



THE ART OF ARCHERIE.

Shewing how it is most ne-
cessary in these times for this
Kingdome, both in Peace and War,
and how it may be done without
charge to the Country, trouble to
the People, or any hinderance
to necessary Occasi-
ons.

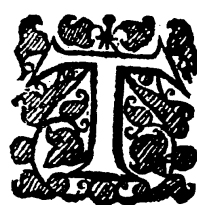
ALSO,
Of the Discipline, the Postures,
and whatsoever else is necessarie
for the attayning to the
Art.

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TO
The Sacred Maiefty of
our Dread Soueraigne
CHARLES,
By the Grace of God, King of
Great Britaine, France, and
Ireland; Defender of the
Faith, &c.

SIR,



HIS *Proiect*
which I offer
to your Sacred
A 3 Ma-

THE EPISTLE

Maieſty, how euer (for mine owne Vnworthineſſe and Inſufficiency, or the almoſt laſt Remembrance of the weapon, which I ſtrive to aduance) it may ſeeme vnworthy of your Gracious view or Conſideration; yet I am confident, if you pleaſe to lay your ſacred eyes vpon it, you will allow it: For firſt, it will be
hono.

DEDICATORY.

honourable to your Kingdomes, through the Multiplicities of good *Souldiers*; Terrible to your oppoſers, when they heare of ſuch diſciplin'd *Multitudes*, and not troubleſome to your *Subiects*; becauſe it neither puts them to one penny of extraordinary *Expence*, takes from them one day of their neceſſary *Affaires*, nor
A 4 loades

THE EPISTLE

loades them with any
trouble or Vexation, ei-
ther of *Minde* or *Body*;
Onely it tyes them to
the exercise and perfor-
mance of that duty, to
which they are bound
both by the Lawes of
God, *Nature*, and the
wholesome *Statutes* of
this Kingdomes, as the
Treatise (I hope) will
witnesse, when your
Maiestie (or any by
your

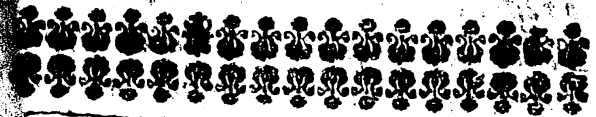
DEDICATORY.

your Maiestie appoin-
ted) shall reade it;
In humble confidence
whereof, I rest

Your Maiesties,

poore Vassail and Subiect,

GERVAISE MARKHAM.



TO

The much honoured
Gentleman, Mr. WILLIAM
TRYMBALL, Esquire. Eldest
Clarke to his Maiesties most
Honourable Priue Councell, and
Muster-master-Generall of all
England.

* *

SIR,



ALL Rivers and Ri-
vellets, Fountaines
and Waters whatsoe-
ver, come from the
Sea, and returne
to the Sea, the
to acknowledg the Hap-
pesse of their Beginnings; the other,

4 2

to

THE EPISTLE

to restore the Rent & Tribute of their Duties. So all subiects receive happiness from their Soueraignes, and to them they ought to restore any thing that they can call happy within them. Hence, I have presumed in all Humility and obedience, to present to his Sacred Maiestie, this little Treatise of The Art of Archerie: and how it may profitably be used in this Kingdome, to the Advancement of the Trayned Bands (to whose Glorie and Good, your place especially calles you) to the Propagation and increase of young Souldiers, and to the support and Re-edifying, of the now falling and almost venterly ruin'd Societies of Bowyers and Fletchers: who (as I am credibly informed, and partly know by diuers true observations) are so shaken and decayed in their Estate and Tradings, that without his Maiestie Assist, it is impossible for the

DEDICATORIE.

to subsist. Then (worthy Sir) be pleased to lay your vertuous Hand to this Building, and make your selfe Master of many Hearts, and many Prayers, which (under your Pardon) you may thus effect, by procuring to be inserted into the Letters for Musters; that the Supplyes may appear with Bowes and Arrowes, and to bee exercised with the Trayned Bands, as more largely appeareth in the Treatise; This I dare no further urge, but leave it to your owne Goodnesse, which can better direct, then I can Imagine.

Your Servant,

GERV: MARKHAM.



TO
THE WORSHIP-
full, the Masters, Wardens,
and Assistants, and to all the
rest of the Worshipfull Com-
panies and Societies of
Bowyers and Fletchers
within the Honourable
City of London, and
elsewhere.

* *

ni Gentlemen,

IT is not out of any
Ambition to get a
Name, out of any
hope of Future pro-
fit, nor out of any Disposition or

a d

loue

THE EPISTLE, &c.

cloue I haue to Nouelties, which hath stirr'd me vp to this labour; But onely a sincere affection I beare to *Truth* and *Goodnesse*, which in former times were, and I doubt not but will bee againe, and euer, the best Friends and Companions to the *Bow* and *Arrow*.

It is true, that in this Treatise, I haue (according to my weak Judgment, and vnder the controulement of better knowledges) shewed how the *Bow* and *Arrow* may againe profitably bee employed, and Reuiued, without offence or Scandall; It now remayneth in you (if his Maiestie shall bee graciously pleased, to put it in Execution) to make good all my promises; And that is, by furnishing the Subject with good *Bowes*.

good

DEDICATORIE.

good *Arrowes*, and reasonable prices, because defects in these, will both disgrace the Worke, and giue offence to the people; yet I would not haue you mistake me, that vnder this word *Good*, I meane the best and principall *Bowes* and *Arrowes*, As though euery man should necessarily be armed with *Ewe* and *Horn-beame*; no, *Elme* and *Birtch*, are Tymbers sufficient for priuate practise, and if they bee well wrought, Artificially chosen, and reasonably sold; the Subject shall find no fault, nor the Exercise hinderance.

This (when you are call'd vpon) you are to take into your considerations, which I know you can better doe, then I can instruct; therefore to it, and to the happy pro-

THE EPISTLE, &c.

proceedings of these Beginnings,
which may begin your Benefits,
I leaue you and rest,

Your Well-wisher,
Gervase Markham.



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ed in this Booke.

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THE



THE ART OF ARCHERIE.

CHAP. I.

*A Generall Encomium, or praise
of Shooting, both in Peace and
Warre.*



Shooting is an Art
necessary for the
Knowledge of all
sorts of Men, use-
full both in Peace
and Warre; It is
an honest pastime
for the minde, and an wholesome
B exer-

exercise for the Body ; Not vilde for Great-men to vse, nor costly for Poore-men to maintayne, nor lurking in holes and corners, for ill men at their pleasure to misuse it, but still abiding in the open sight and face of the world, for good men (if it bee any way faulty) by their wisdom to correct it.

Now touching the Antiquity of it, *Claudian* saith ; That Nature first gaue the example of *Shooting* by the *Porpentine*, which by shooting his Quills will hit any thing that fights with it, which Learned men afterwards imitated in finding out *Bow* and *Shafts* : *Plinie* referreth it to *Scythes*, the sonne of *Iupiter*. Better and nobler Writers, as *Plato*, *Calimachus*, and *Galen*, bring Shooting from *Apollo*, when hee slew *Python* ; yet long before those dayes, wee reade expressely in the Bible of Shoo-

Shooting, and if wee shall beleue *Lira*, *Lamech* killed *Caine* with a Shaft, which long continuance doth not a little praise the Art, besides, that it hath at all times and may still bee vsed by all men, the examples of the Antients are proofes vnresistable ; *Cyaxares* King of the *Medes* and great Grandfather to *Cyrus*, kept a company of *Scythians* with him onely to teach his Sonne *Astiages* to shoote, and *Cyrus*, being a Child, as *Zenophon* sheweth, was himselfe taught the Art of Shooting ; *Darius* was so exquisite in this Art, that hee caused this Inscription to be grauen on his Monument :

D A R I U S the King
lyes buried heere ;
That in Shooting and Riding
had no peere.

B 2

Domi-

Domitian the Emperour was so cunning in Shooting, that he would shoote betwixt a mans fingers standing a farre off and neuer hurt him. *Comodus* also had so sure an hand, that there was nothing within his reach and shoote but hee could hit it in what place he listed : *Themistius* the Phylosopher commended *Theodosius* the Emperour, for three things which hee vsed of a Child, which were *Shooting, Riding, and Feates of Armes* : And not onely Kings and Emperours haue beene brought vp in Shooting, but also the best Common-wealths haue made excellent Edicts to maintayne it. The *Persians* (which vnder *Cyrus* conquered in a manner all the world) made a Law, that their Children from Fiue yeares old vnto Twenty, should learne three onely things, that was ; To

Ride,

Ride, to Shoote, and to Speake Truth alwayes ; The *Romans* had a Law, that euery man should vse Shooting in the time of Peace, till hee was Forty yeares old, and that euery House should haue a Bow and forty Shafts ready for all occasions ; If I should rehearse the Statutes made in Parliament by the Kings of *England* for the advancement of Shooting, I should but tyre patience, let these therefore suffice already rehearsed ; And how fit labour is for Youth, *Minos* among the *Grecians*, and *Licurgus* among the *Lacedemonians* doe shew, who neuer ordayned any thing for the bringing vp of Youth that was not joyned with labour ; and that labour which is in Shooting, is of all other the best ; both because it increaseth Strength, and most preferueth Health, being not

B 3

vehe-

vehement but moderate, not over-
 laying any one part with wear-
 nes, but exercising euery part with
 equalnesse, as the Arme and Brest
 with drawing, the other parts with
 walking, being not so painefull for
 the labour as delightfull for the
 pastime, which Exercise by the
 Iudgement of the best Physitians
 is most allowable. Also by Shoo-
 ting, the mind is honestly employ-
 ed, where a man doth alwayes de-
 fire to doe best, (which is a word
 of honesty) and by the same way
 that Vertue it selfe doth, coueting
 to come nighest a most perfect end
 or meane, standing betweene two
 extreames, eschewing *Short*, or
Gone, or on eyther side *Wide*,
 which caused *Aristotle* to say, that
Shooting and *Vertue*, were like
 one another, and that Shooting of
 all other Recreations was the most
 honest.

honest, and gaue least occasion to
 haue Naughtinesse joyned vnto it,
 which two things, doe approue,
 that (as Tutors or Overseers) are
 fixed vnto it, and that is, *Day-light*
 and *Open-place*, where euery man
 doth come, the keepers from all
 dishonest Actions. If a man shoot
 foule at any time, it is not hid, it
 turkes not in corners, but openly
 accuseth and bewrayeth it selfe,
 which (as wise men say) is the
 next way to amendment.

Now as Shooting is thus excel-
 lent in it selfe, and most allowable
 by both Antient and Moderne
 Authority and example in the time
 of Peace; So it is much more illu-
 strious, and by many degrees more
 profitable and with more vigour
 to bee acquired in the time of
 Warre — as thus, —

The vpper-hand in Warre, next to the goodnesse of God (from whom all Victory commeth) standeth chiefly in three things; The *Wisdom of the Prince, the Slights and Policies of the Commanders, and the Strength and cheerefull forwardnes of the Soldiers*: The 2. first I will omit (they are Elements aboue mee) the last, which is the strength of warre, it abideth in the Souldier, whose chiefe praise and vertue is *Obedience* to his Superiours, then to haue and handle his Weapon well, of which, the one must bee at the Captaines appointment, the other, lyeth in the Courage and exercise of the Souldier; yet of all Weapons, the best is that, where with least danger to our selues, wee may hurt our Enemies most; And that is, (as I suppose) by Artillerie, which now adayes is taken for *Gunnes* and *Bowes*, which how much

much they doe in Warre, both daily experience doth teach, and *Peter Nannius of Louayne* doth very well set out in a Dialogue, wherein this is remarkable, that when hee hath shewed all the excellent commodities of both, and some discommodities of Gunnes, as infinite cost, and charge, cumbersome carriage; And if they bee great, the vncertaine leuelling, the perill of them that stand by them, the easier avoiding by them that are farre off. And if they be little, the lesse both feare and jeopardy is in them, besides all contrary winds and weather which doth hinder them not a litle; yet of all, in *Shooting* hee cannot rehearse any discommodity; yea, so necessary hath Shooting been, and so highly set by, that to its lasting credit it is recorded, that when *Hector* and his *Troians*, would haue set fire on the *Greeke* ships, *Teucer* with his Bow made

made them recoile backe againe,
 And *Troy* it selfe could neuer be
 destroyed without the helpe of
Hercules Shafts, which thing doth
 signifie, that though all the world
 were gathered into one Army, yet
 without Shooting they can neuer
 come to their purpose, and this
 may partly be collected out of the
 holy Scriptures, where it is recor-
 ded, that among the *Jewes*, nothing
 was so frequent or did so much
 good as Bowes; insomuch, that
 when the *Jewes* had any great victo-
 ry ouer the *Gentiles*, the first thing
 that the Captaines did, was to ex-
 hort the people to giue all the
 thanks to God for the conquest,
 and not to their Bowes wherewith
 they had slaine their enemies. God
 when he promisseth helpe to the
Jewes vseth no kind of speaking so
 much as this; *That he will bend his*
Bow

Yosh. 13:

Bow, and die his Shafts in the Gentiles
blood; whereby it is manifest, that
 God will either make the *Jewes* to
 shoot strong shootes to ouerthrow
 their enemies, or at least, that Shoo-
 ting is a mighty powerfull thing in
 warre, wherevnto the high power
 of God is likened; *David* in the
Psalmes, calleth Bowes, *The vessels* *Psal. 7. 63.*
of Death, A Bitter thing, a mighty 74.
Power, with like Attributes; yet one
 place more I must remember for
 the praise of Shooting; and that is,
 when *Saul* was slayne by the *Phi-*
listines (beeing mighty Bow-men)
 and *Jonathan* his Sonne, who was
 so good an Archer, that he never
 shot shaft in vayne; the first Sta-
 tute *David* made, after hee came to
 the Kingdome; was, that all *Israel* *2 Sam. 1.*
should learne to shoot: by which wee 18.
 see what great use and Provision,
 even from the beginning, was a-
 mong

mong the *Jewes* for Shooting. *Sesostrius* the most potent King that ever was in *Egypt*, overcame a great part of the World, onely by *Archers*, and in token how he vanquished all men, he set up in many places great Images to his owne likenesse, with a Bow in one hand, and a sharpe headed Arrow in the other. The Prince of *Samos*, *Policrates*, was Lord over the *Greeke* Seas, and withstood the power of the *Persians*, onely by the helpe of one thousand *Archers*. The best part of *Alexanders* armie were *Archers*, as *Appian* and others record, and they so strong, that fundry times they overcame their Enemies before any other weapon could come in to second them. But to let passe these foreine examples, I will conclude with this saying out of *Pliny*; If any man would call

to

to mind the *Aethiopians*, *Egyptians*, *Arabians*, *Indians*, *Scythians*, *Sarmatians* and *Parthians*, hee shall perceive halfe the World to live in subjection, overcome by the power and might of Shooting. Againe, *Leo* writing concerning what Armes were best, sayth thus; Let all the youth of *Rome* be compelled to use shooting, eyther more or lesse, and ever to carry their Bowe and Quiver about them, untill they bee forty yeares old. And in another place, he sayth; Let the Souldiers have their weapons well appointed, but above all other things regard most Shooting; especially in the time of peace, for the neglect of it onely hath brought the whole Empire of *Rome* to Ruine. And againe, he saith thus to his Generall; Arme your Hoast as I have appointed you, but especially with Bowes and Arrowes, for the power of it is infinite. And againe

to

to the same Generall, thus; *Artil-*
lerie is easie to bee prepared, and in
time of need a thing most profitable,
therefore wee straightly command you
to make Proclamation to all men under
our Dominions, which bee eyther in
Warre or Peace, to all Cities, Boroughs
and Townes, and finally to all manner
of men, that every severall person
have Bowe and Shafts of his owne,
and every house (besides this,) to have a
standing, bearing Bow and 40. Ar-
rowes for all needs, and that they ex-
ercise themselves, in Holts, Hills, and
Dales, Playnes and Woods, for all
manner of chances which may happen
in Warre. Which Law of this good
Emperour, if it were in force in
England, those which now haunt
Play-houses, Ale-houses and Tobacco-
shops, I would presume, by little
and little, bee brought to a better
esteeme of themselves and a grea-
ter

ter loathing of those ill places. Last-
 ly, to conclude with our owne
 Nation; what Battayle haue wee
 ever fought eyther at home or a-
 broad and triumphed, but the
 Bow (next unto God) hath carry-
 ed the honor, witnesse the famous
 Battaille of *Cressie* against *Philip* the
French King, where (as our Adver-
 saries themselves doe confesse)
 was slain all the Nobility of *France*,
 onely by the *English* Archers: like
 unto this, was the Battaille fought
 by the Blacke Prince beside *Poyc-*
tiers, where *John* the *French King*,
 with his Sonne, and in a manner
 all the Peeres of *France* were ta-
 ken, besides 30000. which that
 day were slaine, and very few *Eng-*
lishmen. As this, so the Battayle
 of *Agincourt*, is remarkeable, where
Henry the fifth, with 7000. figh-
 ting men, and many of them sicke
 and

and vnable, yet such Archers, that
(as the Chronicle doth report)
most of them drew a yard, slew all
the Chevalrie of *France*, to the
number of 40000. and more, and
lost not above 26. of the *English*.
The bloody Civill Warre betwixt
the two great houses of *Yorke* and
LANCASTER, where Arrowes flew on
every side, will witnesse the pow-
erfulnesse of the Bow, and as these,
so a world of others, too tedious
to recite. So that in conclusion, it
cannot be denied, but the Bowe
hath done more wonderfull ex-
ployts and brought home more
Tryumphs, then any other weapon
that ever was read of, cyther in
Greece or *Latine* Story, then that
it should now fall sicke, languish,
may dye, and be buried in perpetu-
all oblivion, *O quam te memorem.*

CHAP. II.

CHAP. II.

*That Shooting is most necessarie for
this Kingdome both in Peace and
Warre, and how it may profitably
bee used, without charge to the
Country, tronble to the People, or
any hinderance to necessary occa-
sions.*

WHatsoever I have for-
merly spokē in praise
of the Bowe, which
I know to bee most worthy, yet I
would not have the curious to mi-
stake me, and thinke in it I derogate
from other Weapons, and so call
me a King *Harry* Captaine, or a
man of an old Edition, out of date
in these refined times, where no-
thing is excellent, but that which
is least excellent, *Folly* and *Selfe-*
opinion;

opinion; No, I am farre from such censuring, for I acknowledge the *Pike* and *Musquet* to bee the elder Brethren in Warre, and the Weapons wherewith I have both commanded and beene commanded all my life in the Warres: neyther dare I carry a thought eyther to weaken their power, or decrease their number, my wish is, that his Majesty had for every ten an hundred. But when I looke into the state of the Kingdome, to which my place in severall Countyes calles me, I finde there is a select and choyse company cull'd out every Shire, which are called Cautionary or trayned Band, and which are armed with *Pike* and *Musquet*, yet with that difficulty and vnpreparednesse, that authority her selfe cannot deny, but if sodaine and vnlookt for

should rayse them, few Countyes would boast of absolute perfecti-
 on, but allow them(as they should
) compleat in every thing be-
 yonding vnto them,yet they are but
 handfull, and not to compare
 with the vnarmed, one in an hun-
 dred; If then, to these Trayned
 Bands, there were an equall
 number or a much greater of well
 disciplined Bowe-men, doubtlesse
 they would bee found of great vse,
 and not onely gaine glory to the
 Kingdome, but feare and amaze-
 ment to all those which durst to
 attempt vs: And that this is, a
 worke most necessary and most ea-
 sy, without charge, trouble, or o-
 ther difficulty, thus I approve it.
 First, for the necessity, it is
 showne to all those which eyther
 know vs, have heard of vs, or have
 seen vs; that we are a potent, valiant,
 and

and daring Nation: not trusting
vnto walled Towns, Castles, Forts
or concealed Stratagems, but vnto
to the God of Battailles, a good
Cause, and well manag'd Armes
so that what Enemy soever will
seeke vs, shall finde us in the open
field, where a Battaile must ever be
made the Arbitrator of our good
or evill Fortune. If then, the chance
of one day must decide our controu-
versie, what better Art can be ex-
ercised in that extremity, then the Art
of Multiplication, or bringing of
most Multitudes to fight without
disorder; for, according to the Pro-
verbe, *Many hands make light
worke.* and albe a few may pre-
vail through the vertue of Discipline,
yet more will do more good
if Valour and Wisedome be not
wanting, as thus for example;
Battaile is to be fought, and vnto

Kin

ing brings into the Field 20000.
armed with Pyke and Musquet, to
bring a greater number with those
weapons is difficult or hurtfull, ey-
er through the want of Armes, or
the necessity of other places: If
then, there bee 10000. strong and
well exercised Bowe-men to joyne
vnto them, can any man be so fo-
lish as not to conceiue what terror
and amazement those Showers of
arrows will bring to the Enemy,
that this bee judg'd by them that
have seene the affright in Battailles,
or mine owne part, I cannot but
conceiue it a worke of great neces-
sity, excellent vse, and infinite pro-
fitable both to the King, and his
kingdomes.

Now touching the easie accom-
plishment of this worke, without
charge or vexation, or so much as
grumbling to the common peo-
ple,

ple, it may thus (if his Majesty please) be effected.

There are (or at least there ought to be) in every City, Towne, Hamlet and Village, a certaine select Company of the best and able men both for person and estate which should amount to a double number, or more then those which are called the Trayned men, as thus: If in a Towne there be one Trained man, then there should be two or three of these: if two Trayned men then foure, five, or sixe of these, according to the ability and popularity of the place, and these bee called *Supplies*, because from them the Trained Bands are supplied and re-enforced vpon every alteration, Change, death, old-age, or any other necessary avoydance; Now these Supplies are bound to appearance at all Musters, as well as the

Tray

Trayned Bands and doe so, but having giuen in their names, they depart away without any exercise or military instruction, and so spend out the rest of the daye yther in the Alehouse or some other place where they laugh at those which are taking paines and busie to be instructed; So that when they come to be called into the band themselves, their Ignorance is so great, that they hurt both themselves and others.

Now, if it would please his Majesty, or those to whom he hath dispensed such authoritie, to command, that these *Supplies* should give their attendance with Bowes, Arrowes & Palizadoes, or Staues, assuming the likenes of the Palizadoe & so to be exercised with the Trayned Bands which carrie Pike & Musquet; This Benefit would arise

C 4

rise from such proceedings. First, a
 Glory to the Band by augmenta-
 tion of their numbers, an expertnes
 in the Souldier, by his acquaintance
 withall manner of weapons, and a
 dexteritie of Body, by the vse and
 knowledge of euery Military mo-
 tion; For, allow the Bow to be as
 despised a thing as either Envie or
 Ignorance would haue it, yet out
 of this discipline the Bowman shall
 learne these most necessary les-
 sons: First, all manner of Marches
 & Countermarches, Turnings & re-
 turnings, Wheelings imbattailings,
 doublings, and deductings, distance
 of place, how to Charge, Retyre,
 and how to giue showers or vol-
 leys vpon all occasions, the post-
 ure of the Bow and Arrow, which
 hath affinitie with the Musquet, and
 the postures of the Palizadoe,
 which is a good conduct to the
 Pike,

Pike, he shall learne the beatings of
 the Drum, all words of Command,
 the power of his superior Officers,
 and indeed what not, that belongs
 to an ordinarie Souldier; So that
 when any of them shall be called
 into the trayned Band to handle
 other weapons, they will be found
 so skilfull and expert, that there
 can be no feare either of Confu-
 sion or disorder, and where his
 Maiesty hath one souldier now, he
 will then haue two or a greater
 Number.

Now if I shall be questioned
 touching the mixture of these sene-
 rall weapons, the *Pike*, the *Mus-*
quet, and the *Bow*, or in what sort
 they may be imbattayled without
 disorder or hinderance of one
 weapon with another; I answer,
 that albe there are a world of more
 worthy Souldiers which can bet-
 ter

ter demonstrate these things then my selfe, yet this is mine Opinion, and thus I conceiue it may be done both easily and profitably. In the dayes of Queen *Elizabeth* of thrice happy and blessed memory, when the vse of the *Musquet* was newly brought from beyond the Seas into this Kingdome, and the vertue thereof found and approued; yet was the weapon so scarce to be had, workemen so slow, and new alterations so vnpleasant, that the State was compelled to compound their Bands of three seuerall weapons, the *Pike*, *Musquet*, and the *Harquebush*, or *Calliuer*, as I am able to shew by sundry lists, both of mine owne and others. But after the expence of some small time, by the care of the *Lords Liutenants*, and the diligence of their *Deputies*, the Bands were reduced into that estate wherein

wherein now they stand, which is, *Pike*, and *Musquet* only, and the *Harquebush* cast off. Now instead of the *Harquebush*, and as the *Harquebush*, so would I haue the Bow imployed, and as the *Musquet* doth wing the *Pike*; So I would haue the Bow to wing the *Musquet*, obseruing to keepe the numbers so iust and constant, that one weapon might not intermixe with another, but as three distinct and seuerall bodies, (howeuer joyned in one *Battalia*) to be separated and disposed at the pleasure of the Commander; and because the *Bow* is a more ready and quicker Weapon of discharge then the *Musquet*, the Capitaine may by doubling and redoubling, cyther Ranks or Fyles, make his showers of arrowes greater or lesse, according to the advantage of ground, the strength of his

his numbers, or the approach of the Enemy.

Many other things might be added to this little beginning, which were much too tedious to handle in this place; because, I onely desire but to open a little narrow way to a great deale of profit for the kingdome, which if it shall please Authority to accept and second, both my selfe and many others, much more worthy then my selfe, will bee ready with our vttermost endeauours to make good this project; Besides, the now almost halfe lost Societies of *Bowyers* and *Fletchers*, will get a little warmth and, both praise their God, and pray for theyr King, from whom these good things issue. Not that the Countreies or Souldiers shall bee forc'd to any new charge or cost, by which extraordinary gaine may redound vnto

vnto them, but that the wholsome Lawes of the Kingdome (which bindeth euery man to be master of a Bow and Arrowes) may be a little awakened. And so I returne againe to the Art of *Archerie*, and the true knowledge with vse of the Bow and Arrow, and all things else depending vpon them.

CHAP. III.

Of the chiefe point aymed at in Shooting, and how to attaine vnto it.

THe chiefe point or end whereunto euery man bendeth his ayme when hee learneth to Shoote, is to hit the marke whereat he shooteth, and to the compassing thereof, there is required two things; first, Shooting *streight* then keeping a *length*, and these

these are attained vnto, by knowing and hauing all things belonging to Shooting, & when they be knowne and had, then in the well handling of them; and of these, some belong to shooting straight, some to keeping a length, and some to both, as shall be declared seuerally at large hereafter.

Now touching the things belonging to Shooting, you shall vnderstand, that all things are outward, yet some be outward Instruments for euery seuerall Archer to bring with him, proper for his owne vse, other things be generall to euery man, as the time and place serueth.

Those which I call outward Instruments, are the *Bracer*, the *Shooting-gloue*, the *String*, *Bow*, and *Shaft*.

Those which are generall to all men, are the *Weather*, & the *Marke*;
yet

yet the Marke, is euer vnder the rule of the Weather.

Now the well handling of these and all other things, standeth in the man himselfe, for some handlings are proper to Instruments, some to the Weather, some to the Marke, and some rest in the man himselfe.

Touching the handlings which are proper to Instruments, they be *Standing*, *Nocking*, *Drawing*, *Holding*, and *Loosing*, from whence issueth all faire shooting, which neither belongeth to *Winde* nor *Weather*, nor yet to the *Marke*; for in a Raine and at no marke, a man may shoote a faire Shoot.

As concerning the handlings which are proper to the Weather, they are the knowledge of the Wind with him, or against him, a Side-wind, Full side-wind, Side-wind

wind quarter with him, Side-wind quarter against him, &c.

Touching the handlings proper to the Marke, they are heedfully to regard his Standing, to shoot with Compasse, to draw euermore alike, to loose euermore alike, to consider the nature of the Prick in Hills and Dales, in Strays Playnes, and winding places, and also to espy his marke.

Lastly, for the things remayning with the man himselfe, they are to be avoiding of all affections and passions which are the making or marring of euery good Action. And these things thus spoken of and briefly discussed if they be well knowne and handled, doubtlesse they shall bring a man to such perfection in shooting that fewe or none can exceed him, but if hee misse in any one of them he can ne-

uer

uer hit the marke, and the more he misseth, the further off he is in shooting nigh the Marke. But as in all other matters, so in this, the first Step or Stayre to be good, is to know a mans fault and then to mend it, for to maintaine it is double to doe it.

Thus I haue packed together in a generall manner a small or short *Analasis of the Art of Archerie*; I will now vnloosen them againe, and taking as it were euery piece into my hand againe, discourse of them particularly and at large, beginning with the Instruments. And first of the *Bracer*.

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CHAP. IV.

CHAP. IV.

Of the Bracer and the
use.

THe Bracer giueth the least scope to my discourse, because it is an Instrument of no potent validitie, yet such an one as may not be omitted; therefore you shall vnderstand, that the Bracer serueth for two purposes, the one to saue the arme from the stripe of the String, and his doublet from wearing; and the other, that the String glyding sharply and quickly of the Bracer may make the sharper shoote, for if the string should light vpon the bare sleeue, the strength of the shoote would stop and dye there; yet it is the best in my Indgement, to giue the
Bow

Bow so much Bent, that the string need neuer come neare or touch the mans Arme, and so should a man need no Bracer, as I know many good Archers which seldome or neuer vse them, but it is not a Rule for generall Imitation; because euery mans apparell is not of one fashion, nor euery one that fulnesse of Iudgement, that those which are continually and dayly exercised in the same haue.

In a Bracer, a man must take heed of three things; First, that it haue no Nayles in it, then that it haue no Buckles; and lastly, that the laces wherewith it is fastned be without Tags or Aglets; For the Nayles will sheare the string in sunder before a man be aware, and so put his Bow into hazard, and the Buckles, Tags or Aglets, will (when a man least suspects it) raze and scratch

his Bow, a thing both vncomely to behold, and dangerous for the weapon.

These *Bracers* are made for the most part of Spanish-leather, the smooth-side outward, and they be the best, sometimes of Spanish-leather and the flesh side outward, and they are both good and tollerable, and others are made of hard, stiffe but smooth Bend-leather, and they be the worst and most dangerous. And thus much is spoken of the *Bracer*.

C A H P. V.

Of the Shooting-glove and the vse thereof.

A *Shooting-glove* is a necessary armour or defence for the hand, to preserue it from hurting or galling, so that a man

man may be able in his fingers to beare the sharpnesse of the String to the vttermost of his strength, for when a man shooteth, the violence and might of his Shoot lyeth in the foremost finger, and the Ring-finger; for the middle finger (which is the longest) like a Coward starts backe and beareth no weight of the String, in a manner at all; therefore, the two other fingers must haue thicker leather, and that must haue the thickest of all, whereon a man looseth most, and for sure loosing, the foremost finger is most apt, because it holdeth best, and for that purpose, Nature hath yoked it with the Thumbe. Leather, if it be next a mans skin will sweate, wax hard and chafe; therefore, Scarlet for the softnesse, thicknesse and wholesomenesse, is best to line the Gloue withall; but, if you finde

that it helpeth not, but still the finger hurteth, it is good then to take a Searecloth made of fine Virgin waxe and Deere Suet, and putting it next your hand draw on your Gloue; If yet you feele your finger pinched, then forbear Shooting, both because it is not possible for you to shoote well, as also, the continuall hurting of your Fingers by slow degrees, will make the time long ere you can be able to shoote againe.

A new Gloue pluckes many Shoots, because the String goeth not freely off, & therefore the fingers of the Gloue must be cut short, and trimmed with some sweete ointment, that the String may glide smoothly away.

There be some, that with holding the nocke of their Shaft too hard, rub the skin off their fingers, which

which is an error, yet there is for it two remedies, one to haue Goose-quills spinetted and sewed against the Nocking, betwixt the linyng of the Gloue and the Leather, which both openeth the fingers and helps the Shoote. The other, is to haue a rowle of leather sewed betwixt his fingers at the setting on of the finger-stals, which will so keepe his fingers asunder, that by no meanes he shall hold the nocke so hard, as before he did.

This Shooting-gloue, should also haue a purse on the backe of the hand, wherein the Archer shall euer carrie a fine linnen cloth and waxe, two necessary things, for any man that vseth shooting; Some men vse Gloues or the like on the Bow hand, for feare of chafing; because they hold so hard. But that error happeneth (for the most part) when

when a Bow is not round, but a little square, therefore fine tempered waxe shall doe well in such a case, to lay where a man holdeth his Bow; yet I doe not condemne the wearing of a fine thin cut finger-gloue on the Bow hand. And thus much concerning the Shooting-gloue; which albe, they are but trifles in a generall opinion, yet to the young vnexperienced Scholler they are things of moment, and as well worthy his knowledge as those of greater value.

CHAP: VI.

CHAP. VI

Of the String and the use.

THe *Bow-string* though it be but a little thing to the eye, and but a small twine in the hand, yet it is a thing of high esteeme and worthy of a mans best circumspection, onely the infelicitie is, that in this Instrument a man is forc'd to put all his confidence in the honesty of the String-maker, and surely, the String-maker ought more diligently to be looked vnto by appoynted officers, then eyther *Bowyer* or *Fletcher*; because they may deceiue a simple man with more ease. A euill String breaketh many a good Bow, yea no other thing halfe so many; In warre if

if a string breake, the man is lost
and is no man, for his weapon is
gone; and though he haue two
strings put on at once, yet he shall
haue small leasure and lesse roome
to bend his bow; and therefore,
God send honest String-makers
both for Peace and Warre.

Touching what a String ought
to be made on, as whether of good
hempe (according to our now mo-
derne practise) or of fine Flaxe or
Silke, I leaue it to the decysson of
the String-maker, of whom we must
buy them who are most conuersant
with the vertues of euery seuerall
substance.

Eustathius vpon this verse in
Homer —

Twang quoth the Bow, and twang
quoth the String, out quickly
the Shaft flew —

doth

doth tell, that in old time, they
made theyr Bow-strings of Bul-
lockes Tharmes, or Guts, which
they twyned together as they doe
Ropes, or as they doe great Harp-
strings, or other like strings for
great Instruments, which occasio-
ned them to giue a great twang.

Bow-strings also haue beene
made of the haire of an Horsetaile,
and were called by reason of the
substance wherof they were made,
Hippias, as appeareth in many good
Authors; Great Strings and little
Strings be for diuers purposes, the
great string is more sure for the
Bow, more stable to pricke with-
all, but slower for the cast; the lit-
tle string is cleane contrary, not so
sure, & therefore to be taken heed of,
least with long tarying on it break
your Bow, beeing more fit to
shoot farre, then apt to prick neare;
there-

therefore when you know the nature of both big and little, you may fit your Bow according to your occasions.

In the stringing of your Bow, though this theame belong rather to the handling then to the thing it selfe; yet because the thing and the handling of the thing, be so joynted together; I must needs sometimes couple the one with the other;

The Stringing of the Bow.

First therefore, in the *Stringing* of your Bow, you must marke the fit length of your Bow; for if the string be too short, the bending will giue, and at the last slippe, and so put the Bow in hazard; if it be too long, the bending must needes be in the small of the String, which being twyned hard, must needes knap in sunder, which is the vtter destruction of many a good Bow,
more-

moreouer, you must look that your Bow be well Nocked, for feare the sharpesse of the Horne sheare in sunder the String, which chanceth often, when in bending, the string hath but one wap to strengthen it withall; you must looke also, that your string bee streight and euen put on; otherwise, one end will writhe contrary to the other, and so indanger the Bow. When the string beginneth neuer so little to weare, trust it not, but away with it, for it is an euill saued peny that loseth a man a Crowne.

Thus you see, how many jeopardies hang ouer the poore Bow, by reason onely of the String, as when it is cyther too short, or too long, when the Nocke is naught, when the string hath but one wap, or when it tarrrieth too long on the Bow; yet these, are not all the reasons

reasons for the breaking of the Bow, for it is broken diuers other wayes, and by diuers other meanes, as shall be declared.

In stringing your Bow, you must haue respect to much Bend and little bend, for they be cleane contrary one to the other. The little Bend hath but one commodity, which is in shooting faster and farther, the reason being, because the String hath so farre a passage ere it part with the Shaft. The great Bend hath many commodities, for it maketh easier shooting, the Bow being halfe drawne before; It needeth no Bracer, for the string stoppeth before it come to the Arme, it will not so soone hit a mans Sleeue, or other parts of his Garments, it hurteth not the Feathers of the shaft as the low Bend doth, it also suffereth a man the better to

espy

espie his Marke; Therefore let your Bow haue a reasonable good Bend, as about a Shaftment and more at the least, for the reasons before rehearsed.

Lastly, it is not amisse, if in the mid-part of the String, just where you Nocke your Arrow, you warpe it about for the space of foure fingers, with fine Silke well waxed, for it will both be a good defence for the String to keepe it from wearing, and also fill the Nocke of the Arrow the better, and make it flye with more certainty. And thus much of the *Bow-string*.

CHAP. VII.

Of the Bow, the Diuersities and the
Vses: what Wood is best, the
Choyce, the Trimming, to keepe it
in Goodnesse, and how to Cure it
from all mischieues.

Touching the Bow, which is
the chiefest Instrument in
all this Art, diuers Coun-
tries at diuers times, haue vsed di-
uers Bowes and of diuers fashions.
Horne-bowes are vsed in some pla-
ces at this day, and were much w-
fed in the dayes of *Homer*; for *Pan-*
darus, who was one of the best
Shooters amongst the *Troians*, had
his Bow made of two *Goates-hornes*
joyned together, the length where-
of, saith *Homer*, was, Sixteen hand-
bredth, not much differing from
the

Iliad. 4.

the length of our Bowes. The
Scriptures make mention of *Brasse*-
bowes, *Iron-bowes*, & *Steele-bowes*, all
which were vsed of long time, and
are yet at this day among the *Turks*;
but yet they must needs be vnpro-
fitable; for if *Brasse*, *Iron*, or *Steele*,
haue their owne strength and vigor
in them, they are far aboue a mans
strength; If they be made meet for
mans strength, their vigor is allay'd
and their Strength nothing worth,
to shoot any strong shoot withall.

The *Ethiopians*, made their Bowes
of the *Palme-tree*, wch seemed to be
very strong, (but with vs out of ex-
perience) being 4. Cubits in length.

Herod. in
Pol.

The *Indians*, haue their Bowes made
of *Reed*, wch are wondrous strong;
& it is no maruel, they framed their
Bow & shafts therof; for (as *Herodo-*
tus reports) euery *Reed* was so big,
that a man might make a Fisher boat
thereof; These Bowes, sayth *Apian*,
in *Alexanders* life, gaue so great a
stroke

Herod. in
Thalia.

Ap. lib. 2.

E

stroake that no Armour or Shield, though it were neuer so strong was able to withstand it, the length of such a Bow was euen with the length of him that vsed it.

The *Licians* vsed Bowes made of a certaine Tree called in Latine *Cornus*, touching the name in English, I can sooner prooue that other men call it false, then I can tell the right name my selfe; This wood is as hard as a Horne and very fit for Shafts, as shal be declared hereafter.

Ouid sheweth, that *Syrinx* a Nymph and one of the handmaids of *Diana*, had a Bow of this wood, whereby the Poet meaneth, that it was the most excellentest for this purpose; As for *Brazill*, *Elme*, *Wise* and *Ashe*, experience doth prove them to be but in the meane degree, and so to conclude of all woods

woods whatsoever, the *Ewge* is that whercof perfect Shooting would haue a Bow made; This wood as it hath long beene and is now general and common amongst vs, so was it in former times acquired and had in most price, especially amongst the *Romans*, as doth appeare in this halfe verse of *Virgil*:

Taxi torquentur in Arcus —

Ewge fit for Bow to be made on —

Now this Bow of *Ewge*, ought to be made for perfect shooting at at the pricke, which Marke, because it is certaine and most certaine I will draw & ground all my Rules from that head onely, and the rather, because whosoever is excellent at it, cannot be ignorant at any other Marke.

A good Bow is knowne as good

counsaile is knowne, by the end, and profit we receiue by it; yet both the Bow and good counsaile, may be made better or worse, by the well or ill handling of them as experience teacheth vs; And as a man, both must and will take counsaile of a wise and honest man, though he see not the end of it; So must an Archer of necessity, trust an honest & good Bowyer for a Bow, before he know the prooffe of it. And as a wise man will store vp counsaile before hand, to preuent future euils; so a good Archer, should euer haue three or foure Bowes before hand, least sodaine want might vndoe his pleasure.

Now, that you may escape general mistaking in the election of your Bow, I will giue you some Rules and Notions, which if you forget not, shall preuent many mistakings.

If

If you come into a Shop and finde a Bow that is small, long, heauie, and strong, lying streight, not winding, not marr'd with Windshake, Knot-gall, Wenne, Fret or pinch, then buy the Bow from my warrant, the best colour of a Bow that I finde, is when the Backe and the belly in working be much what after one manner, for such oftentimes in wearing, proue like Virgin waxe or Gold, hauing a fine & long graine from one end of the Bow to the other, for a short graine though it proue well sometimes, yet they are for the most part very brittle.

Touching the making of the Bow I will not greatly meddle, least I should be found to intrude vpon another mans Occupation in which I haue no skill, and so like the Cobler goe beyond my *Latchet*; Onely I would desire all Bowyers to sea-

son

E 3

son theyr Staues well, to worke and sinke them well, to giue them heats conuenient, and Tyllering plenty; For thereby, they shall both get themselves a good name, (and a good name increaseth profit) and also bring a singular commoditie to the whole Kingdome; If any man offend in this poynt, I am perswaded they are onely those young Iourneymen, which labor more to make many Bowes speedily for gaine sake, then diligently to make good Bowes for theyr credit sake, cleane forgetting this Prouerbe,

Soone enough, if well enough. —

wherewith euery honest Tradisman should, as with a Rule, measure his worke, hee that is a Iourneyman & rideth vpon another mans horse, if he ride an honest pace, no man will

will disallow him; But, if hee ride post or beyond discretion, both he that oweth the Horse, and he that after shall buy the Horse may peraduenture haue cause to curse him; neither is this fault confined to any one place, but I feare too generally dispeirst in diuers parts of the Kingdome, to the great hurt of that poore remnant of Archers which yet flourish, and to the great hinderance of the Kings seruice, if euer the vertue of that Weapon shall be reuiued; For belieue it as a maxime, that the Bow can neuer be made of too good wood, nor yet too well seasoned or truly made with heatings and tyllerings, neither the Shaft of too good wood, or too thorowly wrought, with the best Pinion feathers that can be gotten; especially, when a man therewith is to serue his Prince,

defend his Country, and saue himselfe from his Enemie.

But to returne againe to the true knowledge of a well Shooting Bow, you are to vnderstand, that euerie Bow is made, either of a Bough, a Plant, or of the Boole of the tree. The Bough, commonly is very knottie and full of pinnes, weake, of small pithe, will soone follow the string, and seldom weareth to any faire colour; yet for Boyes and young beginners, it may serue well enough. The Plant, doth many times proue exceeding well, especially, if it be of a good and cleane growth, and for the pith of it, is quicke enough of cast, it will ply and bowe, farre before it breake, as all other young things doe. The Boole of the Tree is cleaneft without Knots or Pins, hauing a fast and hard wood, by reason

reason of his full growth, strong and mighty of cast, and is the best of all other for the Bow, if the Staues be euen clouen, and afterward well wrought, not thwart the wood, but as the graine and streight growing of the wood leadeth a man; or otherwise, by all reason it must soone breake, and that in many Shiuers. These things are to be considered in the rough wood, and when the Bowstaues be over-wrought and fashioned; For, in dressing and picking it vp for a Bow, it is then too late to looke for it. But yet in these poynts (as I said before) you must when all is done, relye vpon the goodnesse of an honest Bowyer to put a good Bow into your hand; yet not forgetting your selfe, those Characters which I haue already shewed you; neither must you sticke, for a Groat or a Shilling

Shilling more then another man would giue, if it be a good Bow; For a good Bow twice payd for, is better thē an ill Bow once broken. Thus a shooter must begin, not at the making of his Bow like a Bowyer, but at the buying of his Bow like an Archer, and when his Bow is bought and brought home, before he trust too much vpon it, let him try and trimme it, after this manner.

First, take your Bow into the Field, shoote in it, sinke it with dead heauy Shafts, looke where it cometh most and prouide for that place betimes, before it pinch and so fret, then when you haue thus shot in it, & perceiues there is good shooting wood in it, carry it then againe to a cunning workman that is trusty, & let him cut it shorter, and pick it & dresse it fitter then before,

before, let him make it come round compasse euery where and whipping at the ends, but with great discretion, least it whip in sunder, or else fret before you bee aware, let him also lay it streight if it happen to cast, or otherwise need require; and if the Bow be flat made gather it vp round, and so shall it both shoote faster for farre Shooting, and also bee surer for neare Pricking.

Now albe, some lesse curious and more thrifty, may account this second trimming of the Bow, a pidling and needlesse worke, and that after a thing is once perfect there needes no amendment, let them vnderstand from mee, that it is no very good token in a Bow whereof nothing, when it is new and fresh, need to be cut away or amended; euen as *Cicero* sayth of a
Young

Young-mans wit and style. For e-
 uery new thing must haue more
 then it needeth, or else it will not
 grow better and better, but decay
 and bee worse and worse. New
 Ale, if it runne not ouer the barrell
 when it is new tunned, will soone
 loose both strength and head; and
 that Bow, which at the first buying
 without any more prooffe or trim-
 ming, is fit and easie to shoote in,
 shall neyther bee profitable to last
 long, nor yet pleasant to shoote
 well. And therefore, as a young
 Horse, full of high courage and
 mettall, with artfull handling, is
 brought both to a comely pace and
 cunning manage; So a new Bow,
 fresh and quicke of cast, by sinking
 and cutting, is brought to a sted-
 fast Shooting. And an easie and
 gentle Bow when it is new, is not
 much vnlike a soft spirited boy
 when

when hee is young, yet as of an vn-
 ruly boy, with right handling, of-
 ten cometh a well ordered man;
 so of an vnfit & Staffish Bow, with
 good trimming, must needs fol-
 low alwayes a stedfast and true
 shooting Bow; and such a perfect
 Bow, as will neuer fayle or decay.
 And indeed such a Bow euery man
 ought to looke for, that will at-
 tayne to the end and perfection of
 perfect Shooting.

Now, touching the sauing and
 preseruing of this good Bow, when
 you are once possesse of it and haue
 brought it to that perfection, of
 which I formerly spake, you shall
 then prepare a cloath, eyther of
 fine Harden or Woollen, well wax-
 ed, wherewith euery day you must
 rub & chafe your Bow till it shine
 and glitter withall, which action
 shall cause it both to carry an ex-
 cellent

cellent colour and complexion, and also bring ouer it (as it were) a crust, which will make all the outside so slippery and hard, that neyther wet nor weather shall bee able to enter or hurt it, neyther yet any Fret or pinch be able to byte vpon it; insomuch, that you shall doe it more then extraordinary wrong before you can breake it. This labour must be done oftentimes, but especially when you come from Shooting; you must haue a great care when you shoote, of the heads of your Arrowes, of wearing Daggers, Kniues, Poynt tags or Aglets, least by any mischance they happen to raze or scratch your Bow, a thing (as I sayd before) both vnseemely to looke on, and dangerous for Frets. Also, take heed of mystie and dankish dayes, for they are hurtfull to the Bow, and more dange-

dangerous then rayne; for in such weather, you must alwayes bee rubbing the Bow, or forbear to shoote.

When your Bow is thus neatly trimmed and ordered, you may then put it vp into your *Bow-case*, which *Bow-case* seeing it is a defence or sauegard for the Bow, I will speake a little thereof; First, your *Bow-case* when you ride abroad, must by no meanes bee too wide for your Bowes, for then one will beate against another and doe mischief, neyther must it be too strait, so that you shall bee forc'd to cram them in, for that would crowd them and lay them to one side, which would make them to winde and warpe; but it must bee of a fit proportion, easily filling and no more. A *Bow-case* of Leather is not the best, for they are for the

the most part moyst, & hurt a Bow; therefore our best Archers, will haue for euery Bow a seuerall case, made either of fine Canuase, or woollen-cloth, but woollen cloth is the best, for it not onely keepeth them in sunder without hurt, but also preserueth a Bow in its full strength, that it will neuer giue for any weather; when your Bowes are thus cased vp seuerally, you may then put them vp into your leather case without danger.

At home in your owne house, wood cases made of dry wainscot, are very good for your Bowes to stand in, prouided alwayes, your Bow stand not too neare a stone-wall, for that will make him moist and weake, nor yet too neare the fire, for that will make it short and brittle.

Thus, I haue shewed you the generall

generall preseruations of the Bow, I will now descend to those things which are to be auoyded for feare of breaking the Bow, and they be foure in number, *viz.* The String, the Shaft, by drawing too farre, and by Frets.

A Bow is broken by the String, (as I haue partly shewed you before) when it is either too short, too long, not perfectly put on, when it hath but one wappe, when it is put on crooked, when it is shorne by a sharpe nocke, or when it is suffered to tarry too long on, any of these make the string fayle and the Bow break, especially in the midst, the reason being, because the ends haue nothing to stoppe them but whip so farre backe, that the Belly must needs rise violently vp and split in pieces, as you may very easily perceiue, when at any time you

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will

will bend a Bow backward; A Bow therfore that followeth the String is least hurt with breaking of the String.

Secondly, a Bow is broken by the Shaft, cyther when it is too short, so that you set it in your Bow or when the Nocke breakes, for the littlenesse, or when the String slips without the Nocke through the widenesse, then you pull it to your eare, and let it goe, which must needs breake the Shaft at the least, and puts both String, Bow, and all in hazard, because the strength of the Bow hath nothing in it to stop the violence of it; This kinde of breaking is most dangerous for the standers by, for in such a case, you shall see sometimes the end of a Bow flie more then a score from a man, and as I haue noted it, is euer the vpper end of the Bow.

Thirdly,

Thirdly, the Bow is broken by drawing too farre, two seuerall wayes, either when you take a longer Shaft then your owne, or else when you shift your hand too low or too high for Shooting, and misse the true midst of the Bow; and this motion is that, which pulleth the backe of the Bow in sunder and maketh it flie in many pieces; so then you are to obserue, when a Bow is broken, hauing the belly rissen vp either both wayes or but one, then the String brake it, when it is broken but in two pieces, and that in a manner euen or especially in the vpper end, then the Nocke of the Shaft brake it, and when the backe is pulled in many peices, then ouer-drawing brake it. These tokens are alwayes most certaine, or very seldome doe misse.

The 4th, and last thing, that breake

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keeth

keth a Bow, are Frets or Gaules, which prepare and make ready a Bow for breaking by any of the three wayes formerly spoken off; and these Frets, are as well in the Arrow as the Bow, and they are much like a canker creeping and increasing in those places where they abide, which is euer the weakest and most indigent: And to cure this, your Bow must be picked & trimmed by a cunning workman, who will foresee that it may come round in compasse euery where; For, of Frets you must beware. If your Bow haue a knot in the backe, least the places which be next vnto it, be not strong enough to beare with the knot, or else the strong knot will fret the weake places next vnto it. Frets at first, are but little pinches, which as soone as you perceiue, picke the places about the pinch to make

make them somewhat weaker, and as well comming as where it pinched; and so the pinch will dye and neuer increase further or come to be a fret: Again, Bowes most commonly Fret vnder the hand, not so much (as some suppose) for the moystnes of the hand, as for the heat of the hand, for heat (as *Aristotle* saith) is apt to loose and not to knit fast, and the looser the weaker, and the weaker more apt to Fret.

A Bow is neuer wel made, which hath not plenty of wood in the hand, for if the ends of the Bow be staffish, or a mans hand any thing hot, the belly must needs soone Fret.

Now, for the cure of these Frets, I haue not heard of any to any great purpose, more then to make the Fretted place as strong or stronger then any other, touching

the filling of the Fret vp with the small Shiuers of a quill and Grew, (which some hold good) yet both by reason & mine opinion it must needs be starke naught, for put case the Fret doe cease then, yet the cause which made it fret before (which is onely weaknesse) is not taken away, and therefore consequently the place must needs fret againe. As for cutting out of Frets, together with all manner of piecing of Bowes, I vtterly dislike them, as things not fit for a good Archer, for pierced Bowes, are like olde houses which are more chargeable to repaire, then comodious to dwell in; and againe, to Swaddle a Bow much with bands, how euer necessity may make it vse full, yet it seldome doth any good, except it be to keepe downe a Spell in the Backe, otherwise bands

bands eyther neede not when the Bow is any thing worth, or else Boote not when it is spoyled. And though I know many poore Archers will vse pieced and banded Bowes, because they are not able to get better, yet I am sure if they consider it well, they shall finde it lesse chargeable and more pleasure, to bestow a Crowne on a new Bow then to giue tweluepence for piecing of an old, for better is cost vpon somewhat worth, then expence vpon that which is naught worth. And this I write the rather, because I intreat onely of the perfection of Shooting.

Againe, there is another thing which will soone occasion a Bow to be broken, by one of the wayes before named, and that is shooting in the winter leason when there is any great Frost; for Frosts are euer,

wherefoeuer there is any waterish humor, as is in all kinde of wood, eyther more or lesse, and 'tis true, that all things frozen and Icie, will rather breake then bend; yet if any man must needs shoote at such a time, let him take his Bow and bring it to the fire, and thereby a little rub and chafe it with a waxed cloth, which will quickly bring it to that perfection that he may safely shoote without danger: This rubbing with waxe (as I said before) is a great succour against all wet and moystnesse, and as you thus rub your Bow at the fire; so likewise in the field and going betwixt your Markes, either with your hand or else with a cloath, keepe your Bow in such a temper, as the frost may not annoy it.

And thus much concerning the Bow, how first to know what wood

wood is best, then how to chuse a Bow, after how to trim it, then how to keepe it in goodnesse; and lastly, how to saue it from all harm and mischief. And although many, both can and may say more in this Subiect then my selfe, yet what I haue said is true, and I hope sufficient for any reasonable knowledge.

CHAP. VIII.
Of the Shaft and the vse.

WHat Shafts or Arrowes were made of in former times, Authors doe not so plentifully shew, as of Bowes; yet *Herodotus* doth ^{Herodor. Eurerp.} tell vs, that in the Riuer *Nilus* there was a Beast called a *Water-horse*, of whose Skin after it was dried, the *Egyptians* made Shafts and Darts. The

The tree called *Cornus*, was so common to make Shafts on, that in many good latine Authors, *Cornus* is taken for a Shaft, as in *Seneca* and *Virgill*.
Seneca: Hippo.

Volat Itala Cornus.

Æneid: 9. Yet of all things that euer I marked in any old Authors, eyther Greeke or Latine, for shafts to be made on, I finde not any thing so common as Reeds; *Herodotus* in describing the mighty hoast of *Xerxes*, shewes that those great countries vsed Shafts made of Reeds, as the *Ethiopians*, the *Lycians* (whose Shafts had no feathers, at which I much maruaile) and the *Indians*. The *Indian* Shafts were very long, as a yard and an halfe (according to *Apian*) or at the least a full yard, as affirmeth *Quintus Curtius*, which made them giue the greater blow, yet that great length made them

Apian, li. 8

them more vnhandsome, and lesse profitable for them that used them. In *Creet* and *Italy*, they made their Shafts of Reede also, and as they, so many other Countries beside.

The best Reeds for Shafts grew in *Italie*, especially in *Rhemus*, a flood in *Italie*. But because such Shafts, are neither easie for our English Nation to get, or if got, scarce profitable for vse, I will leaue them vnhandled, and onely speake of those Shafts which our English Nation do most approue of at this day. And therefore you shall vnderstand, that euery Shaft doth consist of three distinct parts, as the *Steele*, the *Feather*, and the *Head*, which make a compleate Arrow; and because they be each of them (how euer sleight in shallow Imagination) yet of great validity and worthy our best discourse, I will handle

handle them feuerally and a part.
And first, of the *Steele*.

CHAP. IX.
*Of the Steele of the Arrow, the
excellence and vse.*

THe *Steele* or Body of the
Arrow or Shaft, is, and
may bee made of diuers
Woods, as namely, Fifteene in
number, as followeth:

Brazill,	}	{	Seruis-tree,
Turkie-wood,			Hulder,
Fusticke,	}	{	Black-thorne,
Sugar-chest,			Beeche,
Hard-beame,	}	{	Elder,
Birch,			Aspe,
Ashe,	}	{	Sallow.
Oake,			

These Woods, as they are most
commonly vsed, so they are most
fit

fit to be vsed, yet some are more
excellent then others, as you shall
heare in their proper place, and in
this instrument as in your Bow, you
must repose your confidence in the
honest Fletcher. And although I
cannot teach you to make a Bow
or an Arrow, because it is the Art
of the Artificers; yet, I will shew
you those Rules and Characters,
which shall make you able to judge
and discern the goodnesse and
badnesse of a Shaft, which is as
much, as a good Archer can re-
quire.

First then, the *Steele* of an Arrow,
must be well seasoned for feare of
casting, and it must be wrought as
the graine goeth or else it will ne-
uer flye cleane or true, for as cloth
cut ouerthwart and against the
wooll, euer maketh an imperfect
garment; So a knotty *Steele* may
passe

pasſe in a bigge Shaft, but in a little one it is intollerable, both becauſe it wil neuer fly farre, & alſo becauſe it is euer in danger of breaking; It cannot flye farre, becauſe the ſtrength of the ſhot is hindered and ſtopped at the knot, euen as a Stone caſt into a ſmooth water will make the water mooue and make many circles; yet if there be any deepe or whirling plat in the water, the motion will ceaſe, and the circles vaniſh ſo ſoone as they approach it, ſo is it, with a knottie Shaft that cannot flye when the ayre takes it; for euery thing as it is plaine & ſtraight of its owne nature, is fitteſt for farre moouing. Therefore, a *Steele* that is hard to ſtand in a Bow, without knot and ſtreight (I meane not artificially ſtreight, as the Fletcher doth make it, but naturally ſtreight as it groweth) is abſolutely the beſt to
make

make a Shaft on, eyther to goe cleane, fly farre, or to ſtand ſurely in any weather.

Now how bigge, how ſmall, how heauie, how long, how ſhort a ſhaft ſhould be particularly for euery man (becauſe I am bound to diſcourſe of the generall Nature of this Nature of this Art, and not the hidden adiuncts) it cannot be diſcouered, no more then Rethoricians can appoint any one kinde of words, Sentences, Figures and Tropes, for euery matter; but euen as the man and the Subiect doe require, obſeruing ſtill that the fitteſt be vſed. Therefore, as concerning theſe contraries in Shafts, euery man muſt auoyd them, and draw euery extremity to his meane or indifferent eſtate, which is the beſt in all things; yet if any man happen to offend in any exceſſe, it is better
to

to offend in want and scantnesse, then in too much or overflowing; and it is better to haue a Shaft a little too short, then any thing too long; somewhat too light, then ouer lumpish; a little too small, then a great deale too big; which thing, is not onely true in Shooting, but in all things else, wch a man vndertaketh, especially in eating & talking.

The offence of these contraries cometh most, when a man is careless and respecteth not of what kinde of wood his Arrow is made; for some wood belongs to the exceeding part, some to the scant part, and some to the meane. As *Brazill*, *Turkie-wood*, *Fusticke*, *Sugar-chest*, and the like; make dead, heauie, lumpish and cabling Shafts; the *Mudder*, *Black-thorne*, the *Seruis-tree*, *Beech*, *Elder*, *Aspe*, and *Sallow*, either for their ouer-weakenesse or lightnes, make

make hollow, starting, scudding, gadding shafts. But *Birch*, *Hard-beame*, some *Oake*, and some *Ashe*, being both strong enough to stand in a Bow, and also light enough to flye farre, are best for a meane degree, which is to bee sought out in every thing: And although I know some men shoot so strong, that the heauyest wood is light enough for them; and other some so weake, that the loose and lightest Wood will hardly serue them: yet generally for the most part of men, the meane woods are the best; therefore to conclude, that wood is alwaies best for a man, which is most correspondent to his strength. And thus, no wood of his owne nature, is eyther too light, or too beaue, but according to the strength of the Archer which doth vse it; and that Shaft which this yeare was for

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a man too light and scudding, for the selfe-same man the next yeare may be too heavy and hobling: Therefore cannot I expresse otherwise, then generally what is the best wood for an Arrow, but let euery one when hee knoweth his owne strength, and the nature of euery seuerall wood, prouide and fit himselfe thereatter; Yet as concerning Sheaf-Arrowes for the Warres (as I suppose) it were better to make them of good *Ashe*, as they were in former times, and not of *Aspe*, as they be now, for of all the woods that euer I prooued, *Ashe* being big is the swiftest, and giueth the fairest blow, by reason of its heauinesse; both which qualities the *Aspe* wanteth; what the benefit of Armour is, euery man can judge by experience, therefore that which piercerh it most, is most worthy; then *Ashe* be-

being both swifter and heavier, it must be the deeper wounder, and so fittest for the Sheafe; And thus much, of the choyce of seuerall Woods.

Now, as no Wood can bee absolutely meet for all manner of shafts, no more can one fashion of the *Steele* be fit for euery Archer; for those that be little breasted, and big towards the head, called for theyr likenesse Capon-fashion, Rush-growne, and of some merry fellowes Bob-tayles, are fittest for them which shoot vnder-hand, because they shoot with a soft loose, and straines not a shaft much in the Breast, where the weight of the Bow lyeth, as you may perceiue by the wearing of euery Shaft; againe, the big-breasted Shaft is fit for him that shooterh right before him; as also, the Breast being weake

cannot possibly withstand a strong pithie kinde of Shooting. Thus the vnderhand must haue a small breast to goe cleere away out of the Bow, and the fore-hand must haue a big breast to beare the great might of the Bow.

Euery Shaft must be made round & not flat, without Gall or worne, because roundnesse (whether you take example fro Heauen or Earth) is the fittest shape or forme both for fast moouing, and also for soone piercing of any thing, and therefore ARISTOTLE sayth; that Nature hath made the drops of Raine round, because it shall the sooner enter through the Ayre.

The nocke of the Shaft is diuersly made, for some be great and full, some handsome and little, some wide, some narrow, some deepe, some shallow, some round, some long,

long, some with one Nocke, and some with a double Nocke, whereof euery one hath his seuerall property; as thus: The great and full Nocke may be well felt, and doth diuers waies save a shaft from breaking; the handsome little Nocke will goe cleane from the hand; the wide Nocke is naught both for breaking the Shaft, and also for suddaine slipping out of the string, when the narrow Nocke avoideth both these injuries: The deepe and long Nocke is good in the Warres for sure keeping of the String, the Shallow and round Nocke is the best of all other for our purpose in pricking, both for cleane delineance of a shoot, and fine sending away of the Arrow; and the double Nocke is for a double suretie of the Shaft. And this I thinke is sufficient touching the Steele of the Arrow

Arrow onely in Generall.

Now for the piecing of an Arrow with *Brazill*, *Holley*, or other heauye Wood, it is to make the end compasse heauie with the Feathers in flying, for the stedfaster shooting; for if the end were plumb'd heauie with Leade, and the Wood next it light, the head-end would euer bee downeward, and never flye streight. Now in piecing, you must conceiue that two points are euer enough for one shaft, least the moystnesse of the Earth enter too much into the piecing and so loosen the glw; therefore many points are more pleasing to the eye, then profitable for vse. Some vse to piece their shafts in the Nocke with *Brazill* or *Holley*, to counterpoise with the Head, & I haue scene some for the same purpose, boare an hole a little beneath the

the Nocke, and put leade into it; yet for mine owne part, I allow not any of those wayes, because the nature of a Feather in flying (if a man mark it wel) is able to beare vp a wonderfull weight; therefore I imagine this manner of piecing at the nocke was drawne from this President; when a good Archer had broken a good shaft with which hee was much enamoured, both in loue to the Feathers, and out of a fancie not to loose what he did formerly affect, hee hath caused it thus to bee pieced, which others perceiuing, (without any examination of the cause, but pleas'd with the gaudinesse) haue presently imitated, and not onely cut one, but all in theyr Quiver; A thing, in my judgement much more costly then necessary; therefore let no man make himselfe anothers Ape without argument, without discretion.

CHAP.

CHAP. X.

*Of the Feather, the Nature, excellence
and vse.*

THere is not any thing in all the Art of Archerie more seriously to be lookt into then the Feather of the Shaft; because first a question may be asked, whether any other thing beside a Feather be fit for a shaft or no; then if a feather onely be fit, whether a Goose Feather onely or no; If a Goose Feather be best, then whether there be any difference as concerning the Feather of an old Goose or a young, a Gander or a Goose, a Fenny Goose or an vpland Goose; Againe, which is the best Feather in any Goose the right wing or the left, the pinion Feather or any other Feather; a white, a blacke, or a gray Feather; Thirdly, in setting on the Feather whether

whether it is pared or drawn with a thicke Rib or with a thinne, (the Ribbe is the hard quill which diuideth the Feathers, whether a long Feather bee better then a short, whether to be set on neare the Nocke or farre from the Nocke, whether to be set on streight or somewhat bowing, and whether one or two Feathers must runne on the Bow; listly, in Couling or Shering, whether it must be done high or low, whether somewhat Swine-backed (I must vse Archers words) or Saddle-backed, whether round or square shorne. And whether a Shaft at any time ought to be plucked, and how to be plucked; Of these things in their order.

First therefore, whether any thing else may be vsed but a Feather, both *Plinie* in Latine, and *Iulius Pollux* in Greeke doe proue, that Feathers

Feathers alwayes haue beene vsed; and but onely the *Lycians* of whom I reade in *Herodotus*, did vse Shafts without Feathers; vnderstand then, that onely a Feather is fit for a Shaft, and that for two reasons: First, because it is leath-weake to giue place to the Bow, then because it is of that nature that it will start vp after the Bow, which plate, wood or horne, cannot do, because they will not giue place; and againe Cloth, paper or parchment, cannot serue, because they also will not rise vp after the Bow; therefore the Feather onely is meet, for it will doe both; Now if you please to behold the Feathers of all manner of Byrds, you shall see some so low, weake and short, some so course, stoore and hard, and the rib so brittle, thinne and narrow, that it can neyther be drawne, pared, nor well

well set on: So that, except it be a Swan feather for a dead shaft (as I know some good Archers haue vfed) or a Ducks for a Flight, which lasteth but one shoote, there is no Feather but onely of a Goose, that hath all māner of comodities in it; & for the Peacocks Feather, which some men doe vse at a short Butt, it seldom or neuer keeps vp the shaft, eyther right or leuell, by reason that it is so rough and heauie; inso-much, that many which haue taken them vp for their gaynesse, haue layd them downe againe for theyr profit; So that I conclude, the Goose of all Feathers is the best for a compleat Archer, and he that will goe beyond it, let him be *Hercules* Scholler and not mine, who feathered his Arrowes with the wings of an Eagle, a Fowle that flyes so high, and builds so farre off

off, that I had rather content my selfe with the gentle Goose, then search for the others Feathers. Especially, because the Goose bringeth euen to a mans doore so many excellent commodities : for the Goose is mans comfort both in warre and peace, sleeping and waking, what praise soeuer can be giuen to shooting, the Goose may challenge the best part : how well doth shee make a man fare at his Table, how easily doth she make a man lye in his Bed, & how brauely doth her quills make vs write, & record euery occurrent : I doe not think that the *Romans* giue so much honour to the Goose for sauing the Capitoll, when they set her golden Statue thereon, and appointed the Censors to allow out of the common Treasurie yearly Stipends for the maintainance of those Creatures,

tures, they did it not (I say) so much for that one good act, as for a world of others, which we dayly and almost houely receiue from them ; insomuch, that if I were bound to declaime in the praise of any Beast liuing, I would choose the Goose: But leauing this digression : Now how a Feather must bee had ; and what Feather is best ; it followeth now, whether of a young Goose, or an old ; the old Goose Feather is stiffe and strong, good for a winde, and fittest for a dead Shaft ; The young Goose Feather is weake and fine, and are best for a swift shaft, and it must be caulled at the first shearing somewhat high : for in shooting, it will settle very much ; The same things (although not so much) are to be considered both in Goose and Gander ; A Fenny Goose, euen as her flesh is blacker,

ker, stoorer and vnwholsomner, so are her Feathers by the same reason courser, stoorer and worse for that purpose; whence it comes, that I haue heard many skilfull Fletchers say, that the second Feather in some place, is better then the Pinion in other; Berwixt the wings is little difference, but that you must haue diuers Shafts of one flight, feathered with diuers wings for diuers winds; for if the Wande and the feather goe both one way, the Shaft will be carryed too much. The Pinion Feathers, as they haue the first place in the Wing, so they haue the first place in Feathering, this feather you may know before it be pared, by a blight which is in it: and againe, when it is clu'd by the thinnesse aboue, and the thickenesse at the ground, and also by the stiffenesse and finenesse, which

which will carry a Shaft better, faster, and further then any other Feather.

Touching the colour of the Feather, it is the least of many other things to be regarded, yet is it worthy some notice; because for a good white you haue sometimes an ill gray, yet surely it standeth with good reason, euer to haue the Cocke feather blacke or gray; as it were to giue a man warning to Nocke right. The Cocke Feather is that which standeth aboue in right Nocking, which if you doe not obserue, the other Feathers must needs runne on the Bow, and so spoyle the shoote.

Now concerning the setting on of the Feather, you are principally to regard, that your Feather be not drawne for hastinesse, but pared with diligence and made streight.

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The Fletcher is sayd to draw after ther; when he hath but one swap at it with his knife, And he is said to pare it, when he taketh leisure and heede to make euery part of the Ribbe apt to stand streight, and euen vpon the Steele. This thing if a man doth not take heede of, he may chance to haue cause to say of his Fletcher, as we say of good meat ill drest; the Feathers are praise-worthy, but the Fletcher too blame.

The Rib in a stiffe feather may be drawne thinner, for so it will stand cleaner, on the shaft, but in a weake feather you must leaue a thicker Rib, for if the Rib web is the foundation ground whereon Nature hath set euery cleft of the feather be taken away too neare the feather, It must needs follow, that the feather shall fall and drop downe, euen as an hearbe doth web hath his Root too neare

neare taken away with the Spade.

The length and shortnesse of the feather serueth for diuers purposes and diuers Shafts, as a long feather for a long, heauy and big Shaft, the short Feather for the contrary; againe the short may stand farther, the long nearer the Nocke, your Feather must stand almost streight on, yet after that sort that it may turne round in flying; Now here I consider the wonderfull nature of Shooting, which standeth altogether by that fashion which is most apt for quicke moouing, which is onely Roundnesse; for the Bow must be gathered round in drawing, it must come a Round compassse, the String must be round, the Steele round, the best nocke round, the Feather thorne somewhat round, the Shaft in flying must turne round, and if it flie farre it flyeth

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eth a round compasse, for either aboue or beneath a Round compasse hindereth the flying; Moreover, both the Fletcher in the making your Shaft, and you in Noeking your Shaft, must take heed that two Feathers run equally on the Bow, for if one Feather runne alone on the Bow, it will quickly be worne & not able to match with the other Feathers, besides at the loose (if the Shaft be light) it will start, if it bee heauie it will hobble.

To coule, sheare or cut the Feathers of a shaft high or low, it must be done according as the Shaft is light or heauie, great or little, long or short: The Swine-backed fashion maketh the Shaft dead, for it gathereth more Ayre then the Saddle-backed doth, therefore the Saddle-backe is surer for danger of weather, and fitter for smooth fly-

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ing. Againe, to sheare a Shaft round, as they were wont in former times to doe, or after the Tryangle-fashion which is much vsed now; in these times, both are good: For Roundnesse is apt for flying of its owne nature, and all manner of Tryangles, (the sharpe point going before) is also apt for quicke entering; and therefore sayth CICERO, That *Cranes* taught by Nature, doe in flying alwayes observe a Tryangle fashion, because it is so apt to pierce and goe through the Ayre.

Cic. de
Nat. Deor

Lastly, plucking of Feathers is naught, for there is no surety in it, therefore let euery Archer haue such Shafts, that hee may both know them and trust them vpon euery change of weather; yet if they must needs be plucked, pull them as little as can be, for so shall they

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they be lesse constant; And thus I haue shut vp in a straight Roome, what can be sayd of the best Feather, feathering and fashioning of a perfect Shaft, I will now proceed to the Head.

CHAP. XI.

Of the Arrow-head, the Invention and seuerall vses.

NECESSTIE, the Inuenter of all goodnesse (as the best Authors affirme) amongst other things, inuented the Arrow-head; first, to saue the end from breaking, then made it sharpe, that it might stick the better, after made it of strong matter, that it might continue longer, and last of all, experience, and the wisdom of men

men hath brought it to such perfection, that there is not any thing more profitable in all the Art of Archerie, either to wound a mans enemy in the warre, or pleasure himselfe and his friend, by hitting the marke at home, as is a right good Arrow-head, for where the Shaft wanteth an head, it is both vselesse and without esteeme.

Seeing then, the Head is of this necessity, it is needfull that we apply our best powers in attaining them; Heads for the warres of long time, haue beene made not onely of diuers matters, but also of diuers fashions. The *Troians* had heads of Iron, as this verse spoken of *Pandarus* sheweth.

*Vp to the pappes, his string did he pull,
his Shaft to the Iron —*

Odiss. 21 The Grecians had heads of Brasse, as *Homer* saith, *Ulysses* shafts were headed when he slew *Antinons* and the other wooers of *Penelope*, and in another place of *Homer*, it is playne, that when *Pandarus* wounded *Meneleus* with his shaft, that the head was not glewed on, but tyed to the Steele with a string, which is also affirmed by the commentaries in Greeke, whence I finde that Archers in those times carried theyr shafts without heads till they had occasion to vse them, and then set them on; which *Homer* againe secondeth in the xxjth, Booke of his *Odisses*, where he tels how *Penelope* brought *Ulysses* Bow amongst her Suters; that he which could bend and draw it might be her husband, there (saith the Poet) attended on her a maid with a bag full of heads both of Iron and Brasse. The *Scythians*

thians, also vsed Brasse heads, the *Indians* had heads of Iron, the *Aethiopians* made heads of hard, sharpe stones, as *Herodotus* and *Pollux* affirme. The *Germanes* (as *Cornelius Tacitus* writes) had their shafts headed with Bone, and many countries, both of old time & now, vse heads of horne, but to conclude with the truth it selfe, Iron and Steele are of all other the most excellentest matter on which to make Arrow-heads. *Iulius Pollux* varieth from vs in the *Pol. 1. 10* appellation of these things, for he calleth the Feathers the head, & this head that we speake of the point; but the reconcilement is so easie, wee need not argue it.

The fashions of heads are as diuers as the matters whereon they haue beene made. The Ancients (saith *Pollux*) vsed two sorts of heads, the one he calleth *Συμμοχ*,
H 4 describing

describing it thus, that it had two points or Barbes looking backward to the Steele, & the Feathers which is the same, which we call heere in *England* a broad Arrow-head, the other he calleth *Yanis* hauing, two points stretched forward, which we call heere a forked head; Both these kind of heads were vsed in *Homers* dayes, for speaking how *Tencer* vsed forked heads, he saith thus to *Agamemnon*.

ad. 8.

*Eight good shafts haue I shot since
I came, each one with a forked
head —*

Pandarus and *Vlisses* vsed broad Arrow-heads, *Hercules* vsed forked heads, yet such as had three points or forkes. The *Parthians* in that great Battaille where they slew rich *Crassus*, and his sonne, vsed broad
Arrow

*Plutar. in
Crassus.*

Arrow-heads, which sticke so sure that the *Romans* could not pull them out. The Emperour *Comodus* vsed forked heads, whose fashion *Herodotus* doth describe most *Herod. 2* liuely; saying, that they were like the shape of a new Moone, wherewith he could cut off the head of a bird, and not touch her body.

But letting passe the customes of the Antients: Our *English* heads which we customarily vse in the warres, are better then either forked heads or broad arrow heads; for first, the end being lighter they flye a great deale faster, and by the same reason giue a farre more deadly blow, and in my conceit (which is no Rule) if the little Barbs or Beards which they haue, were taken away they would be farre better, for this euery man
will

will grant, that a Shaft so long as it flyeth turneth, and when it leaueth to turne, it leaueth to flye any further, and that euery thing which enters by a turning and boaring fashion, the more flatter it is the worse it enters, as a Knife though it be sharpe, yet it cannot boare so well as a Bodkin; therefore sayth *Aristotle*, Nature made euery thing round, that should pierce deepe; so that I conclude, eyther the Shaft doth not turne in flying, or or else our flat heads are hinderances to the Shafts in entering. Now some may say, that a flat head both makes a greater hole, and stickes much faster: to this I say, that both the reasons are true, yet both insufficient; for first, the lesser the hole is (if it be deepe) the worse it is to heale, and a man when hee shooteth against his enemy, desireth rather

rather that it should enter farre, then sticke fast; for what remedy is it I pray you, for him that is smitten with a deep wound, to pull out the Shaft quickly, except it be to hasten his death; thus heads which make a little hole and deepe, are better in the Warre, then those which make great and shallow; though they sticke never so fast in.

Iulius Pollux maketh mention of *Poll. 7* certaine heads for the warre which carryed fire in them, and the Scrip. *Psal. 7* ture also speaketh somewhat to that purpose: *Herodotus* speakes of *Herod. 7* a wonderfull Stratagem done by *uran.* *Xerxes*, at what time he besiedged the great Tower at *Athens*, where hee made his Archers binde theyr Shaft heads about with Towe, and then set it on fire, and so shot them off: which being done by many, set

set all the places on fire, which were made of any matter that would burne: and besides so dazled the enemy, that they knew not which way to turne them: But to finish these heads for Warre, I would wish, that all the Head-makers in *England*, would make their Sheaffe-arrow heads more harder poynted then they be, or else as they are now out of vse, so they will bee without any power to hurt.

Now as concerning heads for pricking, which is one of the maine ends of this discourse, they are reduced into diuers kinds, some are blunt heads, some sharpe, some both blunt and sharpe.

The blunt heads men vse, because they finde them good to keepe a length, and it is true that they keepe a length, because a man pul-

pulleth them no further at one time then at another, for in feeling the plumpe end alwayes equally, hee may loose them, yet in the Wind and against the Wind, the weather hath so much power on the broad end, that no man can keepe a certaine length truely, with such an head: therefore a blunt head in a calme or downe Winde, is very good, otherwise, none worse.

A sharpe head at the end, without any shoulders (I call that a shoulder, which a mans finger may feele before it come to the poynt of the head) will pierce quickly through a Winde; but yet it hath two discommodities; the one, that it will keepe no length, because no man can pull it at a certaintie, but it will come more or lesse through the want of the shoulder; and also, because men are affrayd of the sharpe

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sharpe poynt, for feare of setting it in the Bow; The second discommodity is, when it is lighted on the ground, the small point will be euer in the danger of spoyling, which thing of all others, will soonest make a shaft to loose the length.

Now when men perceiued that blunt heads were good to keepe a length, but naught for a winde; and sharpe heads good to pierce a wind withall, but naught to keepe a length, the head-makers (informed both by the Archers and the Artificers) and wisely weying the commodities and discommodities of both sorts of heads, Inuented new files and other instruments: wherewith they brought heads for pricking to such perfection, that in one head they lodged all the excellencies which were in both the other, with-

without any discomoditie at all. These heads they call High-rigged, Crested, or Shouldred heads, or Siluer-spoone-heads, for a resemblance they haue to the knobs vpon some Siluer-spoons. These heads are good both to keepe a length, and also to pierce the weather with all. First, to keepe a length withall, because a man may certainly pull it to the shoulder euer y shoote and no further, then to pierce the wind withal, because the point from the shoulder forward, breaketh the weather as all other sharpe things doe, so the blunt shoulder serueth for a sure length keeping, and the poynt for passing through a rough and foule weather. And thus much for the matter, shape and choyse of Heads.

Now touching the setting on of the head, albe it is the office of the Fletcher

Fletcher, rather then the Archer, yet it is within the compasse of your owne knowledge, to aduise him to set your head full on or close on. Full on, is when the wood is let hard vp to the end or stopping of the head, and close, is when there is wood left on euery side the shaft to fill the head withall, or when it is neither too little nor too great; If there be any fault in either of these points, the head when it lightheth on a stone or the hard ground will be in danger either of breaking, or some other mischief.

Touching the stopping of heads with leade or any thing else, I shall not need here to speake any thing, because euery Siluer-spoone or shouldred head, is stopped of it selfe.

Short heads are better then long,
because

because the long head is worse for the workeman to file streight, and more difficult to keepe in a true compasse euery where; Againe, it is worse for the Fletcher to set on streight; and thirdly, it is alwaies in more daunger to be broken. And thus I haue done with the particular Instruments, I will now proceed to those which be Generall.

CHAP. XII.

Of the handling of Instruments, the time when, &c.

Touching the handling of Instruments which appertaine to the Art of Archerie, you must vnderstand, that to learne or do any thing with a mans hands, excellently or handsomely, or with an handsome excellence) it
I will

will aske the expence of long time and much practise; therefore hee that will approach to this perfection (especially in shooting) must begin in his youth or child-hood; all creatures how wild or fierce soeuer, are by cunning handling tamed, especially when they be young; and as it is in naturall things, so it is also in those which be artificiall. The Potter can mold and cast his pots, to any forme he pleaseth, when his clay is new, soft, and workeable, and the waxe will take any print when it is warme and plyable; but when eyther the one or the other is old, hard, and of no yeilding quality, they are fitter for the Dunghill then our Industry. So man in his youth, both with wit and body, is most apt and plyable to receiue any cunning that can be taught him; especially, this

Art

Art of Shooting: therefore he that will come to the perfection thereof, must needs begin and practise in his youth, for it is an Art, and will aske at least a full Prentiship.

Yet mistake me not, for I speake not this to disharten any man from the practise of shooting, which hath neglected it in his younger yeares; for I am so farre from it, that I will proue, *Wisedome* may worke the same thing in a man, which Nature doth in a Child.

A child, by 3. things is brought to excellency; to wit, *Aptnesse*, *Desire*, and *Feare*: First, *Aptnesse* maketh him plyant like Waxe, to be formed and fashioned to any thing; *Desire* inflameth him to strue to equall or excell others, in noble actions: and *Feare* of them whom he is vnder, will make him labour, and take greater paine with

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diligent heed in learning any thing, whereof proceedeth at the least, Excellencie and Perfection: And as thus, so a man may by wisdom (in learning any thing and especially to shoote) haue three like commodities also, whereby hee may (as it were) become young againe, and so attaine to perfection. For what *Aptnesse* worketh in a Child, that the vse of weake Bowes will worke in a man; being vnderneath his strength, and so easie that hee may come to faire shooting at his pleasure, prouided he slacke not his practise; for vse is that which will bring him both to faire shooting, and at last, to strong shooting; next what, *Desire* prouoketh in a Childe, that let *Shamefastnesse* worke in a man; and lastly, the paine that *Feare* maketh a Boy vndergoe; that, let the loue of shooting

ing, excell and ouergoe in a man, and without these, there cannot bee any perfection: Thus you see, whatsoeuer a Childe can be taught by *Aptnesse*, *Desire*, and *Feare*, that may a man attaine vnto, by the vse of *Weake Bowes*, *Shamefastnesse*, and *Loue*; according to that of *Cicero*, *That vse is a second Nature*: and I dare be bold to affirme, that whosoever (which is of abilitie) will begin, and constantly perseuere, shall in the end, without question be an Archer.

CHAP. XIII.
*Of comely Shooting, the Be-
 nefit and meanes, with
 the Faults.*

ALthough the best shooting, is that which is most comely, and that they are such Adjuncts as cannot bee divided, yet *Cicero* tels me, that as the chiefe poynt and most to bee sought, is *Comelineffe*, so this comelineffe only, can neuer be taught by any Art or Craft, but may bee perceiued well when it is done, not described wel, how it should be done. Neuerthelesse, there are many wayes to attaine vnto it, which wise men haue assayed, and though not absolutely in it, yet in other matters of like consequence; as thus, it is written, of *Xenxes*, that taking vpon him

him to paint *Helena* in all her perfection, chose out fise of the fairest Maides in all his Country, and in beholding them, conceiued and drew out such a Picture, that it far exceeded all the pieces, that euer went before it; because the perfections of all those fise, was drawn into one portraiture: So likewise in shooting, if a man would set before his eyes, fise or sixe of the fairest and best approoued Archers, that euer he saw shoote, and of one learne to stand, of another to draw, of another to loose, and so take frō euery man, what euery man could doe best; I dare be bold to say, he should come to such perfection in comelineffe, as neuer yet any man attained vnto. But it may be you will expect, because I haue chosen that Theame, that necessarily I ought to speake something, in the

way of instruction thereunto, but truly I must answer you, that I can teach you to shoot fayre, as *Socrates* once taught a man to know God, for when he asked him what God was, nay (sayd he) I can better tell you what God is not, as God is not euill, &c. Euen so can I say of faire shooting, that it hath not this nor that discommodity, & so drayning from it all discommodities in the end, leaue nothing behinde but faire shooting. And to doe this the better, you must remember; that in the beginning, when I described generally the whole nature of Shooting, I told you that faire Shooting did proceed from these five seuerall *Postures*: *Standing, Nocking, Draying, Holding, and Loosing*: all which, I will goe ouer as succinctly, and briefly as I can, describing the dis-

com-

commodities that men commonly vse in all parts of theyr bodyes, when they imploy them to these Actions, so that at any time when you shall erre or offend in any of the motions, you shall both speedily apprehend it, and with as great diligence amend it.

Faults in Archers, doe exceed the number of Archers, and they prodeed from the vse of shooting without teaching; For custome and vse separated from knowledge, and learning, doth not onely hurt shooting, but the most materiall & weightiest Actions in the world; and therefore, I wonder much at those people, which will offer to be the maintainers of vses and customes, without knowledge, hauing no other wordes in their mouthes but these, *Vse, Vse, Custome, Custome*; which besides di-

uers

uers other discommodities, brings with it this mischiefe, that it takes from a man all hope of amendment.

There is nothing more true, then that in shooting, *Vse* is the onely cause of all the faults therin; whēce it comes, that Children are more easily and sooner taught to shoot excellently then Men; because Children may bee taught to shoot well at the first: Men haue more trouble to vnlearne theyr euil Customs, then they haue labour afterward to come to good Shooting.

All the discommodities, which ill custom hath grafted in Archers, can neyther be quickly pulled out, nor yet soone reckoned by mee, they are so many; For one shooteth his head forward, as if hee would byte the Marke, another, stareth

stareth with his Eyes, as if they should flye after his Arrow; another, winketh with one eye & openeth the other, as if hee shot in a Stone-bow; one maketh a slowre face, another a wry countenance; one bleereth out his tongue, another biteth his lip, & another holdeth his Necke awry; In drawing, some fetch such a Compasse, as if they would turne about, and blesse the Field, others haue their hand now vp, now downe, that a man cannot discern where-at they would shoote, another waggeth the upper end of his Bow one way, & the neather end another: another will stand poynting his shaft at the marke a good space, and by & by he will giue him a whip & away, ere any man is aware, another will make such a wrastring, and struggling with his Instruments, as if

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it

if he were able shoote no more as long as he liued; Another draweth his shaft softly to the midst, and by and by it is gone you cannot tell how; Another draweth his shaft low at the brest as if he would shoote a rooueing marke, and presently he lifterh vp his hand prick-height; Another maketh a wrinching or cringing with his Back, as though a man pinched him behind; Another cowereth downe and thrusts out his Buttocks, as if he were shooting at Crowes; Another setteth forward his left leg, and draweth backe with his Necke and shoulders, as if he were pulling at a rope or else were afraid of the marke; Another draweth his shaft well vntill within two fingers of the head, and then he stayeth a little to looke at his marke, which done, he pulleth it vp to the head and so looseth

looseth, which manner of shooting although some excellent Archers doe vse it, yet it is a Fault, and good mens faulces are not to be Imitated.

Once I heard of a man, which vfed a Bracer on his cheeke, otherwise he had torne all the skin from one side of his face with his drawing-hand; Another I haue seene, which at euery shoote after the loose would lift vp his leg so farre that he was euer in danger of falling; Some will stampe forward and some leape backward, and all these faults are cyther in drawing or loosing, with a world of others, which any man may easily perceiue and so endeaunour to auoide them:

Now there be ether faults after the shaft is gone from the Bow, which onely euill custome hath brought

brought vpon men, of which the worst is, when men will cry after their shafts either with execrations or other vnseemely words, much vnfit for so honest a Recreation; questionlesse such words are the Symptoms of an euill mind, and display a man that is subiect to immeasurable affections; good-mens eares doe abhorre them, and an honest man will avoyd them. Now besides these, there be others, which haue other faults; as some will take there Bow and writh and wring in to pull in there shaft when it flieth wide, as if he droue a cart; some will giue two or three strides forward dauncing and hopping after his shaft, as long as it flyeth; some with feare to be too farre gone runne backward as it were to pull their shaft backe, another runneth forward, when he feareth to be short
 heauing

heauing after his Armes as though he would helpe the Arrow to flye; another runs aside to pull his Shaft streight, one listeth vp his heele & so holds it till the shaft be false, another casteth his Arme backward after the loose, and another swings his Bow about him like a whifler before a Pageant to make roome; with a world of other errors, now out of my remembrance. All which, *Montaigne* in one of his *Essays*, calls the Discharging of passions vpon a wrong subiect. Now these Antick gestures, disfigure and take away all comlinesse from this noble action; So, that Archer which is voyd of all these crimes, cannot but possesse the perfection of comlines in this Art, which how soeuer it cannot be exprest to the life, in words, yet (I will according to my small knowledge) giue you some
 small

small Character thereof, which if any man shall please to follow, though I cannot make him vtterly Faultlesse, yet his Faults shall neither quickly be perceiued, nor yet greatly rebuked. And this method I will draw from these five principall Postures; *Standing, Nocking, Drawing, Holding, and Loosing*, which being done in perfection, containe the Substance of all faire Shooting.

CHAP. XIII.

Of the first Posture, which is Standing.

THe first Posture or Poynt which a man ought to obserue when he goeth about to Shoote, is to take such Footing and Standing, as shall be both comely

comely to the eye, and profitable for the action he hath in hand, setting his countenance and all other parts of his body, after such a gesture and port, that both all his Strength may be imployed to his owne most absolute aduantage, and his Shoote made and handled to the high contentment and delight of euery well judging beholder; And first, a man must not goe to it too hastily, for that is Rashnesse, nor yet be too tedious or make too much a doe about it, for that is Curiosity. Next, the one foote must not stand too farre from the other least he stoop too much, which is most vnseemely; nor yet too neare together, least he stand too streight vp, for then he shall neither vse his strength well, nor stand as he ought, stedfastly; the meane betwixt both these must be kept.

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A thing more pleasant to behold when it is done, then easie to be taught how it should be done.

CHAP. XV.

Of the second Posture, which is Nocking.

TO Nocke well, is the easiest point in all the Art of Archerie, and containeth no more but ordinary warning, onely it requireth diligent heed giuing; First in putting the Nock betwene your two first fingers, then bringing the shaft vnder the String and ouer the Bow, then to set the shaft neyther too high nor too low, but euen and streight ouerthwart the Bow; For vnconstant Nocking, maketh a man loose his length, and besides that, if his Shaft hand bee high,

high, and the Bow hand low, or otherwise if they be contrarily placed, both the Bow is in danger of breaking, and the Shaft if it be little, will start, and if it be great it will hobble.

You must obserue euer, to Nocke the Cocke Feather vpward, as I told you before, when I described the Feather; and bee sure that the String slip not out of the Nocke, but with your Thumbe before, & a finger on each side behind, hold it fast till it be drawne, for should it happen otherwise, all were in hazard of breaking.

CHAP. XVI.

*Of the third Posture; which is
Drawing.*

DRawing well, is the best part of Shooting; the Ancients in times past, vsed another manner of drawing then we doe: For they drew low at the Brest, and to the right Pap; as is described by *Homer*: The noble women of *Scythia*, vsed the same fashion of shooting low at the breast, and because their left Paps hindered them, they caused them to be cut away when they were young, vpon which action, they tooke to themselves the name of *Amazons*. But now in these dayes, contrary to that custome, we draw to the right Eare, & not to the Pap;
new

now whether the old way in drawing low to the Pap, or the new way to draw aloft to the eare, bee better; *Percopius* an excellent Greeke Author doth decide: shewing that the old fashion in drawing to the Pap was naught, hauing no pyth in it, and therefore (sayth he) is Artillery dispraised of *Homer*, who calleth it weake, and able to doe no good. But drawing to the Eare, he greatly prayseth, as a way whereby men shoot stronger, longer, and deeper; drawing therefore to the Eare, is better then to draw to the Breast: and now I call it in to my minde, I neuer read in any Author whatsoeuer, of any other kinde of shooting, then drawing with a mans hand eyther to the Breast, or to the Eare, and yet I haue turned ouer all *Homer*, *Herodotus*, and *Plutarch*, which makes

*Percop.
Hist. Pers.*

me not a little wonder, how and when *Crossebowes* first came up, seeing they are so forgotten by the best *Historians*: *Leo* the Emperor would haue his Souldiers draw quickly inward, affirming it made a Shaft flye fast: but in shooting at Prickes, hasty drawing is neyther sure nor comely. Therefore to draw easily and vniformely, (that is to say) not wagging your hand vpperward nor downeward, but still obseruing one time and fashion, vntill you come to the Ridge or shouldring of the Head, is best both for profit, skill and Comelynesse.

CHAP. XVII.

Of the fourth Posture: which is Holding.

Holding is an Action, that must not bee of long continuance, for to stand any time vpon it, you put the Bow in danger of breaking, and also spoyle your shoot; It must be so little, that it may be perceiued better in a mans mind and imagination, when it is done, then seene with a mans Eyes as it is doing: for in one moment, the Shaft both approacheth to the Eare, and departeth from the Bow.

CHAP. XVIII.

*Of the Fifth Posture: which is
Loosing.*

Loosing, is of the Nature of Holding, and asketh as speedie a motion; for it must be so quicke and hard, that no gyrd may be perceiued; and againe, so soft and gentle, that the Shaft flye not as if it were sent out of a Bowcase: The meane betwixt both these (which is perfect loosing) is not so hard to be followed in shooting, as it is hard to be described in teaching: If you will shoot fayre, in Loosing you must take heed of hitting or touching any thing about you; which caused *Leo* the Emperour, to command all his Archers in Warre, to haue their heads powdered,

led, and their Beards shauen, least the hayre of their head should hinder the sight of the Eye, or the hayre of their Beards stop the course of the string; a world of other Precepts there be, but these I hold sufficient for fayre shooting.

CHAP. XIX

*Of keeping a length, of wind
and weather.*

Having handled (as I hope) sufficiently this Theame of faire shooting, there remaineth nothing now but shooting streight, and keeping a length, to make a man hit the marke, which is the full end of this discourse; now to shoot streight, or keepe a length, cannot be done without some excellent

cellent knowledge in the wind and Weather, therefore I will ioine them together, and discourfing of each in their proper places, fhew what belongs to the keeping of a length, and what to shooting freight.

The greateft enemies to fhooting, are the winde and the weather, by which true keeping a length is chiefly hindred, which accident, if it were not, men by ordinary inftitution might be brought to wonderfull neare fhooting. For it is no maruaile if the little poore shaft, being fent alone fo high into the ayre amidft the rage of wind and weather, one blaft hurling it one way, and another, another. It is I fay, no maruaile if it both loofe the length, & miffe the place where the Shooter had thought to haue found it. Greater matters then
Shooting

Shooting a re vnder the rule of the weather, and will of the winde; as fayling on the Seas, and things of like nature, and as in Sayling the chiefeft poynt of a good Master, is to know all tokens, which belong to the change of weather, and the courfe of the Windes, that thereby he may with more fafety come to the Hauen; euen fo the beft property of a good Shooter, is to know the Nature of the Windes with him & againft him, by which he fhall fooner hit the Marke. Wife Sea-mafters, when they cannot win the beft Hauen, are glad of the next that is good; and Shooters, although they cannot hit the marke, will be glad, and labour to come as neare as they can. All things in this World, are imperfect and vnconstant, therefore let euery man acknowledge his owne weakneffe,
and

and onely glorifie him which is all perfection. The Saylor that putteth forth in all weathers, seldome escapes Shipwracke, and the Shooter, which maketh no difference of Seasons, but holds all alike, shall neyther boast of winnings nor of vertue. Little Boates and thinne Boards, cannot indure the rage of Tempests, and weake Bowes and light Shafts, cannot stand in a rough Wind. And belieue it, what Archer soeuer shooteth ignorantly, considering neyther fayre weather nor foule, true or false standing, Nocking, Feather, nor Head, Drawing nor Loosing, nor yet any compasse, shall alwayes shoot short and gone, wide and farre off, and neuer come neare, except by chance hee stumble on the Marke; For Ignorance is nothing else, but absolute Blindnesse.

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A skilfull Archer will first with diligent vse and marking the Weather, learne to know the Nature of the Wind, and will with wisedome measure in his mind, how much it will alter his shoot either in length keeping, or in streight shooting; & so with changing his standing, or taking another Shaft which hee knoweth to bee fitter for his purpose, eyther because it is lower feathered, or else of a better wing, will so handle with discretion his Shoot, that he will seeme rather to haue the weather vnder his rule by such care and circumspection, then the Weather to rule his Shaft by any sodaine changing. Therefore in shooting, there is as much difference, betwixt an Archer that is a good Weather-man, and him that knoweth nor obserueth any thing, as is betwixt a blind-man and him that can see.

More-

Moreover, a perfect Archer must seriously learne to know the sure flight of his Shafts, that he may be bold alwayes to trust them: Next, he must learne by continuall experience to know all kind of weathers, the signes when it will come, the Nature when it is come, the diuersity and alteration when it changeth, and the decrease and diminishing when it ceaseth: These things thus knowne and obserued, and euery shoot diligently pondred, the ought our Archer to compare the Weather and his Footing together, and with discretion measure them, so that whatsoeuer the Weather shall take away from his Shoot, the same shall just footing restore againe; This poynt well knowne, and discreetly handled, bringeth more profit and commendations to the Archer, then any other se-

Of Footing.

condary obseruation whatsoeuer.

He that will know perfectly the Wind and Weather, must put difference betwixt times, and seasons, for diuersitie of times cause the diuersity of weather. As in the whole yeare there are foure diuersities of times, the *Spring*, the *Summer*, the *Fall*, and *Winter*, so likewise in one day, there are also foure diuersities of Time; the *Morning*, *Noone-side*, *Afternoone* and *Euening*; and all these, both alter the weather and change a mans Bow and Strength, and to know that this is so, is enough for an Archer, and not to search the cause why it should be so, for that is the office of the learned.

CHAP. XX.

*Principall Observations from
the Time of the
yeare.*

IN considering the time of the year, a wise Archer will follow a good Seaman; In winter and rough weather, small Boates and little Pinkes forsake the Seas. And at one time of the yeare, no Gallies come abroad. So likewise, weake Archers vsing but small and hollow Shafts, with Bowes of little pith, must be content to giue place for a time; yet I speake not this to discourage any weake Shooter, for as there is no Shippe better then a Gally in a soft and calme Sea, so no man shooteth more comely or nearer his marke, then some weake Archers

Archers doe in a fayre and cleare day.

Thus you see every good Archer must know, not onely what Bow and Shafts are fittest for him to shoote withall, but also what times and seasons are meetest for him to shoote in. And truly in all other Matters, and amongst all the degrees & estates of men, there is no man that doth anything more discreetly for his commendations, or more profitable for his owne aduantage, then he which doth and will know perfectly for what matter, Action and time he is most apt and fit; And here (were it not variable from the discourse I haue in hand) I could enter into a large field of inuection, against those which onely labour to struggle to turmoyle themselves in those matters and affaires which are neither

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fit

fit for their capacities nor consonant to their bringing vp; but *Cin-
thius Aurem veller*, I will turne a-
gaine to the Action of Shooting, in
which I will perswade all wise
Archers, alwayes to haue their in-
struments fit and obedient for their
owne strength, and then ettermore
to waite and attend for such time,
weather and seasons, as is most a-
greeable with the action they goe
about: Therefore, if the weather
be too violent and vnfit for your
shooting, leaue of for that day and
attend a better Season, For he is a
Foole that will not goe when Ne-
cessity driueth.

Yet to make some larger dis-
cription of the weather concerning
shooting, I would haue you re-
member (as I told you before) that
in the whole yeare, the *Spring, Sum-
mer, Fall, and Winter*; and in one
day,

day, the *Morning, Noone, After-
noone, and Evening*, altereth the
course of the weather, the pith of
the Bow, and the strength of the
man: And in euery one of these the
weather altereth; as sometimes
windie, sometimes calme; one
while cloudy, another cleare, some-
times hot, sometimes cold; the
wind sometimes moyst and thicke,
sometimes, dry and smooth, &c.

A little winde in a misty day
stoppeth a shaft more then a good
whistling wind in a cleare day; nay
I haue seene (when there hath bin
no wind at all) the ayre so Misty
and thicke, that both the markes
haue beene wonderfull great: And
once I heard in *Cambridge*, the
down-marke at Tweluescore-prick,
for the space of three weekes was
thirteene score and an halfe, and
into the wind (not being very great

a great deale aboute foureteene score.

The wind is sometimes plaine vp and downe, which commonly is most certaine and requireth least knowledge or circumspection, so that a meane Shooter with meane furniture (if he can shoote home) may make shift to doe well.

A side-winde, tryeth a good Archer and good Furniture, for sometime it bloweth a loft, sometime low by the Ground, sometime it bloweth by blasts & sodaine gusts, and sometime continueth all in one manner, sometime a quarter wind with him, & more & again, as much against him; all which, by a man casting vp a little light grasse, or otherwise by his owne experience, shall easily finde out. To see the wind it is impossible, the nature of it is so fine and subtile, but by careful observation

seruation a world of experience may be gathered; especially in a Snow wherein one may perceiue, that the wind goeth by streames and not whole together, and in this Obseruation, though the experience will breed in a man a greater admiration at the Nature of the winde, then cunning in the knowledge of the winde; yet thereby he shall learne, that it is no wonder at all, though the best Archers loose their length in shooting, seeing the wind is so variable in blowing.

The Master of a Ship, be he neuer so Skilfull, may by the vncertainty of weather loose both life and goods; no wonder then if a good Archer, by the selfe same wind, so variable in it owne nature, and so insensible to our nature, loose not onely a Shoote, but a Game.

The more deceitable the Wind is, the more care must the Archer haue of those beguilings; hee that doth mistrust, is seldome ouer-reached: for although hee cannot attaine to that which is best, yet hee will be sure to auoyd that which is the worst.

Againe, besides these Winds, you must take heed, if at any time you see any Cloud appeare and gather by little and little against you; or if a shower of Raine bee approaching, for then the driving of the Weather and the thickening of the Ayre will increase your Marke, but when the Shower is gone, and all things cleere and calme, the Marke will be as it was at the first, and you are to alter your shooting new againe.

You must also take heed (when you shoot) whether one of the Markes

Markes or both, standeth a little short, or vnder the couert of an high Wall, for there you may easily be beguiled, as thus; If you take Grasse, & cast it vp to see how the Wind stands, many times you will suppose to shoot downe the Wind, when you shoot cleane against the Wind, & there is a strong reason for it; because the Wind which cometh against you, at the wall, reboundeth backe againe, and whirleth euen to the Pricke, and sometimes much further; and then turneth againe, euen as a violent water doth against a Rocke, or any other high Brey; which example of water, though it be more sensible to a mans eyes, yet it is not more true then this of the Wind: Insomuch, that the casting vp grasse (which should be a tell troth) will flye that way, which indeed is

the longer way, and so easily deceiue the Archer which is not heedfull.

To preuent this inconuenience, it is good for you when you come in the midst, betweene the Marks, where the field is most open, and the Wind at greatest liberty, and there to cast vp eyther a Feather, or some light Grasse, and know how the Wind standeth, which done, to hie to the Pricke with all speed possible, & according as you found the Wind in the Mid-way, so to frame your shoot at the Marke.

Take heed also, when you shoot neare the Sea-coast, although you are two or three miles from the Sea, for there (if you be diligent to marke) you shall espy in the most cleere day, wonderfull alterations, which cause strange effects in shooting: And as thus neare the Sea,
so

so likewise take heed when you shoot neare any Riuer side, especially if it ebbe and flow, for if then you obserue the Tide, the weather and accidents proceeding from them, you can hardly be a looser. And thus (according to my weake knowledge) I haue shewed you the nature of the **Wind** and **Weather**, wherein if any man find eyther defect or insufficiency, I shall intreat him to amend it out of his owne much better Experience; concluding the Chapter with this admonition, of which I spake before, that after the knowledge of the weather thus attained, that then our Archer take heed to his Standing, that hee may thereby win as much in the Ground, as hee lost by the Weather.

CHAP. XXI.

*Of giuing Ayme : the Ease
and Errors.*

Touching the giuing of Ayme I cannot tell well what to say, onely that in a strange place, it taketh away all occasion of foule play, which is the onely commendations it can require: But in my Iudgement, it hindereth the knowledge of Shooting, and maketh men more negligent; which eclipseth the former glory; but allow it (as men would haue it) vsefull, yet (though Ayme bee giuen neuer so) you must trust to your owne skill, for you cannot take Ayme at another mans Shoot, nor at your owne neyther; because the Weather will alter in a minute, and that

that sometimes at one Marke, and not at the other; and will trouble your Shaft in the Ayre, when you can perceiue no Wind on the ground, as I haue seene many shafts doe, which haue tumbled aloft in a very faire day; There may be faults also in Drawing and Loosing, and many things else, which are required in the keeping of a iust length; which though your Ayme be neuer so certaine, yet your error may be vndiscouered: therefore make vse of your Ayme and your Iudgement, by a serious discourse within your selfe, and reconciling them by the ayde of your owne experience, make them both vsefull and profitable: This I haue brought in as a Parenthesis, not so much for the validity, as that I would not leaue any thing forgotten.

CHAP. XXII.

CHAP. XXII.

*Of taking true Standing, that is
aduantageous.*

THe next thing to the knowledge of the Weather, is perfect Footing, or taking a true aduantageous standing: Therefore, in a side Wind, you must stand somewhat crosse into the wind, for so you shall shoot the surer; when you haue taken your footing, then looke vpon your shaft, that neyther wet nor earth be left vpon it, for that will make it loose the length; looke also on the head, lest it haue had any stripe at the last Shoot, for a stripe against a stone, many times will both spoyle the head, crooke the Shaft, and hurt the Feather; the least of all which, will make a man loose

loose his length: which to reparaire, and for the auoydance of these generall euils, which happen euery shoot, I would haue our Archer to carry by his side, a fine, short, close compact powch, in which he should haue a Fyle, a Stone, a Hurfish-skin, and a cloth to wipe his shafts cleane vpon euery occasion; These things must a man carefully looke vnto, euer when he taketh vp his Shaft, he must also take heed, that the head be not made too smooth, for that will make the Arrow flye too farre, the meane therefore, is best proportion; the next to these things, followeth the Bow, the handling whereof, I haue handled already; as for Nocking, Drawing and Loosing, they are not vndiscussed, I will but therefore rub your memory ouer with this Precept, that to looke at the head of your Shaft

Shaft at the Loose, is the best help for keeping a length, yet some are of opinion, that it hindereth excellent shooting, because a man hath then no certainty of shooting streight, chiefly in that he beholds not his Marke, but for mine owne part, were I to shoot at a Lyre, and not at a Marke; I would alwayes looke at my Arrows end. But of this I will speake more in the next Chapter, and now conclude, that who so marketh his Weather diligently, keepes his Standing justly, holds the Nocke truly, drawes and looseth equally, & keeps his compassse certainly, can neuer misse his length.

CHAP. XXIII.

Of Shooting streight, and the Helpes.

Touching the Art to shoot streight, I will first shew you what Lessons old Archers haue found to attaine therevnto, and then, what wayes are best to accomplish the same.

As the Weather belongeth chiefly to the keeping a length, yet a side-wind appertaineth to shooting streight; and the nature of the Pricke also, is to shoot streight; The length or shortnesse of the Marke, is alwayes vnder the Rule of the weather, yet there is something in the Marke, worthy to bee marked of an Archer.

If the Pricke stand on a plaine
streight

streight ground, they are the best to shoore at; If the marke stand on an hill side, or the ground be vnequall with hollownes and turning wayes betwixt the markes, a mans eye will take that to be streight which is crooked. The experience of this thing, is seene in painting and other Arts, where crookedlinesse appeares streight by shadowes. But to proceed, the chiefe cause why a man cannot shoot, is because they looke at their Shaft, which fault cometh for want of instruction when a man is young; for he that learns to shoote by himselfe, being afraid to pull the shaft out of the Bow, looks still at his Arrow; And custome confirmeth this Errour, as it doth many other, and men continue longer in this fault, because it hath so good a vertue in the keeping of a length, therefore to keepe this

this fault and yet shoote streight, Some Archers haue found out this Inuention, to espie a tree, or an hill beyond the marke, or else to haue some notable thing betwixt the markes on which he might fixe his eye & his hand: And, that this is so, there was once an excellent Archer which tooke all his implements, his Quiuer and other necessities & layd them in the mid-way betwixt the markes, which the by-standers suppoled he did for safety sake, but the end of his drift was, to make him shoote streight; there be other Archers which will espy a marke a Bow wide off the pricke, and then place himselfe on that hand the pricke is on; which thing, how much good it doth a man, he will hardly beleue, that doth not proue it.

Others, and they no meane Archers,

M

chers,

chers, in drawing looke at the mark vntill they come almost to the head, then they looke at the shaft, but at the very loose, with a second sight, they find their marke againe. But this way, and all the other before rehearsed, are but shifts and fooleries and not to be imitated in shooting streight, the onely way worthy pursuit is alwayes to haue your eye vpon your marke, and as I hold, it is the readiest and easiest way, to come to shoote streight, chiefly if it be practised in youth, and confirmed in elder age.

Now there is yet a scruple in mens minds, which is the best way to looke at the marke; as whether betwixt the Bow and the string, or aboue or beneath the hand, and many other wayes beside. But it is not much materiall, which way a man lookes at his marke, if it va-
rie

rie not from comely shooting, the diuersity of mens standing and drawing, causeth diuers men to looke at their markes diuers wayes, yet they all leade a mans hand to shoote streight, if nothing else stoppe; so that comelinese is the onely iudge of best looking at the Marke. Some men wonder, why in casting a mans eye at the Marke, the hand should goe streight: But surely, if he considered the nature of a mans eye, he would not wonder at it: For this I am certaine of, that no seruant to his Master, no child to his Father is so obedient, as euery joynt and piece of the body is to doe, whatsoeuer the Eye bids. The Eye is the guide, the ruler, and the succourer of all the other parts; the hand, the foot, and other members, dare doe nothing without the Eye, as doth appeare in

the night, or darke Corners.

The Eye is the very Tongue wherewith wit and reason doth speake to every part of the body, and the wit doth not so loone signifie a thing by the Eye, as every part is ready to follow, or rather preuent the bidding of the Eye. This is plaine in many things, but most euident in Fence and fighting, (for as I haue heard men say) there every part standing in feare to haue a blow, runnes to the eye for helpe; as Infants doe to the Mother; the foote, the hand, and all waite vpon the Eye. If the eye bid the hand either beare off, or strike, or the foote either goe forward, or backward, it doth so. And that which is most wonder of all, the one man looking stedfastly at the other mans Eye and not at his hand, will euen as it were read in his eye, where

where he purposeth to strike next; for, the eye is not any thing else, but a certaine window for wit to shoote out her head at.

This wonderfull worke of God, in making all the members so obedient to the Eye, is a pleasant thing to remember, and looke vpon; therefore, an Archer may be sure in learning to looke at his mark when he is young, alwayes to shoote streight. The things that hinder a man which looketh at his mark to shoot streight, be these; A sidewind, a Bow eyther too strong or too weake, an ill arme, when a feather runneth on the Bow too much, a bigge breasted-Shaft for him that shooteth vnder-hand, because it will hobble; a little breasted-shaft for him that shooteth aboue the hand, because it will start: a paire of winding prickes, and many o-

ther things, which you shall marke your selfe, and as you know them, so learne to amend them. If a man would leaue to looke at his shaft, and learne to looke at his marke, he may vse this way, which a good shooter told me once that he did. Let him take his Bow in the night, and shoot at two Lights, and there he shall be compelled to looke alwayes at his marke, and neuer at his shaft. This way once, or twice vsed, will cause him forsake looking at his shaft, yet let him take heed of setting his shaft in the Bow.

Thus you see, to shoote streight is the least Mastry of all, if a man order himselfe thereafter in his youth, and as for keeping a length, I am sure, the rules which I gaue will neuer deceiue; so that there shall lacke nothing, either of hitting

ting the marke alwayes, or else very neare shooting, if the fault be not only in your owne selfe, which may come two wayes; either in hauing a faint heart, or courage, or else with suffering your selfe ouermuch to be led by affection; if a mans minde faile him, the body, which is ruled by the mind, can neuer doe his duty; if lacke of courage were not, men might doe more Maisteries, then they doe, as doth appeare, in Leaping and Vaulting.

All affections, and especially Anger, hurt both minde and body, the mind is blinded thereby, and if the mind be blind, it cannot rule the body aright. The body both Bloud and Bone, as they say is brought out of his right course by anger, whereby a man lacketh his right strength, and therefore can-

not shoote well. If these things be auoided (whereof I will speake no more, because they belong not properly to shooting) and all the precepts which I haue giuen, diligently marked, no doubt any man shall shoote, as well, as euer any man did.

This Discourse handled by me (as I know well,) not perfittly, yet as I suppose truly, the world must take in good parte, wherein, if diuers things doe not altogether please, yet it may pardon.

