, as this method proved but ill calculated at the target distance now observed, either to excite emulation, or to display superior shooting; the Toxophilite Society new modelled the custom, by declaring, that the most central shot, made *during the whole shooting*, should be deemed the best, and win as the *first* center-shot formerly did. This method preserved the old custom of *center-shots*, and, at the same time, gave opportunity for a longer contest of skill. But yet it did not altogether decide *superiority* in shooting.—To determine which, the Society instituted another prize, entitled the *Medal of Numbers*, which is won by the *greatest* number of *bits* in the target, *without regard to colours*.

In order to carry the display of skill still further, they ordained, that the bugle (which is annually presented to them by their patron, his Royal Highness the Prince of Wales) should be shot for at the target, *changing the Length, and the Size of the Target every end, and giving a value to each colour, in proportion to its proximity to the center*.—(See *ante*, Page 113.) And, as an encouragement to the younger archers, it is a rule, that no member, who has won a bugle, can shoot for a *second* till each member has once won one.

This

This was a very old rule in prize-shooting; as appears by the following curious extract, from a very ancient manuscript, preserved in the Harleian collection; entitled "The Booke of certain Triumphes, upon the
 " Marriage of Richard Duke of York (son to Kinge
 " Edward IV.) with Ann Mowbray, Daughter to the
 " Duke of Norfolk."

" The challenge of the Ladie Maie's servants to all
 " comers, to be performed at Greenwich."

" To shoot standart arrowe, or flight (53)."

" Item, The fifteenth daye of Maie next followinge,
 " there shal be certain archers of the said Ladye's in the
 " felde, at the howers aforesamed; to shoot standart
 " arrowe and flight, with all comers. And he that wil
 " come and furthest shootes without stand, at any of
 " these games, or at all; (that is to saie), the answerer
 " that shootes the standart furthest, to have a prise de-
 " lived him by the judges. And he that shootes next,
 " another; and so in like case at the arrowe and flight:
 " provided always, that he that winneth any of the
 " prises, shall not after that shoote againe for none of
 " the prises of that game, he hath once woone of,
 " during the time."—*Harl. MSS.* No. 69.

(53) Stow informs us, that the citizens of London were accustomed to shoot before the Mayor, Aldermen, and Sheriff, in Finsbury-field, with the *standard*, *broad-arrow*, and *flight*, for games.—*Survey of London.* (1598). p. 77. And it seems, that the Lord-Mayor annually appeared to see a prize won, by shooting with a *pound-arrow*. *School of Recreation*, by R. H. London, 1684. 12mo.

SECTION VIII.

OF THE POPINJAY AND GOOSE.

UNDER the head of Games of Amusement, afforded by the Bow, we may add those of the *pepingoe* or *popinjay*, and the *goose*.

The first of these two games (which seems to be an humane imitation of that described in the *Iliad* and *Æneid*) is a mark, the shape and size of a parrot, projected two or three feet from the top of a church-steeple. It consists of three loose parts, (all fixed together upon iron pins or points); namely, the body and two wings: and is shot at perpendicularly (the archer resting his left foot upon the base of the tower); and, no arrow which does not strike one of the loose parts precisely *at the pin* which supports it, can unhinge it. This game is annually practised at Kilwinning, in Scotland.

The inhabitants of several parts of Flanders practise the same sort of game, under the title of the *Eagle*.

The *goose-shooting* was thus:—"A living goose was enclosed in a turf-butt, having its head alone exposed to view; and the archer who first hit the goose's head, was entitled to the goose as his reward. But this custom, on account of its barbarity, has been long laid aside: and, in place of the goose-head, a mark (of about an inch in diameter) is fixed upon each butt, and the archer, who first hits this mark, is captain of the butt-shooters for a year."—*Barrington*.

SECTION IX.

OF PLUCK-BUFFET.

IN the *Garland* we read of a ludicrous game, intituled *Pluck-buffet*, in which the King is made to engage with Robin Hood:

Our Kynge and Robyn rode togyder.
 For soth as I you say,
 And they shote *plucke-buffet*,
 As they went by the way.

And many a buffet our kynge wan,
 Of Robyn Hode that day;
 And nothyng spared good Robyn
 Our Kynge in his pay.

*Lytel Geste of Robyn Hode.
 Eight Fytte.*

This game is more fully explained in the preceding Fytte; where it was agreed, that whoever should fail of the rose-garland should

Bere a *buffet* on his *hede*:
 I wys ryght *all bare*.

*New Garland.
 Seventh Fytte.*

SECTION X.

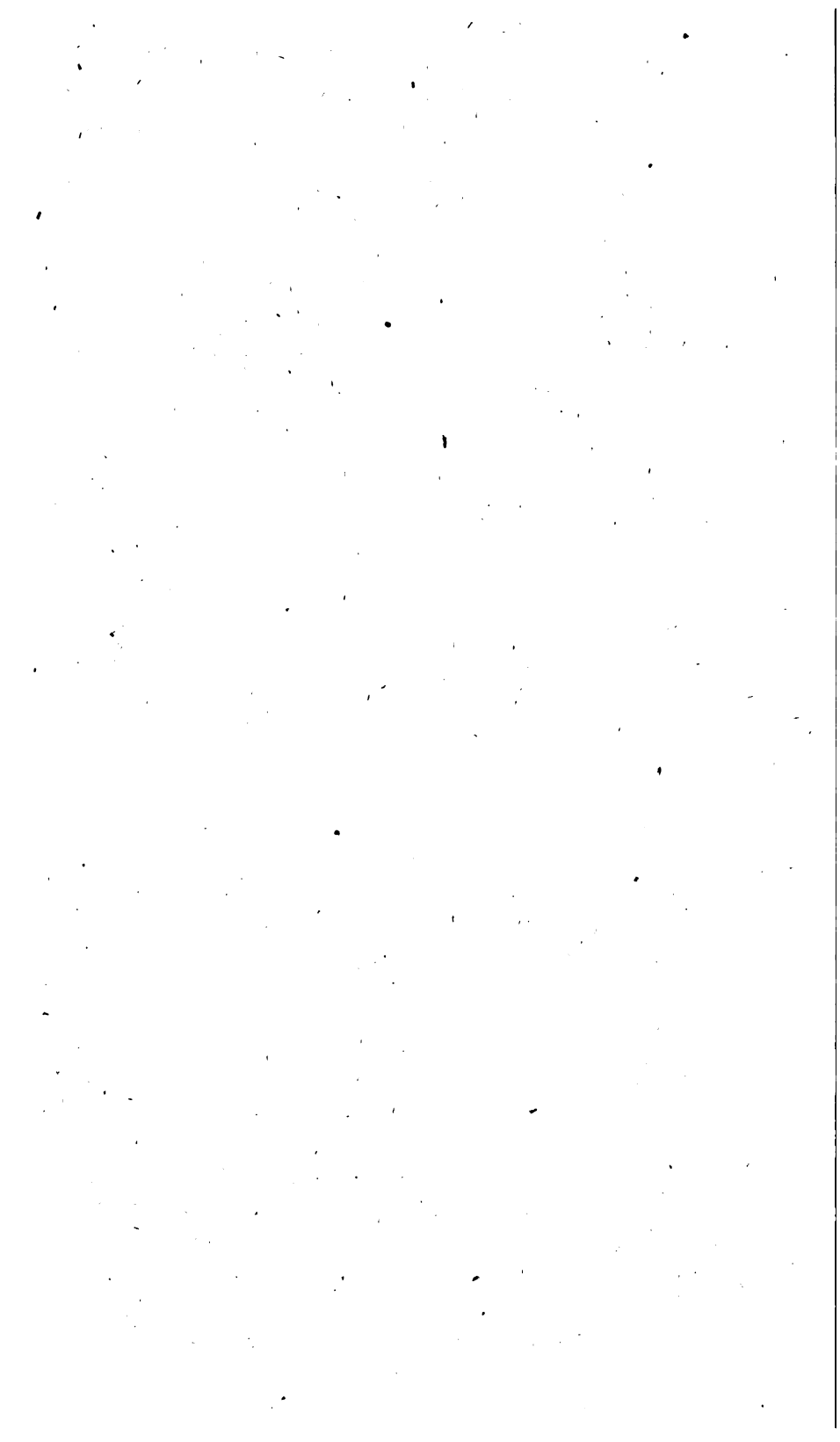
OF FISH-SHOOTING, &c.

ALTHOUGH *fishing* cannot regularly be introduced under the head of Games in *Archery*, yet is it an amusement, to which the bow can contribute; and, many archers may be inclined to try the experiment. Shooting fish with arrows, is an employment in which
 the

the inhabitants of many of the uncultivated parts of the globe are well skilled. A few years ago, Mr. Waring invented an arrow for this purpose, which has been used with great success, both in the meers in Cheshire, against those *tyrants* of the watty plain which frequently break through a net; and, in striking carp from the land.

Mr. Waring has also invented arrows for throwing *bullets* and *small shot*.—See a description of them, and of the *whistling* arrow, in Mr. Moseley's *Essay on Archery*. Mr. Moseley also mentions a singular invention (which he deems more curious than useful) for taking birds on the wing, by shooting a *net* over them, by means of an arrow.—Pages 135, 138.





A
REMEMBRANCE
OF THE WORTHY
SHOW AND SHOOTING

BY THE
DUKE OF SHOREDITCH,

AND HIS
ASSOCIATES

THE
WORSHIPFUL CITIZENS OF LONDON,

UPON

Tuesday the 17th of September, 1583.

Set forth according to the Truth thereof, to the everlasting
Honour of the Game of Shooting in the Long Bow.

BY W. M.



TO THE WORTHY
 SHOREDITCH DUKE,
 AND HIS TWO
 NEPHEWS,
 SONS TO THE
 EARL OF PANCRIDGE,

And to all the Worshipful Citizens and Chief Archers
 of the *City of London*:

W. H. wisheth Continuance of Health, with Increase of Honour.

BOLDLY have I presumed (*Right Worshipful Members*
 of this Honourable City) to publish unto the eyes of the
 world, your late laudable work, which not only beautified
 this city, but the whole realm of England. Rare was the
 fight, great was the cost, yet greater your good wills: the
 report whereof will be in memory while London lasteth.
 Now seeing no man taketh in hand to describe the same
 as it deserved, and pitying greatly it should lye bidden,
 I considered that blind Bayard oft times seemeth boldest,
 and thereupon my self (though least able of all other) have
 presumed, under your correction, to publish the truth of
 what I noted in the train: therein purposing, that though
 to your own ears it bringeth no matter of delight, yet the
 truth

truth of this seemly show (which fame hath far spread abroad) may through this realm be expressed; as also left in remembrance unto your childrens children, and their posterity after them: Beseeching therefore that your wisdomes would accept my good will, for which I remain thankfult during my life.

Your Worships

In all Humility,

W. M.

A

REMEMBRANCE, &c.

THE learned in time past have greatly commended the penning of histories, because that by them their posterity is certified, what hath been done in the days of their ancestors; the benefit whereof is greatly considered in the wisest of this age, and I would it were unknown to none. Our Elders heretofore that have registered the great battles and skirmishes in times past, mention that the Long-bow hath done great acts, and been the overthrow of mighty armies: wherefore considering what profit and honour our commonwealth of England hath gained by the long-bow, I have thought convenient to set down in memory that most honourable show of Archers, which was at London on the seventeenth of September, 1583; chiefly for two causes: first, to exhort our Countrymen to continue at home this laudable exercise, the better to discourage our enemies when they haply hear thereof, that by so notable a thing shewed but in a merriment, they may the better conjecture what English men could do, if necessity compelled them to the same. Secondly, to follow the custom of our ancestors, which is, to leave enrolled such matter as is worthy memory, that so good a work might seem new in such our successors,

S

fors, and procure them to the furtherance of the like causes in themselves.

The Prince of famous memory, King Henry the Eighth, having read in the Chronicles of England, and seen in his own time how armies mixed with good Archers, have evermore so galled the enemy, that it hath been great cause of the victory; he being one day at Mile-end when Prince Arthur and his Knights were there shooting, did greatly commend the game, and allowed thereof, lauding them to their encouragement.

This noble King at another time keeping a princely court at Windsor, caused fundry matches to be made concerning shooting in the long-bow: and to which came many principal archers, who being in game and the upshoot given, as all men thought, there was one Barlo yet remaining to shoot, being one of the king's guard; to whom the King very graciously said, win them all and thou shalt be Duke over all archers. This Barlo drew his bow, and shooting won the best. Whereat the King greatly rejoiced, commending him for his good archery; and for that this Barlo did dwell in Shoreditch, the King named him Duke of Shoreditch. (A sign of a princely mind to the encouragement of his poor subject.) The memory of all which, both by Prince Arthur and the Duke of Shoreditch, hath been greatly revived, and within these five years set forward at the great cost and charges of fundry chief citizens, whose names I omit. And now this present year 1583, much more beautified than ever it was, as hereafter is expressed. The worthy Shoreditch Duke, as successor to the former Dukes his predecessors, gave warning to all his Marquisses, Earls and Barons, with all their train of archers whatsoever, in and about the city of London, to be in readines to accompany him into the field, every one with a long-bow and four shafts, upon the seven-
teenth

teenth of September, and to meet him in Smithfield, which they did for the most part.

On which day in the morning, the Duke being at Merchant-Taylors Hall, there repaired unto him all those that were appointed for the conducting of his person to the place of meeting, as Barons, and a multitude of good archers under his own ensign; who with sound of trumpets, drums, and other necessary instruments for the beautifying of the same, passed along Broadstreet, where the Duke dwelled, marching through Moorgate to Finsbury Fields, and from thence into Smithfield, where a great many attended for him: then the black train, and the Goldsmiths went forward into Holborn, the Duke and his company following in a seemly order; where coming against Hatton-House, the Goldsmiths staid, and cast themselves into ranks, that the Duke might have fair passage between them: so that the Train being now marching along, and the Duke passing by the Marquis Barlo, alias Covell, he presented to his nobleness a wedge of gold, in sign of good will, which the Duke very thankfully accepted; then came the black train, offering by a Page a speech to this effect, "*that he was ready to aid him with all his power, for his safety, into the field:*" whereat the Page, out of a box, flung abroad, glittering like gold, certain spangles, in sign of liberality.

Then came the Marquis of Clarkenwell with Hunters, who having been abroad with their hounds, did wind their horns, so that the noise of them, together with the yelling and yelping of the hounds, and the whooping and hallooing of their Pages which followed, there was such a delight taken by the hearers thereof, as is worth memory; which Marquis coming with his Forester, proffered his service to the Duke, which he thankfully accepted; which hunters were under the

Earl of Pantridge, whose two sons being nephews to the Duke, came with their power of Knights, Barons and Squires, accompanied with many good and excellent archers, taking place, to the honour of the Duke, into the field. Then the Goldsmiths took their place behind the Duke, whose gunners, when the Duke was even past, gave a worthy volley of shot, which rung in the air like a thunder clap; and so took place in the hindward. Then went all the train through Chancery Lane, and turned towards London down Fleetstreet, until they came to Ludgate, where stood ready to receive them into the city, certain Knights of great worship, with many other of the Aldermen (1) of the city and sundry principal Commoners in the same, who being men of years, and had born great good will to the laudable game of shooting, entered with fair large arrows in their hands, in black gowns, citizen-like, and took their place behind the Duke; and as they yet passed through Paul's Church-yard on the south-side, there came sundry Citizens forth unto them (2), all in their gowns, and took place, every one having an arrow, as before, to the better beautifying and setting forth of the same. Thus passed they through into Cheapside, who by that time they were come thither, all their Train was in place, and marched as followeth. First came two Ensigns before the Marshal of the field, the Marshal being clad in green velvet and satin, with a truncheon in his hand: then followed him forty Foresters, apparelled all in green, every one bearing a bow and four shafts by their side, with horns at their backs, which they winded as they went along.

(1) Sir Owen Hopton, her Majesty's Lieutenant of the Tower of London, Sir Rowland Haward, and divers Aldermen of London.

(2) At Paul's School came unto them the Merchant Taylors in their gowns, every one having a fair broad arrow in their hands.

And between every one of them Pages (3), in white frocks girt unto them, upon which was sowed green oaken leaves, with caps made in the same manner; every one bearing a tiller-bow or cross-bow, and broad arrows in their hands, to the number of forty, all whooping and hallooing when the hunters did wind their horns. Then came six trumpets founding, with drums and fifes, guarded with halberds; then came the Marquis of Islington with twelve Knights, and those several had six gentlemen attendant on them, and Pages in white fustian with black stripes, and caps agreeable; bearing shields, with a seemly show of Archers, wearing about their necks and bodies green ribbons, and large green scarfs. Next followed a fair, large, red streamer, with the red lion, with halberds, drums, and proper Pages in green, with taffety night-caps, bearing shields and shafts in their hands. Next five Swatrutters strangely appavelled, with great hose down to the small of their legs, with strange caps agreeable; bearing on their necks long swords, which seemed very stern in countenance: then followed five green men (4) clad in ivie, with clubs on their necks, which were young trees, and the roots upward; with a worthy show of bowmen, who for the most part wore ribbons of coloured orange tawny, and oranges hanging at them.

Then came the residue of the Earl of Pancridge's train in the fore-front thereof; the two sons to the Earl of Pancridge (himself not present, but his coat and

(3) Mr. Beadel, in Paternoster-Row, and Mr. Smith, in Paul's Church-yard, chiefest.

(4) These five green men were prepared by Mr. Wood, who being continual ranger did both expreis his name, and beautify the show. His badge also bare a fair shield, upon which stood this sentence, *More ways than one to the wood.* The Marquis of Saint John's wood brought the wild men.

charges in sign of a willing mind did largely appear, with a worthy company of excellent good archers, accompanied with trumpets, halberds, drums, ensigns, and all other things necessary to the beautifying of the same to their great praise, for their large liberalitys, besides the great bountifulness of the Earl their father.

Next followed the fellowship and near neighbours of Ludgate parts; who, to the furtherance of this show, had been at great cost in provision of trumpets, drums, ensigns, fifes, and other furniture: the most part were haberdashers of London (5), who very orderly marched through the City of London, being sumptuously apparelled in velvet jerkins, and hats agreeable, with chains of gold about their bodies, and Pages bearing their shields of fine workmanship, and a worthy train of good archers wearing green scarfs and ribbons of the same colour. The show of Feryers proceeded, which was one hundred handsome fellows with calivers on their necks, all trimly decked with white feathers in their hats; so had all their company of archers throughout: then their ensign and two Cardinals, wearing broad hats of tawny colour, with two silk strings buttoned under their chins, the ends hanging down to their feet, apparelled in red velvet and fatten; next followed two Friars clothed in black robes, with bald crowns, and beads in their hands, seeming to pray very devoutly, and blessing them that passed by, causing great laughing and sport.

Then came the whole inhabitants following, beautifying the show, very costly apparelled, with a child in the midst of them, mounted, on a great horse richly trapped, sounding a trumpet, to the great wonder of many the beholders.

(5) Especially Mr. Blamior, chief of them.

Then

Then followed the citizens and inhabitants of Fleet-bridge, Fleet-street, and Temple-bar, with a show worth the beholding, of seemly archers, all bravely apparelled in silks and chains, with their ensigns, drums, trumpets, and such other furniture. Then the odd devise of Saint Clement's parish, which but ten days before had made the same show in their own parish, in setting up the Queen's Majesty's stake in Holborn fields; which stake-master Knevit, one of the gentlemen of her Majesty's chamber, gave unto them at his cost and charges: And a gun worth three pounds, made of gold, to be given unto him that best deserved it by shooting in a piece at the mark, which was set up on purpose at Saint James's Wall. Whereby was to be seen the great good will of so bountiful and worshipful a gentleman; who hath promised yearly, during his life, to give five shillings more to the same; the gift was given for a year to the winner, and to the parish for ever. The liberality of the right honorable lords of the nobility; their bountifulness towards the feasting of the whole parish also, is worthy remembrance (6). The manner of the show was, first, Saint Clement wearing a rochet and a mitre, having a long gray beard, rid upon a horse, with his man before him, between two hampers full of small white loaves, giving of bread unto the poor, or any that would have the same: having also twelve men following on foot in white canvas caps, and canvas frocks girt to them, with baskets on their shoulders, waiting upon him, having a blue anchor painted on their breasts and backs: finding it so registered of him in their legendary, that S. Clement was first a baker, who for his

(6) The L. of Leicester gave them two bucks, and 40s. in money. The E. Arundel did lend them his house to feast in, besides a hogsthead of wine and venison, which he gave them.

good wit and honest life, was made a bishop, and after a Saint. After this show came all the young men of S. Clement's parish, very well apparelled with chains and some scarfs; every one having his Page attending upon him in black frocks, decked with silver, with caps agreeable, with edgings of white furs, very seemly, bearing shields and shafts, which before did carry the guns of the batchelors, when they went to set up the stake, and to shoot for the gilded gun. Next followed the ancient householders of the same parish, with their Pages, having an ensign, with drums and such other furniture, with a worthy show of archers following.

Then came the Marquis of Hogsden with a stately ensign of red-crimson damask, in the midst of the which ensign there was a phoenix in silver carried by two men on two staves, with sound of trumpets and drums; the show beautified with Pages as before, hand-swords to make room, and halberds to guide and keep them in order.

After them came the Marquis of Shackelwell, chief treasurer to the Duke, with his men, every one with white and green ribbons, and badges in their hats, before whom was carried a most fair and long ensign of red damask, in the which was the golden lion: after the ensign followed two with hand-swords, to make room, and then after them two Pages all in white jackets, upon the which was painted with powdered armour, and the one Page bare a shield, on the which was painted a well, on one side of the well there was a leg, and on the other an arm, both arm and leg shackled to the well, and branches of box springing out of the same; the other Page a broad arrow in his hand.

Next after this company came the master-controller of the Duke's house with his men, every man
having

having a bow and four arrows as the rest, and green ribbons about their necks.

Then came a large table, wherein was written a description of the benefit of the shooting in the long-bow, and how shooting has been decayed, and by whom restored: advertising men from all unlawful games, as dicing, carding, tipping in alehouses, and such like, wishing to have the exercise of shooting to be had in use both by masters and servants, to the strength and commodity of this realm, as also to the terror of all foreign enemies, besides two tables drawn with inscriptions of honest exercise: then came two fair ensigns, white and black, with whiffers in chains of gold, with white staves, and henchmen following them bearing shields, every shield painted with a several devise; then came the Duke himself, going between two fine Pages bearing shafts, the Duke bearing a standard arrow in his hand, and being apparelled in a long gown, citizen-like, with a hat on his head, agreeable to the order of the chief commoners of the city: then after him followed Sir Owen Hopton, Knight, Lieutenant of her Majesty's Tower of London, Sir Rowland Hayward, with other the Aldermen and Citizens of London, bearing standard arrows in their hands, with a seemly company of archers: then came the Earl of Buckley chuse with Master Daye at Aldersgate, with a show of Marquisses and Barons, accompanied with many Knights of archery, beautified with trumpets, drums, ensigns, and halberds, all the archers wearing green scarfs; the Black Prince having twelve Knights, and a troop of Barons following him in chains of gold very orderly, and between them Pages in green jackets and green taffety night-caps, all dropped with gold and conceits of rare device on their shields.

Then last of his train came the Baron Stirrop, whose costly stake will be in memory after he is dead,

now

now standing at Mile-end. This Baron brought a seemly show of good archers, all with green ribbons about their neck, and escutcheons in their caps, with the gilded stirrop, expressing the truth of his name: who, besides his great cost and charges in feasting of his archers, did chuse many good ringers of his neighbours, who in the morning early did ring at the chiefest churches about London, for the honour of the Duke and his company, feasting them in the most commendable manner for their pains, who in the going out of the Duke through the city, did also ring the bells in many chief churches all the way he went, and likewise at his coming home, to their great pains and labour.

Last of all came the Goldsmiths, accompanied with some other inhabitants of Cheapside and elsewhere, that joined with them in company. The invention of the show was worthy noting: first came trumpets and drums, with two hand-swords playing, making room, with a fair beautified ensign: then the ancientest fort (7) first in gowns and hats, with every one a fair large arrow in his hand, expressing the good will to the long-bow, and now being aged, do give over that laudable game to their sons and servants, yet still well-willers to the action; and every one of them had his Page seemly cloathed in red mandilions, striped with silver, like broad laces, and caps of red taffety, edged with white fur; these carried their shields of sundry devises, in the one of their hands, and an arrow in the other hand: then came a ship ready rigged, carried pageant-wife, and cunningly made to toss and lean sometimes on the one side, and sometimes on the other, with a sea-fish ready to overthrow the same, thrusting forth her

(7) Marquis Barlo, alias Covell, was the chief in the forefront of the shooters.

head, and plucking it in again, in the midst of the waves, and two Indians or blackmores to go near unto it: on the one end of the ship stood the unicorn, on the other end the mermaid. The ship seemed as though it had newly come from India, and by great travel and danger had brought home her burden, laden with gold and silver: then followed the younger men of their train, and for the most apparelled in satin doublets, silk hats, chains of gold about their bodies, and silk hose, with a bow and four shafts, and every one had his Page going before him in red mandilions, as before mentioned, and caps accordingly fuitable, some bearing pickers, some spades, and some hammers, signifying as though they came from the Indies, and had thence, by great labour, brought home that treasure which the ship carried: and others carried wedges of gold, and some of them silver, which by workmanship is made out of the same earth that the ship bringeth; and every one of these Pages had upon their mandilions these sentences written both before and behind;

Honest labour procureth health,

By honest labour men come to wealth.

Thus every one had his Page bearing these tools, like workmen by whose labour many things are made out of gold and silver to the use of all men, and to the avoiding of idleness. Then upon a staff was borne in the midst of the same show, a coronet, whereat hung three arrows of silver, very workmanly made; then followed a concert of broken musick, playing all the way, to the great delight of all the beholders and hearers of the same: and last of all an hundred shot, being very ready and nimble to discharge, and these were well appointed with powder. Thus went they along through Cheapside up Cornhill, and turned by Leaden-hall to Bishopsgate, where at the end of Houndsditch the Street was chained

chained in, and there placed the image of a monstrous giant, which in times past dwelt in that place, being stoutly defended with long morrice-pikes, halberds, and wheel guns of great shot ready charged against the Duke's gunners and archers, who valiantly shot many arrows into the giant, and discharged their calivers, which the giant's men would not put up, but shook their spears, shot off their pieces in show to defend the place, which since that giant lived belonged to Prince Arthur. Thus for sport on both sides, the trumpets sounded, the drums struck up, the ensigns were tossed in seemly sort, and the fencers with tanwords made room, beginning a battle in seemly show, the Shot of the Goldsmiths discharged their shot so fast, and in good order, to the shaking of the giant's fort, that hardly the people near hand, might know one another. Thus the train passed to Shoreditch church, and then turned down into Hogsdien-fields, into a fair large green pasture ground of goodly compass, where a tent was set up for the Duke and the chief Citizens, where, when they were come they might sit to see the shooters appointed to shoot at the butt new set up for the same, being seven score and eight yards from the other end of the tent. The true number of archers that shot, was thirty hundred: the number that accompanied him into the field, of archers, citizens, whiffers, and those which guarded them with bills, was forty and one hundred and odd persons, besides Pages and Henchmen, which was in number three hundred and odd. The attire worn by all this company (for the most part) was very gorgeous; some in black velvet jerkins, doublets of satin, with hats of velvet; the most part in satin and taffety, and hats of taffety, a great many wearing chains of gold. The true number of chains of gold worn among the company, that I saw, was nine hundred forty two; the

the rest of the company did all wear green large scarfs, some white scarfs, other some green ribbons, orange tawny ribbons, some black and white, green and white, but the most part was green.

Before they came to the tent, the train marched about the field in warlike manner, and forthwith cast themselves about and broke their ray, every one hasting to the tent where the Duke purposed to begin shooting. Then every ensign brought in his archers, and there with sound of trumpets proclaimed by the herald, that every man should avoid forty foot from each side of the butt; otherwise to stand to their own perils. Thus went they to shooting, where by then three ensigns had shot, which was about three of the clock; word was brought to the Duke, that certain of prince Arthur's Knights were coming into the field, desirous to speak with his nobleness. Having answer that they should be entertained courteously: forthwith the Goldsmiths made forth to meet them, staying at their own stake against their coming, who anon came, and then the Goldsmiths ensign, and some of their Pages very orderly, with some of the archers in chains of gold, went and met these courteous Knights, mounted upon stately palfreys, with ten Pages also on horseback, and Irish lackies with darts running by their horses on foot, besides a trumpeter, a herald, and a messenger, upon good geldings: the Knights were apparelled in cloth of tissue, or crimson silk and gold; their Pages in green silk; having likewise a seemly company of archers very richly apparelled in satin doublets and chains of gold, to the number of two hundred, attending on foot, half going before, the residue coming behind. (A worthy show be seeming so noble a game). Thus with great reverence they came near to the tent; the messenger clad in a jacket of black velvet, with a black velvet cap,

cap, and green satin doublet, pronounced an oration to the Duke: the copy thereof followeth.

“ Most noble Duke, first to your good self and next
 “ unto all your worthy society and company in general;
 “ I in the behalf of the most noble and renowned
 “ Prince Arthur, and all his noble Knights, gratify you
 “ (and yours) with the choice of a thousand commen-
 “ dations: fame blowing abroad, and in the court of
 “ the noble Prince Arthur, that this day (in this place)
 “ should be practised the most excellent quality of
 “ shooting in the long-bow. Which news were no
 “ sooner blazed in that most royal court, but by the
 “ consent of their renowned Prince, these noble Knights
 “ mounted themselves on horseback, calling to mind
 “ the great courtesy they received of your nobleness,
 “ at the late royal show of their famous Prince. For
 “ requital of which your great friendship, this troop of
 “ noble Knights (for the honour they owe to the long-
 “ bow) are repaired hither to present unto your noble-
 “ ness a friendly gift; which is; five bows of gold,
 “ and five silver arrows; requiring your nobleness to
 “ bestow them on five of the most valiant, most active;
 “ and most expert of all your train, in shooting in the
 “ long-bow, requesting (friendly) we may presently
 “ see the delivery of them to those persons most worthy:
 “ hoping you will accept these their friendly gifts,
 “ springing from well-willing minds. Loth to hinder
 “ your worthy exercise, we omit for expence of time,
 “ that which else more largely should have been dis-
 “ coursed. These actions being finished (we presume
 “ of your courtesy) we shall depart friendly, always
 “ wishing the prosperous success of your worthy exer-
 “ cise.”

The Duke with hearty thanks accepted these their presents, promising with great protestation to match the
 prince

prince every way in good will and courtesy, wishing that this their amity might long continue.

Then the Knights departed with great grief to the duke, because he had provided a banquet for them, which could not be served in by reason of the unruliness and throng of the people.

The Marquis Barlo, chief of the Goldsmiths, to gratify them with some show of courtesy, bestowed on them two ingots or wedges, one of gold the other of silver, and after did conduct them into their own liberties with a volley of shot, which they very thankfully accepted.

And this one thing is worthy of memory, that upon the day of Prince Arthur's shooting, which was five weeks before this show, the Duke willing to beautify the same in some seemly sort, sent a buck of that season by the Marquis Barlo, accompanied with many Goldsmiths, who coming in satin doublets and chains of gold about their bodies, with horns at their backs, did all the way wind their horns, and presented the same to Prince Arthur, who was at his tent, which was at Mile-end green; he not only accepted the same, but also promised to have the Duke's courtesy in mind, if God lent him life.

Having now digressed in brief, I will return to the Duke, who seeing the night draw on, broke up the shooting until the next day, which was Wednesday, where they all met again, to try who could depart victors of those games then to be won. Which were in value as followeth; the first fifty three shillings four pence, the second five nobles, the third four nobles, the fourth twenty shillings, and the fifth ten shillings. Thus every one having one shot at the Butt, the best five were young men; four of the best games did the Earl of Pancridge's men win; the fifth one of the Duke's men did get.

get. The best and the second were won by two of S. Dunstan's in the East; the best was a skinner's man, the second a brewer's man: and he that won the first did dwell in S. Bride's parish, being a sadler's son, 'all which three were brought home in this manner. First, for that it was dark, they were brought out of the field with torch lights to the number of two hundred, and the winners mounted upon great geldings, sent to them from out of those parts where they dwelled, very sumptuously trapped with cloth of silk, and silver, and another of gold, with eight trumpets, drums and ensigns, with shot, which came from Fleetstreet to fetch them home: and others with halberds safely to conduct them, they all three were clad in green; the first in green taffety, with a white scarf about his body, and a great chain of gold about his neck, with a cap of velvet, and a golden band about the same, bearing an arrow in his hand, and a green ribbon hanging thereat; and so had they all: to their great laud and honour were they conducted first into Grubstreet, then entered the City at Cripplegate, down Woodstreet, and so into Cheapside: continual shot was bestowed to bring them home, to the great delight of the beholders: thus marching through Paul's Church-yard, they went to Ludgate, and so home, where their trains was very thankfully received. Against they came home, there was prepared great banquets by their Masters and Parents, to the great delight of that parish where they dwelled, who would not for money have lost the honor of the same.

Then did the Marquis Barlo with all the Goldsmiths and his convoy of men at arms (8) safe conduct the Duke home to his house, appointing one Jeffery Gates

(8) Norwich and Savage, both notable for shot in this train.

an ancient servitor to them, to be the leader, who marched in the forward until they came to the Duke's house, where the Duke was no sooner entered his house, and the Marquis, together with the chief of the train, but the harquebussers, at the appointment of Gates, charged their pieces, and forthwith did bestow such a volley of shot, as caused the glass to shake forth of the glass windows; to the honour of the Duke, and the good liking of them all.

Then every Baron and the whole company of Governors were brought home to their joy and comfort, making good cheer, shooting off their pieces, sounding of trumpets, and striking up of their drums to delight and comfort.

Thus have I (as perfectly as I may) described the manner of the same, reporting the truth of what I saw. Then on the Monday following, the Duke had provided a sumptuous feast, to which all the archers came, being kept at the Bishop of London's Palace, who for the good will he bore to shooting, lent them his house freely, wishing that it might be as commodious to them, as the show and sight, for provision of so many citizens in his house was comfortable to him. And for fear of disorder, there was unto every archer given a token stamped with a broad arrow, who, at the gate of the Bishop's palace, delivered them to those that were appointed to receive them.

Which done, every man (for the most part having ribbons about their necks) went to those tables, which by good foresight were provided for them, every man taking his place until the service was brought in; the tables furnished before with table cloths, salt, bread, and trenchers. The great hall of the palace was filled, and over the heads of the people hung the most sumptuous Ensigns, under which they were before conducted

to the field. There might a man behold the great provision of meat, the cooks in such good order dressing the same in quiet sort, as was worthy noting. And when the service of meat was brought in, the trumpets sounded, the drums struck up, and every man in very good order placed to their contentment; so that the great hall, the largest parlor, the galleries, and other rooms in the house were filled with people, who with great rejoicing gave thanks to God for his providence and blessings, many ways bestowed on them. Then was there served unto one large table, which was the highest table in the great hall, boiled capon, roasted beef, venison pasties, custard, tart, roasted capon and rabbits, with other dishes necessary for the time, with wine, beer, and ale, and ever was replenished with sufficient thereof to their contentation.

The rest of the tables had this service to every mess. First boiled mutton, roasted beef, a pasty of venison, and a roasted capon; and some had rabbits, besides beer and ale which was sufficient, every mess had a bottle of wine served in a bottle unto the same: there were three hundred messes of meat served in, to the great joy and comfort of those that were there, being served in such good order as is laudable. When the meat was served in, every man familiarly drank one to another; and then the Duke very reverently drank to them all, whereat the trumpets sounded, the people hallooed, the drums struck up, and such a noise was made that it was heard far off. Then the Duke, with some of his Knights and gentlemen, went about the whole house, and visited every table, with drum and fife, to the well liking of them all; so that with much melody they came in again into the great hall, giving thanks to the whole company. Then sundry times the trumpets sounded, the drums struck up, and the company drank to the Duke,
 * passing

passing away the time until dinner was ended. Then another company did wind their horns, which in good order of measures they did. The people by this time beginning to depart, the Duke caused the Herald to stand up and make a proclamation, that the people might be silent; which done, he pronounced in a short sentence, a thanksgiving to God for our gracious Queen, desiring God to send her long life and victory over all her enemies; whereat the people cried Amen; lifting up their caps, heaving up the tables over their heads, in sign of joy of her Majesty, whereat the trumpets sounded, the company halloed and shouted. Last of all they praised God and so departed; giving the remnant of the broken meat to the poor and needy, of which company a number gave diligent attendance for the same at the great gate. (A charitable deed in the knitting up of so honourable a matter.) Thus they declared their courtesies one to another, to the maintenance of Christian unity, which I pray God long continue, that this her Majesty's realm of England may be kept still in peace and tranquility, to the maintenance of God's Glory, the same and perpetual renown of her Majesty; whose life, the God and giver of all life prolong, that our lives, which depend upon hers, may the better be preserved and continued. *Amen.*



A BRIEF
DESCRIPTION
OF THE
SHOW

MADE AT
S. MARTINS in the FIELDS,

IN SETTING UP HER

MAJESTY'S STAKE.

ON Wednesday, being the second day of October last past, standing at a stall in the Old Baily, I heard the sound of drums and guns, and drawing near to see it, there came Whiffers with staves, red and white, with a lusty company of good archers, very well and seemly apparelled, bearing bows and shafts; every archer his page, clothed in red Mandilion, striped with silver, and caps agreeable to the same. There came in number two hundred bowmen, mixed with two hundred calivers, besides halberds, to beautify the show, mixed throughout. The gunners were expert fellows, discharging their shot in very good order: all this train going under sundry fair ensigns. Forth-

with the trumpets sounded, and a very fair show followed. First, men very strangely apparelled in long hairy garments, made of skins like unto martens, hopping and skipping along as they went: then came two horsemen harnessed, their horses all over trapped in white silk: then came a very sumptuous Stake, being the Queens Majesty's, which they went to set up in S. James's Field; upon this stake stood a golden lion holding a shield with her Majesty's arms, the supporters whereof were Fortitude, Justice, Temperance, and Prudence; the lion having a whole crown on his head. Then came a seemly Pageant, very cunningly made and with great cost, wherein sat the Gods; first, Pan, with Fame and Honour, attending on Vertue; then Saint Martin, and Eliza, as superior, accompanied with the Four Virtues; the Muses attending very seemly with musick playing before the Pageant. Thus they passed very orderly through Holborn to Chancery-Lane, and so to S. James's in the Fields: in the train was carried three silver games as reward for the winners of shooting in the long-bow, and a gilded gun, as a reward unto the best that could handle their piece. (Both exercises of great strength unto this realm). They used many speeches in their train as they went. And, at night were brought home very worthily with fire-works, which greatly beautified the same. To conclude, never saw I a fairer sight upon such a sudden, which being worthy of commendation, I thought good to note the principal things therein, that it might remain in memory to their continual praise.

A BRIEF
RELATION
OF THE SEVERAL
APPEARANCES
OF
ARCHERS
SINCE HIS
MAJESTY'S RESTORATION.

ON March the 21st, *anno Domini* 1661, Four hundred archers, with their bows and arrows, made a splendid and glorious show in Hyde-Park, with flying colours, and cross-bows to guard them. Sir Gilbert Talbot Baronet, was their Colonel, Sir Edward Hungerford, Knight of the Bath, their Lieutenant Colonel, Mr. Donne was their Major. Great was the appearance both of the nobility, gentry, and commonalty: several of the archers shot near twenty score yards within the compass of a hat with their cross-bows; and many of them, to the amazement of the spectators, hit the mark; there were likewise three showers of whistling arrows. So

great was the delight, and so pleasing the exercise, that three regiments of foot laid down their arms to come to see it.

Yet as delightful as it then was, this exercise was intermitted by some unlucky neglective fate, from the year 1661, till 1675; and then indeed they began to string their bows and handle their arrows for a handsome appearance to compliment Sir Robert Vyner, then Lord Mayor: their rendezvous was in the upper Moor-fields: there, about three hundred and fifty, most richly habited, were drawn up in a body; from thence they marched through Moorgate, through Cripplegate, and through Woodstreet into Cheapside; then they passed by the north side of Saint Paul's, and marched round it into Cheapside again, and so to Guild-hall, where they waited to receive the King's most excellent Majesty, and the then Lord Mayor. When the King had passed by (who seemed highly pleased with the sight of so many archers) then they marched to Christ-Church, where a very noble dinner was prepared for them at the expence of the Lord Mayor: Sir Robert Peyton Knight, was their leader, and Mr. Michael Arnold was their bringer-up: they marched under one colour, six men with cross-bows being appointed to guard it: all the officers had green scarfs, and every bowman wore a green ribbon. There was not any thing more material to be mentioned in that day's march.

Upon the 26th of May following, the archers marched to Tuttle-fields to shoot their whistling-arrows. They rendezvoused in the Military-Ground near Bloomsbury, and marched from thence through part of Holborn, through Chancery-lane, through Temple-bar, and so through the Strand to Whitehall. There were six abreast; yet when the van reach'd Whitehall, the rear had not passed through Temple-bar, so numerous were the archers then; from Whitehall directly

directly to Tuttlefields aforeſaid. When they were drawn up in a line, then came the King with his guard and coaches of ſtate, together with his Royal Highneſs, the Duke of York, the Duke of Monmouth, and moſt of the nobility attending him; to ſee them ſhoot: His Maſteſty marched twice or thrice from one end of the body to the other to view them. The archers were in number near a thouſand; the ſpectators near twenty thouſand. It was a great encouragement, and a mighty joy and ſatiſfaction to the archers, to ſee the King behold them with ſuch a ſerene, benign, cheerful, princely and favourable countenance: His Maſteſty was pleaſed to ſtay an hour or two to look on, whiſt they ſhot ſeveral ſhowers of whiſtling arrows to entertain him, with which his Maſteſty, and the Nobility, ſeem'd very much ſatiſfied; then the King was pleaſed to return to White-hall: then Sir Gilbert Talbot ſent in ſeveral barrels of beer, and other proviſion for the archers; ſo did Sir Edward Hungerford, Sir Robert Peyton, and the reſt of the Captains; after they had reſreſhed themſelves, then they marched home with drums beating, and colours flying. Sir Gilbert Talbot being the Colonel; Sir Robert Peyton, Lieutenant-colonel; and Michael Arnold, Major.

In the year 1676, on St. Simon and Jude's day, Sir Joſeph Sheldon being elected Lord Mayor, about 350 archers marched under the command of Sir Robert Peyton, Knight; they rendezvouſed in the upper Moorfields, and marched as before mentioned in the time of Sir Robert Vyner's mayoralty, and were in the ſelf ſame manner placed to receive the King and Queen, the nobility and gentry, who came to honour the Lord Mayor with their preſence at dinner at the Guild-Hall: When his Maſteſty was paſſed by, then they marched to Chriſt-Church to dinner. Amongſt the variety of
ſights,

fights, none seemed to give his Majesty more content and delight, more pleasure and satisfaction, than to see the bows and arrows, these ancient habiliments of war, revived.

On the 14th day of July, 1681, the archers marched from London to Hampton-Court, under the command of Mr. Edwards and Mr. Henry Warren: that was a day appointed to shoot for several pieces of plate, worth thirty pounds, at eight score yards distance. After a little time was spent, the King was pleased to honour them with his presence, and stay'd near two hours to behold their pastime, to the great joy, satisfaction, and honour of the archers: and as though this had not been honour enough, so full of goodness and clemency was his Majesty, that he permitted as many of them as pleased to kiss his hand, in token of his being well satisfied with that heroic exercise; the prizes were two silver cups, and three dozen of silver spoons. The said target was placed upon a Butt, erected on the green, before the King's Palace there; but it rained so fast that the King was forced to retire before all the prizes were won, which were thirty in number; he stayed till six were won, and expressed his satisfaction very much; and without all question the archers may reasonably hope for what favour they can humbly beg for the encouragement of archery from this King, and it will be granted with as much readiness as by any of his royal ancestors in the like case whatsoever heretofore; for no King, unless his glorious Father, could ever match his goodness.

POSTSCRIPT.

ON Friday the 21st of April, 1682, the archers met in the Artillery-Ground, marching through Cornhill, Fleet-Street, and the Strand, to Tuttlefields. The chief officers were Sir Edward Hungerford, Knight of the Bath, Colonel; Mr. Michael Arnold, Lieutenant Colonel; Mr. John Edwards, Major; Mr. Henry Warren Captain Lieutenant; Mr. Edward Gough, Mr. Edward Done, Mr. George Walker, Mr. James Manley, Captains; John Jennings, Lieutenant. The King's most excellent Majesty, his Royal Highness, and most of the nobility, were so favourable as to honour them with their presence; as likewise the Ambassador of the Emperor of the kingdom of Morocco and Fez: there were at least a thousand archers in the field; for now gentlemen begin to be pleased with the divertisement, and pleased with this manly recreation: There were three showers of whittling arrows; such a fight, such a noise, and such an appearance, it's presumed was never seen in England on the like occasion; yet we hope that every year will beget new lovers of this profitable and harmless exercise, for they are now resolved, at least once or twice a year, to make such a public appearance, if his Majesty will be pleased to permit them.

F I N I S.



A
G L O S S A R Y

OR

EXPLANATION OF THE TERMS

MADE USE OF IN

A R C H E R Y.

A

ALLOW, } An archer is said to *allow*, or make *allowance*
ALLOWANCE, } for the wind, when he shoots somewhat wide
of the mark, and on that side of the mark nearest
the wind, in order that the wind may bring his
arrow into the line of the mark.

ARROW *barbed*—A war-arrow, having the head armed with
barbs or wings (by the poets called *beard*).

———— *bearing*—An arrow which possesses a steady flight.

———— *bob-tail'd*—An arrow encreasing in bulk, in a regular
proportion, from the nock to the pile.

———— *breasted*—An arrow which is largest in the *middle*: also
termed *high-chested*.

———— *broad*—A war-arrow with a flat barb, sometimes called
a *swallow-tail'd* arrow.

———— *bullet*.—An arrow made for throwing a bullet.

———— *fishing*—An arrow used for striking fish.

———— *butt*—An arrow used in shooting at short Butts.

———— *fluted*—An arrow which is *indented in lines* to prevent its
casting.

ARROW

ARROW, rufb-grown.—An arrow formed like a ruff.

———— *sheaf.*—A war-arrow carried in a sheaf. Sometimes by the poets called a *field*-arrow.

———— *shot.*—An arrow used for casting small shot.

———— *taper-shaped.*—See Arrow *bob-tail'd.*

ASCHAM.—A wooden case in which bows are kept.

B.

BACK of a bow.—The exterior side of a bow.

BELLY of a bow.—The interior side of a bow.

BELT.—A strap furnished with a *Well* and worn round the waist, in which the arrows for immediate use are placed.

BEND of a bow.—The space or span between the bow and the string, when the bow is bent or braced.

BLAZON.—A target used in Flanders: the face of which is divided into squares, each square having a number.

BLACKS.—Black or dark marks.

BOUGHT.—A Twist or turn.

BOW arm.—The arm employed in holding the bow.

———— *back'd.*—A bow, the back of which is a *distinct* piece glued upon the belly.

———— *bearing.*—A bow that casts an arrow well.

———— *hand.*—The hand which holds the bow.

———— *shot.*—The distance which an arrow flies from a bow.

———— *stave.*—A stave of wood, cut ready for being shaped into a bow.

BOWYER.—A bow-maker.

BRACE, *to.*—To bend a bow, by putting the string into the upper horn. A bow is said to be *high* braced, when the string is far from the belly: on the contrary, when near the belly, it is said to be *low* braced.

BRACER.—A guard worn on the arm to prevent the string, in its return, from hurting the arm.

BUTT.—A mound of earth, upon which a mark to shoot at is placed.

———— *shooting.*—Shooting at Butts, or marks placed on Butts.

———— *arrow.*—See arrow.

C.

CAST, to.—To cast, is to become warped. This word is also used to express the operation or spring of a bow; as a bow of quick or slow *cast*.

—— *the.*—The right of shooting the first, by winning at the last shoot; which is called *getting the cast*.

***CHRYSAL.**—A kind of pinch (in form like a canker-worm) in a bow.

CLOUT.—A small white Target placed near the ground.

——— *shooting.*—Shooting at clouts.

COCK-feather.—That feather on the arrow, which has no one parallel to it; and which should be *uppermost* when the arrow is placed in the bow.

COME, to.—A bow is said to *come*, when it *sinks* or *bends too much* in any part.

COME round, to. } A bow is said to *come round*, or to *come*
COME round compass, to. } *round compass*, or *in compass*; when, in drawing, it forms a proper curve or circle.

COMPASS, to keep.—To observe due elevation.

——— *to shoot.*—To shoot *compass* or a *round compass*, is to shoot the arrow in a curved or parabolic line.

CROW-bill.—A horn pile.

CROWN-clod.—An ornament placed upon the Butts.

CUT the mark, to.—An arrow is said to *cut* the mark, when it flies straight towards it, but falls *under* it.

D.

DEAD-shaft.—A heavy dull shaft.

DOWN-wind.—See wind.

DRAWING.—That act in shooting (by drawing the string), which immediately precedes loosing.

* This word (which is not to be found in Ascham) may possibly be the same as *chrysalis*, a caterpillar in the worm state: a fret somewhat resembling that animal; and indeed Ascham observes, “that frets are very similar to a canker, creeping and increasing.”

DRAWING

DRAWING *arm.* { *The arm* } employed in drawing the
 _____ *hand.* { *The hand* } bow.
 _____ *fingers.* { *The fingers* }
 _____ *through the bow.*—Is drawing so far, that the *point of*
 the arrow comes beyond the *belly* of the bow.
 _____ *a feather.*—Is slipping it from off the quill.

E.

ELEVATION.—The act of raising the bow in shooting at the mark: generally opposed to a *point blank* level.
END.—The place where a mark is fixed.
 _____ *double.*—A shoot from one mark to another and *back again*.
EYE of the string.—That part of it, which occupies the *upper horn* of the bow.

F.

FAST.—A word used to caution persons from passing between the shooter and the mark, and to direct them to stand still.
FLETCHER.—An arrow-maker.
FLIGHT.—The *distance* or *path* in which an arrow *flies*.
 _____ *A.*—An arrow used in flight-shooting.
 _____ *shooting.*—Shooting with the lightest sort of arrows (called flights) and the greatest distances.
FLUTED-arrow.—See arrow.
FOLLOW the string.—A bow is said to *follow the string*, when by use, it has lost its original straightness; and has obtained a curve or inclination *forwards*.
FOOT and pole.—(In measuring a shoot). The *bale* of a tree from the top to the root.
FOOTING.—The manner of placing the feet in shooting.
FOREHAND.—See Overhand.
 _____ *shaft.*—An arrow shot over-hand.
FRET.—Is that part of wood which is corroded or eat away. But in archery, this word is chiefly used to signify that rising or protuberance which is occasioned in some weak woods, by the strain they receive in bending. Frets (says Ascham) are little *pinches*.

GARLAND,

G.

GALL.—See Knot-gall.

GAME, *in.*—In good shooting.

GARLAND.—A wreath, within which (in ancient times) the mark was placed.

GONE.—An arrow is said to be *gone*, when it may, from its flight, be judged to fall *wide* of, or *far* from, the mark.

GREASE POT.—A small box, somewhat bell-shaped, open at the mouth, and containing the composition used in lubricating the fingers of the shooting-glove.

H.

HANDLE *of the bow.*—That part of the bow which is held in shooting.

HANG *on the string, to.*—The Fingers are said to *hang on the string*, when they do not *loose* it *smoothly*.

HARD *to stand in a bow.*—An arrow is so spoken of, when it flies from the bow *steadily*, and without *firting*.

HEAD *(of a shaft), crested.*
 _____, *high ridged.*
 _____, *silver-spoon.*
 _____, *shouldered.* } —A pile having a circular swelling or prominence, forming the base of the Stopping, which is conical.

HE! HE!—This exclamation is said to have been an archer's *word of call*, handed down from very ancient days.

HEAT. } A word used by bow-makers, to signify the tempering of wood by means of fire.
 HEATING. }

HIGH-*feathered.*—An arrow is said to be high-feathered, when the feathers are left *long* and *deep*.

HIT.—A stroke in the Target or Mark.

HOLDING.—The act of holding the *string*, when the bow, in shooting, is fully drawn up. This word is, indeed, sometimes applied to the bow.

HOME.—An arrow is said to be drawn *home*, when it is drawn as far as it ought to be.

—— *at.*—An arrow is said to be *at home*, when it falls upon, or not short of the mark.

HORNS of the bow.—The *extrremities* or ends, which are tipped with horn.

HOYLE.—A short roving mark.

—— *shooting.*—Shooting at *Hoyles*.

I.

INCHES.—The Inches or distance allowed round the Butt-mark, in which an arrow must fall in order to count, when the *inches* are shot.

K.

KEEP a length, to.—To shoot the exact *distance*, although not straight.

KNOT-GALL.—A preternatural *tumour* or *hurt* in trees, occasioned to the bough or other part of a tree, by some other bough or tree rubbing against it.

L.

LAYING a bow straight.—A term used by the Bow-makers, to signify the bringing it straight by means of *heat* or *force*.

LENGTH.—The distance shot.

LIMB of a bow.—That part of a bow which reaches from each side of the handle to the horn.

LOOSE, the } —The act of letting go the string, after it is
LOOSING. } drawn up.

LOW-feathered.—An arrow is said to be *low-feathered*, when the feather is cut *short* and *shallow*.

MARK.

M.

MARK.—The object shot at.

——, *roving*.—A mark shot at in roving.

MARKER.—The person who marks the fall of the arrow in the butt.

N.

NOCK.—This is the old way of spelling *notch*, which, in archery, is always spelt and sounded *nock*.

NOCK, *to*.—To place the nock of the arrow in the string.

NOCKING *point*.—That part of the string on which the arrow is placed.

NOOSE.—That end of the string which occupies the *lower* horn.

O.

OVER-*arrow*.—An arrow which flies *over* the mark.

—— *bowed*.—An archer is said to be *over-bowed*, when the power of his bow is above his command.

—— *drawn*.—An arrow is said to be *over-drawn*, when it is drawn too far.

—— *hand*.—An archer is said to shoot *over-hand*, when he looks at his mark *over* his bow-hand.

OVER-HAND *shaft*.—An arrow that is shot *over-hand*.

P.

PAPER, *the*.—The Butt-mark.

—— *game*.—A game, in which no arrow is allowed to count which does not *touch* the paper.

PETTICOAT.—The *Face* or *Ground* of a Target beyond the *outer* colour.

PIECING *of a shaft, the*.—The wood at the *pile-end*, spliced or incorporated with it.

PILE.—The head of an arrow used in shooting at *marks*.

— *roving.*—The pile used for *roving* arrows.

— *sugar-loaf.*—A pile in the form of a *sugar-loaf*.

PIN.—The peg which fastens the Butt-mark.

PINS.—Small knots in wood running frequently very deep, and sometimes quite through it. They are very hard, and in some woods (as deal) may often be driven out.

PINCH.—A small *Fret*.

PLUCK *a shoot, to.*—To retard or deaden a shoot.

— *down aside, to.*—To shoot into the ground on one side.

— *buffet.*—A game mentioned in the *Garland*, which entitled the Victor, instead of receiving a prize, to give the Vanquished a *buffet* or blow on the cheek.

PLUCKING *a feather.*—Raising the feathers when they are sunk.

POINT.—(Probably signifying Pile.) A measure in piecing an arrow.

— *blank.*—The *White* (Mark), at which an arrow is shot. Now used to express an *horizontal* shot.

POPINJAY.—A mark in the shape of a bird.

PREFERENCE.—One limb of a bow is said to have the *preference* of the other, by bending *most*.

PRICK *mark.*—The white Mark or Target shot at.

PRICKING. }
PRICK-shooting. } —Shooting at prick Marks.

PRICKS.—The place where the pricks or marks are placed.

— *shaft.*—An arrow used in prick-shooting.

PRICKER.—The needle or instrument with which the target card is pricked or marked.

Q.

QUIVER.—A case in which arrows are carried.

R.

RAISE *a pin, to.*—A pin in a bow is said to be *raised*, when there is wood left around it forming a prominence.

RINGMAN.

RINGMAN.—The third finger or that upon which the wedding-ring is placed.

ROOD, a.—Seven yards and a half.

ROUND-compass.—See compass.

ROVERS:—Casual marks, or marks of *uncertain* distance.

ROVING.—Shooting at rovers.

———— arrow. } An arrow,
 ————— bow. } A bow,
 ————— pile. } A pile, } used in shooting at Rovers.

RUN on the bow, to.—A feather is said to *run* on the bow, when it is placed so far out of its proper line, as to rub against the bow in shooting.

S.

SADDLE-back'd—A feather is said to be cut *saddle-back'd*, when it is cut in the shape of a saddle.

SCORE, a.—Twenty yards.

SELF-bow.—A bow formed out of *one* piece of wood.

SET the shaft in the bow, to.—To pull the shaft so far, that the point touches *the belly* of the bow.

SHAFT.—An arrow: properly so called when it wants only the *head*.

SHAFT-arm. } The arm,
 ————— hand, } The hand, } employed in drawing the arrow.

————, *gadding.* }
 —————, *scudding.* } A shaft that { starts from the bow.
 —————, *hobling.* } { skims upon the wind.
 { that flies unevenly.

————, *hollow.*—A shaft made of very light, porous or spongy wood.

SHAFTMENT.—That part of the arrow occupied by the *feathers*.

SHAKE.—A longitudinal crack, concussion, or rent in wood, often caused by the force of the wind.

SHEAF of arrows.—A quiver or case of arrows used in war, consisting of twenty-four.

SHOOT, a.—An arrow shot.

———— *down the butts, to.*—To begin at the *furthest*, and end at the *shortest* butt.

SHOOTING

SHOOTING-glove.—A glove used on the *shaft-hand* in drawing the String.

SHORT arrow.—An arrow which falls *short* of the mark.

SHOULDER of the pile.—The rising or promineney near the point.

SIDE wind.—See wind.

SINKING a bow.—The act of reducing the *spirit* or *stiffness* of a bow, by shooting in it with heavy arrows.

SNAKE, to.—An arrow is said to *snake*, when it has worked itself under the grafs.

SPELL.—A rising of the lamellæ or ends of the *grain* of the wood of which a bow is made.

SPRING of a bow.—The elastic quality of a bow.

STAND in the bow, to.—An arrow is said to *stand*, (or to *stand in*) a bow, when it flies from it steadily, and without shaking or flirting.

————— *in the wind, to.*—To stand *across* the wind.

STANDARD-arrow.—An arrow made according to a certain scale or pattern.

STANDING, the.—The posture in which an archer stands, when he shoots.

————— *bow.*—A bow that stands well without sinking.

STELE.—An arrow without feather or head.

STOPPING.—The extreme part or head of the pile, which is solid.

SUGAR-loaf pile.—See Pile.

SWIFT-shaft.—A shaft that flies swiftly.

SWINE-back'd shaft.—An arrow having the feather cut in imitation of the line of an *hog's back*.

T.

TAB.—A piece of flat leather, which lies on the *inside* of the hand, and is used instead of the *fingers* of the shooting-glove.

TARGET.—A mark shot at, consisting of several circles.

————— *arrow.*—An arrow used in shooting at the Target.

————— *card.*—A card coloured as the Target, containing the names of the shooters at the Target, and on which are pricked the hits.

TARGET

TARGET-shooting.—Shooting at Target-marks.

TASSEL.—A bunch of worsted, used for wiping the arrows.

TILLER.—An instrument made of a straight piece of wood, with a notch at the end, and notches on the upper side; in which a bow is placed and drawn, to see how it bends.

TILLERING.—Trying a bow by the tiller. Altering a bow by scraping it.

TO the bow. } —A man is said to shoot, and his arrow is said
— the shaft. } to fly *to* the bow or *to* the *shaft*, as his arrow
 flies to the *bow-hand* or *shaft-hand* side of his mark.

UP, too much.—A bow is said to be *too much up*, when it is *braced* too high.

U.

UNDER-bowed.—An archer is said to be *under-bowed*, when he uses a bow too weak for him to shoot well with.

UNDER-hand.—An archer is said to shoot *under-hand*, when he looks at his mark *under* his bow-hand.

UPSHOT, to give the.—To make the *presumed* best shot, towards the end of the game.

UP-wind.—See wind.

W.

WEATHER-MAN.—An archer is said to be a good *weather-man*, when he is conversant with the weather.

WEIGHT of a bow.—The weight or power which a bow requires to *draw* it up.

————— **of an arrow.**—The quantity of its bulk, ascertained by weighing it.

WEN.—A callous *excrescence* growing out of trees.

WHIP, to.—To inwrap.

WHIPPING, the.—The material used to inwrap the nocking point.

WHIST-

WHISTLING-arrow.—An arrow with a large round and hollow head (generally made of horn) perforated with holes, which makes a whistling noise as it flies.

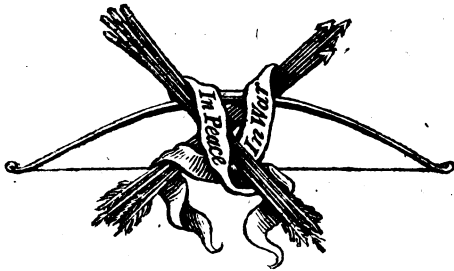
WHITE.—The interior circle of a paper-mark.

WIDE arrow.—An arrow which falls *wide* of the mark.

<p>WIND, down. ———, <i>side.</i> ———, <i>side quarter.</i> ———, <i>up.</i></p>	}	<p>A wind which blows</p>	{	<p>directly from the shooter down to the mark. directly across the line of the mark. obliquely upon the line of the mark. directly from the mark to the shooter.</p>
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WINDING pricks.—Prick-marks that stand askant.

WIND-shake.—See Shake.



ADDITIONS.

OF THE STRING.

PART IV. CHAP. IV. *Add*, The string may be stretched, before it is put on the bow, by suspending a *weight* to it.

OF THE NOCK.

CHAP. VI. Sect. 6. *Add*, Silver nocks have been used, and a broken nock has sometimes been mended with an hollow tube of silver.

OF DRAWING.

CHAP. VIII. Sect. 6. The string, in drawing, should lie on or near to the *end-joint* of the fingers, which should be sufficiently bent to hold it, but not so much bent as to *retard* or *deaden* the shoot.

OF COLOURING THE ARROW.

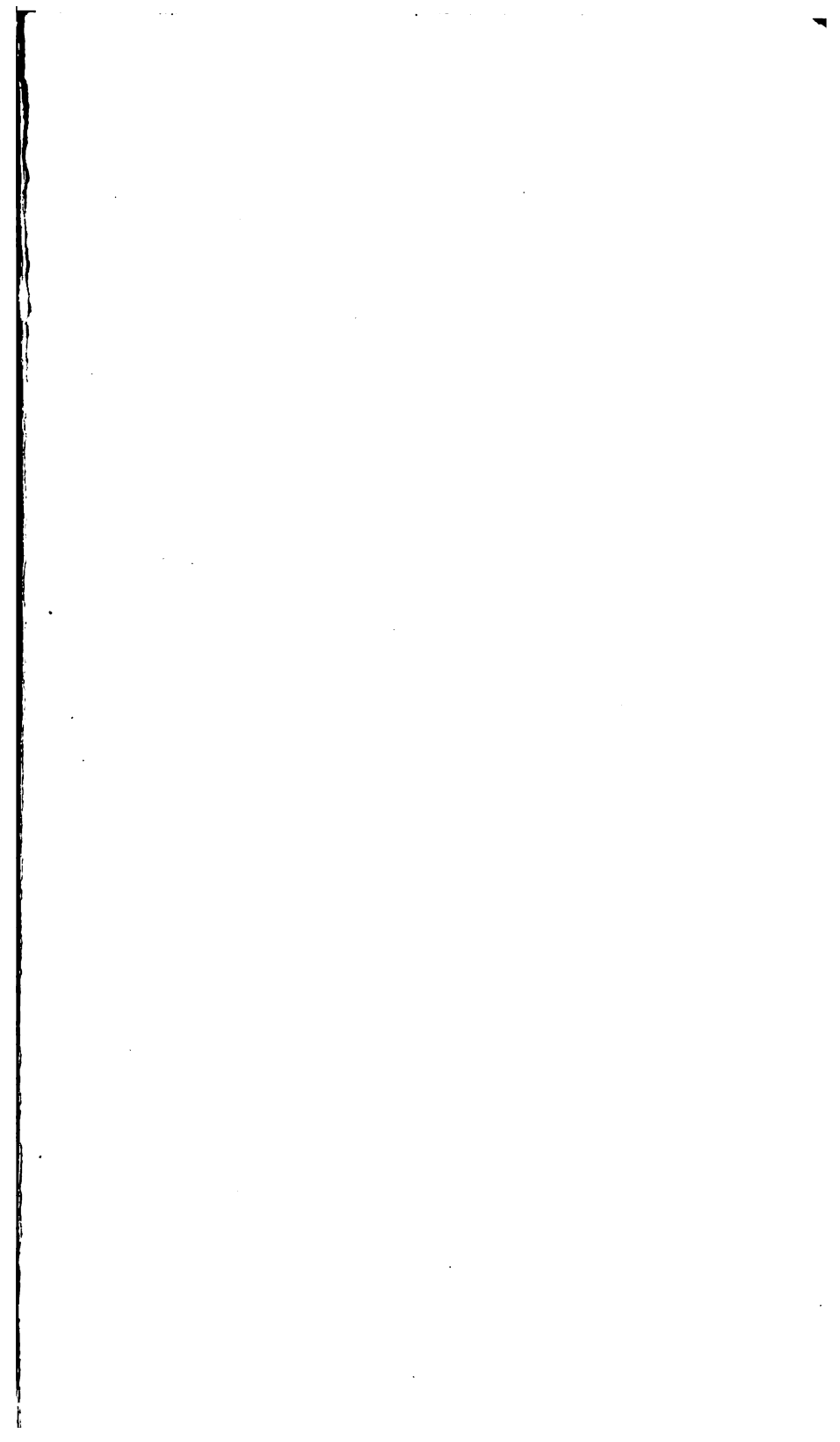
Note 50. The arrow should be first washed with water, in which *alum* has been dissolved, this must be used *cold*. When
the

the alum water has dried on the arrow; the black dye (which should be boiled, and strained off once or twice) may, when *cold*, be laid on the arrow, or the arrow may be dipped in it two or three times: (if it be used when *hot* the arrow will be liable to be *cast*). Fine glass-paper will answer the purpose of removing the roughness left on the arrow by the dye, as well, or better than tripoli. To make the black deeper, the arrow may, after the roughness is removed, again be rubbed with a flannel which has been dipped in the dye, before it is oiled. Indeed the copal varnish may be entirely dispensed with.

E R R O R S.

Page.	Line.			
7	7	For England	read	<i>Britain.</i>
8	11	Englith	—	<i>Britons.</i>
	(note l. 9)	Macou	—	<i>Mascou.</i>
10	23	Englith	—	<i>Britons.</i>
15	(note l. 32)	Barrington	—	<i>Arnott.</i>
21	1	Paralells	—	<i>Parallels.</i>
23	20	thining	—	<i>thinning.</i>
54	(note l. 14)	Corfelette	—	<i>Corfelet.</i>
63	17 and 18	Parenthesis to begin at <i>as</i> , and end at <i>expresse.</i>		
64	10	Statutes	read	<i>Statute.</i>
81	25	Saltzmann	—	<i>Salzmann.</i>
100	(note l. 13)	Waiwoode	—	<i>Vairwoode.</i>
	15 }	Can timer	—	<i>Can temir.</i>
197	24	Hood	—	<i>Wood.</i>
	29	Howorth	—	<i>Harworth.</i>
111	(note l. 2)	atchieved	—	<i>achieved.</i>
112	8	Parenthesis. to begin at <i>when.</i>		
	9	Ditto at <i>turning.</i>		
113		Mr. H. Greene	read	<i>Mr. J. H. Greene.</i>
119	3	Dele semicolon after <i>effelt.</i>		
163	(note l. 3)	Scythians	read	<i>Lycians.</i>
218	12	Strong ger	—	<i>Stronger.</i>
222		Dele all the inverted commas at the <i>last paragraph.</i>		
233	(note 46, l. 1)	Parenthesis to close at <i>Archers.</i>		

M.S.



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