

**THE COLLECTION OF RENAISSANCE
MILITARY ARTS AND EXERCISES
OF PIETRO MONTE**

A TRANSLATION OF THE

***EXERCITIORUM ATQUE ARTIS MILITARIS
COLLECTANEA***

BY

MIKE PRENDERGAST AND INGRID SPERBER

**THE COLLECTION OF RENAISSANCE MILITARY ARTS AND EXERCISES
OF PIETRO MONTE**

Translation © 2018 Mike Prendergast

Translation by Mike Prendergast and Dr. Ingrid Sperber.

This translation is freely available for non-commercial use.

THE TRANSLATORS

MIKE PRENDERGAST

Mike Prendergast has been researching, practising and teaching historical strategy and martial arts since 1999. His main focus is on the art of fencing of Renaissance Italy. Initially studying Bolognese fencing, he moved to specialise in the system of Fiore dei Liberi (c. 1410) and the rapier style of Nicoletto Giganti (1606), before embarking on his study of Monte.



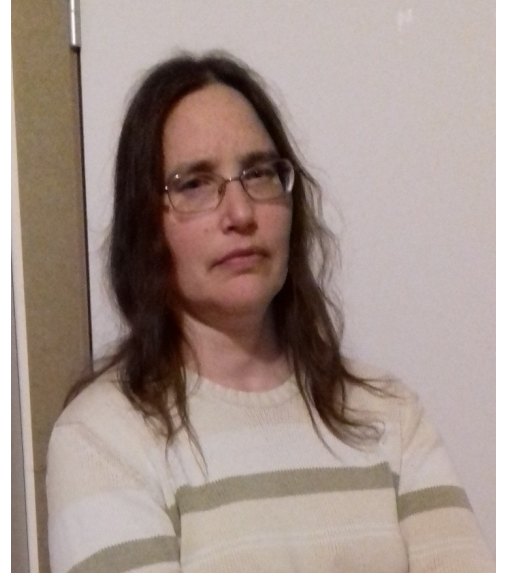
Having initially started with Japanese martial arts, Mike discovered historical European fencing through the international medievalist group, the Society for Creative Anachronism, where he has received the society's highest award for research, the Laurel. In 2015 he was appointed one of the three premier Masters of Defence for the European branch of the society.

Mike instructs in rapier and longsword with SCA Dun in Mara and interprets and teaches the martial arts of Pietro Monte, as chief instructor with the Historical Combat Academy, in Dublin, Ireland. He also teaches internationally at Historical European Martial Arts events and hosted the 2015 International Rapier Seminar. Mike competes internationally in tournaments and has taken medals in a variety of weapon forms including gold in rapier and sword & buckler. He also trained for several years in Hyoho Niten Ichi Ryu, the traditional Japanese style of swordsmanship founded by the famous duellist and strategist Miyamoto Musashi.

Mike teaches in the field of architecture and sustainable construction, and has trained as a NLP Master Practitioner and Personal/Business Strategist and Performance Coach with the Irish Institute of NLP. He enjoys combining his enthusiasm for research and coaching in both in his professional teaching and in martial arts.

INGRID SPERBER

Ingrid Sperber is a Swedish Latinist who received her PhD-degree at the university of Uppsala in 2005 for a dissertation on the Latin Lives of Irish saints. She has mainly worked on Irish and British Latin from the medieval and early modern periods. She is currently employed by the National Library in Oslo, working on a dictionary of Norwegian medieval Latin. As well as her work on this translation, Ingrid is also the co-author of a 2014 paper on Monte along with her husband, Toon Van Houdt - *The Author as Translator. The Struggle with Language and Authority in Pietro del Monte's De dignoscendis hominibus (Milan, 1492) and Exercitiorum collectanea (Milan, 1509).*



AUTHOR'S PREFACE

This book represents the culmination of painstaking if enjoyable work, which extended over several years. It has been my great pleasure to work with my co-translator Ingrid, who brought a lively enthusiasm for the project along with her heavyweight latinist credentials. We are releasing this book here initially in its digital form, in advance of our planned printed book release in May 2018. Please check back later on my website for updates on Monte's art and work. Also both Ingrid and myself would appreciate comments and thoughts on this edition. You may leave feedback and suggestions also at my website at: <http://mikeprendergast.ie/monte/>

Finally, please note that Ingrid and I worked together on the first draft of the translation, however, the later edits are my responsibility, as are any errors! :-)

- Mike Prendergast

Dublin, Ireland, January 2017

INTRODUCTION

Pietro Monte (1457–1509) is a fascinating figure who seems to walk through the shadows on the edge of the great age of knowledge and learning that was the Italian Renaissance. It is debated whether he was Spanish or Italian by birth, he uses both of these languages, as well as Latin in his collectanea. He appears to have been one of the most famous masters of arms of his time. He lived as a *condottieri*, a professional military man in an age of war. We know that he served, among others, Galeazzo da Sanseverino, an Italian-French *condottieri* in the court of Ludovico Sforza in Milan. He occasionally emerges from obscurity in mentions from notables such as Baldassare Castiglione, author of *The Book of the Courtier* and he is even referenced by Leonardo Da Vinci, as a master to consult about the flight of darts (What could Monte have taught Leonardo? See especially Book II, Chapter 131 'On the weapon which we call the dart in the vernacular.'). Monte's expertise ranges far beyond ballistics, however, and his fascinating 'collection' gives an insight into the strategy, philosophy and fighting techniques of Renaissance Europe. All of this is written from the point of view of a practical man, a warrior and a leader of men, who died in battle, leading the Venetian rearguard against the French at the Battle of Agnadello.

Monte is credited with writing at least four treatises pertaining to strategy and combat: *De Dignoscendis Hominibus* (1492) and three published posthumously *De Singular Certamine Sive Dissentione*, *De veritate unius legis et falsitate sectarum* and this volume which you have here in translation - *Exercitiorum Atque Artis Militaris Collectanea*.

This volume is divided into three books. Book I is, in general, about setting out the principles of combat and strategy. Book II gives more practical details, which will be of particular interest to those recreating historical combat techniques, including armoured and mounted combat. Book III is unique, as it relates to large scale strategy and warfare - a Renaissance Italian Art of War, written by a general with vast experience in the field. I will not attempt to delve more into the contents of this volume in this brief introduction. Monte's world awaits your exploration in the pages that follow.

ACKNOWLEDGEMENTS

I wish to thank in particular, Agnieszka 'Uisce' Jakubczyk, whose support, not to mention editing, has been invaluable to me during the production of this book.

Also, my brother, John Prendergast, who not only introduced me to swordsmanship in the first place, but who also has been of huge support in helping me bring this project to realisation.

Special thanks and appreciation go to Dr. Timothy Dawson, who contributed his expertise on medieval saddles and equestrianism.

Thanks also to Christy Mackenzie and Tom McKinnell, for helping me with my queries on anatomy of man and beast.

Many thanks as well to the members of the Historical Combat Academy, Dublin, past and present, for accompanying me and supporting me on my journey to interpret Monte's martial arts and helping me gain a deeper understanding of his system. Including, in no particular order: Wyatt Renaud, Réka Tóth, Lisa Vitalo, Phil MacFadden, Chris Kinsella, Tamás Tóth, Géza Sebestyén.

Finally, there are always those who have walked the path before us and who inspire us. I will name two in particular:

Bill Wilson, for early encouragement and showing me what life it is possible to conjour out of old books.

Guy Windsor, for early and continued inspiration and guidance on the path of Italian martial arts.

To you all, my thanks.

salute

- Mike Prendergast

PIETRO MONTE, *COLLECTANEA*, INDEX

BOOK 1

Collectaneorum Libri Primi Prologus

1 Uocabulorum expositio

Setting forth the terms

2 Quamobrem aduertendum sit quod non possumus per sola verba artes mechanicas seu manuales prorsus adiscere

Why it must be noted that we cannot learn mechanical or manual arts directly through words only

3 De palestra versutiis ac temperantia quibus in ea vti debemus

On the wrestling ground and the cunning and the moderation which we must use in it

4 De palestra singulis manibus apprehendendo quod est per dexteram aut sinistram

Of the wrestling ground: seizing with a single hand, that is, by the right or the left

5 De luctatione a collari sine agathe capiendo

On collar wrestling or seizing well

6 De modo luctandi singulis brachijs

On the way to wrestle with a single arm

7 De modo luctandi brachijs equaliter impartitis

The way to wrestle with both arms equally

8 De apprehensione per latus

On seizing by the side

9 De apprehensione per tergum

On seizing by the back

10 Regula versutiarum electiorum et de apprehensionum mutatione

A rule on cunning choices and change of grips

11 De modo vniuersali atque particulari quo in armis vti debemus

On the universal and particular way which we should use in arms

12 De ludo aze ac de quibusdam ictibus in eo principalibus

On play with the poleaxe and certain principal blows with it

13 Qualiter damnosum sit nos firmos manere dum armis decertamus

How it is injurious to us to remain firm while fighting with weapons

14 De ludo ensis duarum manuum

On play with a sword for two hands

15 Quonam modo arma pro defensione esse debeat

In what way defensive weapons should be handled

16 Quales arme eligende sint ad conflictum fortium virorum et quales ad debilium

What kind of weapons to choose for a fight between strong men, and what kind for the weak

17 Qualiter reparare debemus cum longam armam contra breuem aut si breuem tenemus contra longam

How we should parry with a long weapon against a short one, or if we hold a short one against a long one

18 De ludo pugionis

On play with the dagger

19 De modo iaculandi siue proijciendi

On the method to cast or throw forth

20 De modo proijciendi vectem

On the method to throw a shaft

21 Qualiter lapidem paruulum porrecturi simus

How we will throw a small stone

22 Modus proijciendi lapidem siue saxum grossum qui hyspano idiomate schina appellatur

The method to throw a big stone or rock, called *schina* in Spanish

23 Quo pacto equestres lanceam iaculari debeamus

How we should throw a lance when on horseback

24 De exercicijs currendi

On running exercises

25 Quo pacto vnus pedester cum alio equestri currere queat

How a person on foot can run together with another who is on horseback

26 De modo saltandi et tripudiandi

On the method to leap and tumble

27 De quibusdam voltis seu giris qui in sella fiunt *or circles*

On certain vaults or circles which are performed in the saddle

28 Quantum in quolibet exercitio bonus animus preualeat

How much good courage prevails in any exercise

29 Regula satis utilis in modo girandi

A rule which is quite useful for the way of turning around

30 Quanta vtilitas emanet dum scimus reducere secretum vnius scientie ad aliam

How much usefulness arises when we know how to bring the secret of one knowledge to another

31 De quibusdam industrijs quibus vti debemus vt possimus ab aduersarijs cauere

On certain activities which we should use to be able to be on our guard against adversaries

32 Quanta vtilitas sit complexiones cognoscere et detrimentum ipsas ignorare

How useful it is to learn of the temperaments, and how detrimental to be ignorant of them

33 Particula quorundum prouerbiorum

Particulars of some proverbs

Prologus de complexionibus

Prologue on the temperaments

34 De aptitudinibus et factionibus membrorum sanguineorum

On the aptitudes and composition of the limbs of sanguinics

35 In quo officio sanguinei valeant ad proprietatem sue nature

In which functions sanguinics are strong according to the properties of their nature

36 De colericis et aptitudine suorum membrorum

On choleric and the aptitudes of their limbs

37 Quomodo colerici cognoscantur

How choleric are recognized

38 De complexionem melancolica ac de formatione quam membris impendit

On the melancholic temperament and the shape it gives to the limbs

39 De operibus melancolicorum

On the works of melancholics

40 De phlegmaticis et suorum membrorum proportionem

On phlegmatics and the proportion of their limbs

41 De operatione phlegmaticorum

On the work of phlegmatics

42 Quo pacto quisque conformetur elemento de quo maiorem partem assumit

How everyone conforms to the element which he assumes for the most part

43 De colericis

On choleric

44 De melancolicis

On melancholics

45 Dispositio phlegmaticorum aqueo elemento appropriata

The disposition of phlegmatics suited to the watery element

46 Qualiter cum quolibet nos habituri simus penes complexionum varietatem

How we should behave with anybody in accordance with the variety of temperaments

47 Quo pacto cum sanguineo decet in quocunque exercitio operari

How to work with a sanguinic in any exercise

48 Quonammodo cum colericis sit operandum

How to work with choleric

49 Quo pacto cum melancolicis sit operandum

How to work with melancholics

50 Quonammodo cum phlegmaticis nos habere debeamus

How we should behave with phlegmatics

51 Quomodo secundum varietatem corporum diuersimode operemur et qualia arma et loca ad conformitatem diuersorum hominum eligenda sunt

How to work in different manner in accordance with the variety of bodies, and what kind of arms and places are to be chosen to conform with different people

52 Qualiter vnusquisque qualitatem sui elementi de quo maiorem partem sue compositionis accipit decertaturus accedens prosequatur

How each one follows the quality of his element, from which he receives the greater part of his composition, when he approaches to fight

53 Qualiter hic aut in modo decertandi melancolicos in secundo gradu ponamus

How, here or in the way of fighting, we place melancholics in the second rank

54 Qualiter in tertio loco ponendi sunt colerici ad ineundum certamen

How choleric are to be put in the third place for entering a fight

55 Qua ratione in pugna phlegmatici sunt vltimo loco ponendi

The reason phlegmatics are to be put in the last place in a fight

56 Qua ratione scitis aliquibus artibus nonnulli eas quotidie exercere debent alij autem raro ob variorum complexionum conformitatem

The reason, when knowing some skills, some should exercise them daily, others rarely, to conform with the various temperaments

57 Quatenus vnumquodque animal aliquam habeat monstrationem a natura tributam de sua leuitate ac fortitudine atque illo quo est aptum

To which extent every animal has some indication assigned by nature of its lightness and strength and of that to which it is adapted

58 Qualiter animalia optime proporcionata cito egritudines sentient atque eis resistere possunt et quod aliter disproporcionata animalia agunt

How very well-proportioned animals quickly feel illnesses and can resist them, and how disproportioned animals act differently

59 Differentia inter sanos et infirmos a natura

The natural difference between the healthy and the sick

60 Quomodo magna sit difficultas ad cognoscendum personas eiusdem complexionis

How great is the difficulty is to recognise persons of the same temperament

61 De aduertentia quam homines habituri sunt dum ad generandum filios operam dant vt habiles nascant

On what men will pay attention to when they attend to conceiving sons, to make sure that they are born able

62 Signa principalia ad cognoscendum homines qui solent pingues fieri

The principal signs for recognizing men who tend to become fat.

63 Regula ad faciliter cognoscendum quis magnam memoriam habeat

A rule for easily recognising who has a great memory

64 De proprietatibus que augent aut minuunt memoriam

On characteristics which increase or decrease memory

65 Qualiter paucam reminiscentiam possideant illi quos dicimus esse magne memorie

How those whom we say have a great memory have little recollection

66 Qualiter considerata sit differentia inter speciem et speciem sicuti inter vnum hominem et alium

How the difference between one species and another must be considered just as that between one man and another

67 Qualiter considerande sint animalium factiones vtpote vbi longe et vbi breues esse debent et quo pacto similia membra mensuranda sint

How to consider the make up of animals, as where they should be long or short, and how to measure similar limbs

68 De quadam aspicientia super naturali situatione membrorum animalium que vtilissima est atque vniuersalis ad multa pauco labore de animalibus cognoscenda

On an observation of the natural placement of the limbs of animals, which is extremely useful and universal for recognising many things about animals with small effort

69 Quamobrem decet Omnia animalia tam volatilia quam quadrupeda esse munita in partibus superioribus in inferioribus vero gracilia vt lenia esse

Why it befits all animals, flying as well as four-legged, to be fortified in the upper parts, but slim in the lower, so that they can be light

70 Differentia inter magnos homines et paruulos in membrorum exercitijs ac de temperatis seu discioltis et rigidis et quod maiores ac disciolti preualent

The difference between big and small men in exercises of the limbs, and about the temperate, or loose, and the stiff, and that those who are larger and loose prevail

71 Quam ob causam dum de complexionibus agitur ad tertium librum de cognitione hominum est occurrendum

Why, when dealing with temperament, one must go to the third book of De cognitione hominum

72 Quatenus in modo cognoscendi obseruanda sit differentia inter membra breuia et longa quamuis eiusdem complexionis sint

To what extent, in the way of recognising, one must observe the difference between short and long limbs, though they belong to the same temperament

73 De quodam generali intentu super complexionibus

On a certain general point of attention on the temperaments

74 De quatuor complexionibus equalibus et de differentia que in hac compositione reperitur

Concerning the four equal temperaments and the difference which is found in this composition

75 Quonam pacto per factiones aliquam competentem cognitionem de pueris iuxta natiuitatem habere possumus

How we can, through their makeup, get a competent recognition of newborn children

76 Descriptio exteriorum membrorum vt facilius intelligatur per membra in quibus apprehensiones agere debemus tutari aut nocere ac de causa cognoscendi complexionibus

Description of the outer limbs, to make it easier to understand by the limbs in which we should seize, defend, or harm, and for the reason of recognising the temperaments

77 Cur vtilitas sit scriptoribus quod complexionibus hominum cognoscant vt dum necessitas occurrit de habitudinibus vniuscuiusque describere sciant

Why it is useful for writers to know the temperaments of men, so that, when [needed], they know how to describe the bearing of each person

78 De quibusdam communibus opinionibus circa hominum dispositionem

On certain common opinions about the disposition of men

79 Qualiter timere debemus dum aliquid operaturi sumus

How we should be fearful when we are about to do something

80 Quonam modo homines verbosi timere solent

How verbose men usually fear

81 Qualiter pudor aliquando causa timoris sit

How a sense of honour is sometimes the cause of fear

82 Quomodo quilibet cognosci potest quantus sit in quacunque arte de ipsa loquendo

How the greatness of anyone in any art can be [ascertained] by talking about it

83 Differentia inter magnos et paruulos

The difference between the large and the small

84 Qua etate homo fortiori reperiatur

At what age a man is found to be the strongest

85 Documentum ad sequendas vires corporeas et intellectuales

An instruction for pursuing bodily and intellectual strength

86 Quales cibi magis sint nostris viribus conformes

What kinds of foods are best suited to our strength

87 De illo quod solet blasphematoribus accidere

On what tends to happen to those who blaspheme

88 Quanta inuigilantia opus sit illis qui in variis regionibus personas suas experiri volunt

How much vigilance those need, who want to test their persons in different regions

89 Qualiter ut quis recte aliquam artem intelligat oportet quod in ea magister sit

How, for someone to rightly understand an art, he must be a master in it

90 De illis qui quandoque vincere et interdum vinci solent

On those who sometimes win and sometimes are defeated

Particula super nonnullis proprietatibus que communiter reperiuntur in hominibus prouinciarum in quibus fui aut quorum conuersationem habui

A section on some characteristics which are commonly found in men of provinces of which I have familiarity with

91 De Hyspania

On Spain

92 De Portugallia siue Lusitania

On Portugal or Lusitania

93 De Sicilia

On Sicily

94 De Italarum dispositione

On the disposition of Italians

95 Cuius complexionis Galli sint

Which temperament the French are

96 De Britannia

On Brittany

97 De Anglia

On England

98 De Germania et Flandria

On Germany and Flanders

99 De Hungaria

On Hungary

100 De Boemis

On Bohemians

101 De Pollonia Tartaria et Ruscia

On Poland, Tartary, and Russia

102 De Grecia

On Greece

103 De Asia

On Asia

104 De Aphrica

On Africa

105 De Francia Anglia Germania et Hungaria

On France, England, Germany, and Hungary

106 Cuius dispositionis sint homines in frigidis regionibus

Of what disposition are men in cold regions

107 De dispositione hominum qui in calidis prouinciis habitant

On the disposition of men who live in hot provinces

108 In qua prouincia melius se inueniant homines ad proprietatem suarum complexionum

In which provinces men do better according to the properties of their temperament

109 Quonammodo homines in cibis et exercitiis gubernari debeant

How men should be governed in food and exercise

BOOK 2

Secundi collectaneorum Libri Prologus

Second Collectaneorum Book Prologue

1 Documentum aut modus gubernandi nosipsos

A document or method for governing ourselves

2 Quante excellentie palestra sit inter alia exercitia

How excellent wrestling is amongst other exercises

3 Quo pacto ad palestram ingressuri et ambulaturi sumus

How to enter and walk to wrestle

4 De illo quod demum in palestra est obseruandum

On that which lastly is to be observed in wrestling

5 Utilis astutia in palestra

Useful cunning in wrestling

6 Ubi faciende sint apprehensiones in palestra et quod aduersario non debemus terga vertere ne nos prosternari sinamus

Where to seize in wrestling, and that we must not turn our backs to the adversary, that we do not, as much as possible, let ourselves be thrown to the ground

7 Quomodo est luctandum cum staphilibus aut corrigiis

How to wrestle with saddle leather or strap

8 Quonammodo de omnibus apprehensionibus dum palestra decertatur vire nostre dirigende sint tunc quando stratagemata fiunt

How, in all grips, when wrestling, our strength is to be directed at the time stratagems are made

9 Quonam pacto in armis ambulare debemus

How we should walk in arms

10 De ludo aze vel tricuspidis

On play with axe or tricuspis

11 De quibusdam ictibus principalibus tripuncte seu aze

On some principal blows of the *tripuncta* or axe

12 Quante longitudinis opus sit azam esse

How long the poleaxe must be

13 Quatenus galli et germani tripuncta vel aza ludant

To what extent they play with the tripuncta or poleaxe in France and Germany

14 Quonam pacta (*sic*) est decertandum pedester cum armis curtis et ponderosis in albo armati

How to fight on foot with short and heavy weapons when in white armour

15 De lancea que vulgariter ginerta vocatur ac de lancea longa

On the lance, called ginerta in the vernacular, and the long lance

16 Defensio principalis siue custodia de lancea longa ac de aliis que mediocris longitudinis sunt

The principal defence or guard with a long lance and others of medium length

17 De ludo lancionis aut piche que lancea grossa et inter longissimas ac mediocres extat

On play with *lancio* or *picha* which is a large lance which stands between the longest and the medium

18 De ludo baculi qui vulgariter de bastone nominatur

On play with the staff, which is called a *bastone* in the vernacular

19 De ludo ensis duarum manuum

On play with a sword for two hands

20 De ludo ensis vnus manus

On play with a sword for one hand

21 De quibusdam ictibus (*sic*) vtilibus

On some useful blows

22 De ictibus ex inferiori parte venientibus

On blows coming from below

23 Quo ictu vti possumus volentes nos coniungere

Which blow we can use when we want to join together

24 De prima ensis custodia

On the first guard of the sword

25 Remedium contra primam custodiam

A remedy against the first guard

26 De secunda custodia ac de obstaculo vel remedio contra ipsam

On the second guard and an obstacle or remedy against it

27 De ludo ensis ac pelte

On play with sword and *pelta*

28 De ludo ensis cum cappa

On play of sword with cape

29 De ludo ensis cum parma que est arma ex corio defensibilis et apud hyspaneos atque aphricanos in consuetudine

On play of sword with *parma*, which is a defensive weapon made of leather, in use among the Spanish and the Africans

30 De ludo ensis cum rotella que tanquam pelta se habet nisi quod magna est et tota de lingo et manigia. Sed locus ex quo accipere debemus diuersus a pelta quia duas manículas continent sicuti parma et brachium ingreditur per vnam vt manus aliam apprehendat. Rotella vero a proprietate sue rotunditatis nominator

On play of a sword with a *rotella*, which is like a *pelta*, except that it is large and wholly made of wood; and handle. but the place where we should hold it is different from the *pelta*, as it contains two handles, like a *parma*, and the arm enters through one, to let the hand take hold of the other. and the *rotella* has its name after its roundness

31 De ludo scuti vel clypei

On play with *scutum* or *clypeus*

32 De pugione vel mucrone et quibusdam suis ictibus

On the dagger or *mucro*, and some of its blows

33 De eodem ludo pugionis

Also on play with the dagger.

34 De modo ludendi cum partesana et rotella partesanam vero dicimus armam inhastatam aliquanto longiorem aza que latum habet ferrum tanquam ensis antiquus latius tamen ac breuius

On the way of playing with a partisan and *rotella*; a partisan we call a weapon which is hafted and somewhat longer than a poleaxe: it has a wide iron like an ancient sword, but wider and shorter

35 De duabus partesanis cum rotella

On two partisans with a *rotella*

36 Quomodo vtile esse experiatur inire ad latus dextrum aduersantis et qualiter rotellam uel dargam nostrum tenere debeamus siue operari

How it is experienced as useful to enter to the adversary's right side, and how we should hold or use our *rotella* or *darga*

37 De modo transmittendi passus super sinistro latere

On the way of stepping on the left side

38 De astutia qua vti debemus volentes armam nostrum contra aduersarium iaculari

On the stratagem which we should use when we want to throw our weapon against the adversary

39 Quid faciendum sit dum partesanam thoracem et rotellam habemus

What to do when we have a partisan, a *thorax*, and a *rotella*

40 De ludo ronche et alabarde que fere eiusdem equalitatis ac similitudinis sunt

On play with a *roncha* and a halberd, which of almost the same uniformity and likeness

41 De speto

On the *spetum*

42 De certamine duarum partesanarum

On the fight with two partisans

43 Qualiter conseruare nos oportet si armam longam contra breuem haberemus aut econuerso

How to preserve ourselves if we should have a long weapon against a short one, or the other way around

44 Quali astutia vti possumus dum nos pedestres manemus et alium equestrem expectare volumus

What kind of stratagem we can use when we are on foot and we want to wait for another, who is on horseback

45 De quibusdam ictibus principalibus in quouis armorum genere

On certain principal blows in any kind of weapon

46 Quantum vtile sit contrapassare aut passus in latera dirigere

How useful it is to *contrapassare* or direct a step to the sides

47 Quam periculosi sint ictus manudextri

How dangerous right-handed blows are

48 De quibusdam manudextris ac de alijs ictibus

On certain *manudexters* and other blows

49 Quos ictus agere debemus ex quo ensem attrahimus

Which blows we should strike after we draw the sword

50 Quos ictus agere possumus dum in certamen ingredi volumus

Which blows we can use when we wish to enter into a fight

51 De duobus manudextris

On two right-handed blows

52 De duobus manureuersis

On two *manureuersi*

53 Qualiter possumus leuiorem ensem agere

How we can make a sword lighter

54 Quod sit vtilitas habere manubrium ensis longum

That it is useful to have a long sword handle

55 Quantum vtile sit armam longam afferre

How useful it is to carry a long weapon

56 De hielcijs aut crucibus ensium

On the hilts or crosses of swords

57 Quantum vtile sit hominem assuefieri ad operandum cum manu sinistra

How useful it is for a man to become accustomed to working with his left hand

58 Quos ictus manus sinistra agere debet

Which blows the left hand should make

59 Qua de causa duos ictus agendo tres sint faciendi

Why, in delivering two blows, three should be made

60 Quomodo vnusquisque in principio super seipso pergere debet

How each should proceed above himself at the beginning

61 Qua ratione cum promptitudine ictus faciendi sint

The reason blows are to be made promptly

62 Quo tempore bona sit promptitude et impetus

At what time promptness and impetus are good

63 Quanta vtilitas sit vti aza et ense duarum manuum

How useful it is to use a poleaxe and a two-handed sword

64 De quibusdam ictibus satis coopertis

On certain blows which are sufficiently covered

65 Quatenus se habere debeant dexteri cum sinistris et sinistri cum dexteris. Quod est idem ordo quum eque natura contrarij sint licet ob maiorem aut minorem consuetudinem inter eos aliquam disparitatem versari contingat

How the right-handed should behave with the left-handed and the left-handed with the right-handed, which is the same order, since they are equally contrary in nature, though on account of greater or lesser commonness, there happens to be a certain disparity between them

66 De modo decertandi equester

On the way of fighting on horseback

67 Quid agendum sit dum iam equites coniuncti sunt

What is to be done when riders are already joined

68 De quibusdam ictibus offensilibus et alijs quoque defensilibus

On certain offensive blows, and others, which are also defensive

69 Contra illos qui mucronem suum supra arzonem affirmant

Against those who strengthen their *mucro* on the *arzo*

70 Quo pacto offendere debeamus

How we should attack

71 Quid facturi sumus dum videmus alium caute ambulare

What we shall do when we see the other walking cautiously

72 Quos ictus cum maza siue claua operari possumus et quam longa esse debeat et quomodo fieri oporteat

Which blows we can do with a mace or club, and how long it should be, and how it should be done

73 Quid facturi sumus videndo equum aduersarij nobis nimium fastidij inferre

What to do when seeing the adversary's horse overly offending us

74 Quonam pacto aliquando stochis in modo obuiationis vtendum est et de medio contra ipsum

How to sometimes use estocs in the way of a clash, and of a means against this

75 Quid agendum sit dum volumus cum mucronibus coniungi

What to do when we want to be joined with *mucrones*

76 Quo pacto equus noster gubernandus sit

How our horse is to be governed

77 Cuius conditionis equus esse debeat in huiuscemodi exercitio

In what condition the horse should be in this kind of exercise

78 Quam sit vtile viseram subleuatam habere

How useful it is to have the visor raised

79 Qua de re multum differenter est decertandum dum in albo vel grauiter armati sumus quam si cum paucis armis et de quibusdam ictibus appropriatis dum milites grauiter armati sunt quod pedester vel equester maneat

Why fighting in white or heavy armour differs much from with little armour; and concerning some blows which are appropriate when the soldiers are heavily armed, whether they remain on foot or on horseback

80 Qualiter in quacunque facultate manibus aut verbis attinente postquam deliberamus sine scrupulo agendum est vt breuiter ad perfectum finem euenire possimus

How, in any capacity pertaining to hands or words, we should, after deliberating, act without hesitation, so that we can quickly arrive at a perfect result

81 Quo pacto arma esse debeant ad decertandum inter duos milites

How the armour should be for fighting between two soldiers

82 Qualiter decertatio super equo sit euitanda

How to avoid a fight on horseback

83 Quid faciundum sit dum iam prope hostem sumus

What to do when we are already near the enemy

84 De modis preliandi pedester et in leui pugna vel conflictu quod in vulgari scaramuciare dicimus et sepe sit vt alter irritet alterum

On the methods of fighting on foot and in light combat or conflict, which in the vernacular we call skirmishing, and which is often done to provoke each other

85 Quomodo ad scaramuciam seu ad leuem pugnam eundum sit dum equestres manemus

How to go to a skirmish or light combat when we remain on horseback

86 Qua astutia vti debemus si nolumus obuare nec quod alij nobis obuient dum equestres sumus

Which strategem we should use if we want neither to charge nor that others charge us when we are on horseback

87 Quatenus habenda sit telorum longitude et quod non est danda determinata mensura nisi quod capienda sunt ad conformitatem nostre dispositionis et in oppositum aduersarij

How long the weapon should be, and that one should not give a set measure, unless it is taken to conform with our disposition and oppose the adversary

88 Quo pacto sella esse debeat ad decertandum

How a saddle should be for fighting

89 De sellis quibus milites grauis armature vtuntur

On saddles used by soldiers with heavy armour

90 De sella iustrandi siue operandi

On the saddle for jousting or charging

91 Qualis esse debeat sella ginetra quam hyspani atque aphricani afferre solent

How a *ginetta*-saddle, which the Spanish and Africans bring, should be

92 Quantam aduertentiam circa equum habere debemus

How much attention we should have concerning the horse

93 De modo obuandi cum lanceis

On the way to oppose with lances

94 Quo pacto equum nostrum instruere debemus vt ad hoc exercitium accommodetur

In what way we should train our horse to adapt it to this exercise

95 Quatenus thorax esse debet pro hoc exercitio concurrenti siue iustrandi

What the thorax should be like for this exercise of running together or jousting

96 De armatura capitis ad obuandum siue iustrandum

On head armour for meeting or jousting

97 De quibusdam ligaminibus vt in sella fortiores assistamus

On certain ties to help us be stronger in the saddle

98 De munitione ad iustrandum vel obuandum

On reinforcement for jousting or meeting

99 De modo ducendi ponderosam lanceam

On the way to direct a heavy lance

100 De modo extrahendi lanceam facilius a bursa

On the way of drawing the lance out of the *bursa* easily

101 De alio leuiori modo portandi grossam lanceam

On another lighter way of carrying a thick lance

102 Quo pacto lancea prolongari potest ad obuandum

In what way a lance can be extended for charging

103 Quatenus manu vti debeamus et cum oculo concordare manere vt iactus aut conflictus quos agimus directi vadant

To what extent we should use the hand and remain in agreement with the eye so that the casts or attacks which we make go straight

104 Quas proprietates habere debent arma defensibilia vt bona sint

Which qualities defensive arms must have to be good

105 De quibusdam armis leuibus

On some light armour

106 De diploide et pactione sua

On the doublet and how it is made

107 De calligis

On boots

108 De manicis aut listis

On sleeves or *listas*

109 De chirothecis

On *chirothecis* (handcovers)

110 De armatura capitis

On head armour

111 Quomodo nos armare debeamus dum nocte ambulamur

How we should arm ourselves when walking at night

112 De quadam graui armatura et primo de schinellis siue armaturis tiliarum

On some heavy armour, and first about the *schinellis* or leg-armour

113 De cossottis seu arnesiis vel de armaturis coxarum

On the *cossottis* or harness or armour for the hips

114 De thorace alba

On the white corslet

115 De thorace ad preliandum pedester

On the corslet for fighting on foot

116 De casside vel galea que almetus vulgariter dicitur et de visera eius

On the *cassis* or *galea* which is called helmet in the vernacular, and its visor

117 De quadam casside secreta vtili ad portandum sub almeto

On a certain secret *cassis* which is useful to wear under the helmet

118 De bauera seu armatura que ante collum et barbam ire solent

On the bevoir or the armour which is usually fitted in front of the neck and the beard

119 De vna bauera siue barbutio ad leuiter armandum

On the bevoir or *barbutium* for arming lightly

120 De Galea

On the helmet

121 De armatura brachij

On armour for the arm

122 De spaldatijs siue scapulatijs

On spaulders or shoulder pieces

123 De manupla seu manutheca ferrea

On the gauntlet or hand cover

124 De sinistra manupla

On the left gauntlet

125 De modo colligandi vnam petiam siue frustum armorum cum alio

On the way of fastening one piece or part of armour to another

126 De falda seu fimbria lorice que naticas et crura tegit. Quam nos iuxta vulgare idioma faldam appellamus et de gocetis supra humeros atque musculos aduenientibus

On the fringe of the *lorica* which covers the buttocks and thighs, which we by our vernacular language, called *falda*, and on the *gocetis* which come on the shoulders and upper arms

127 De factione falde siue fimbrie lorice vel malliole ferree

On the construction of the *falda* or fringe of the *lorica* or iron mail

128 De altera leui armatura ad decertandum

On another kind of light armour for fighting

129 De brachieria vel modo iaculandi vniuersaliter assumpto

On *brachieria* or the universally adopted way of throwing

130 De lapide volatili seu missili

On the flying stone or missile

131 De telo quod vulgariter dardum nominamus

On the weapon which we call dart in the vernacular.

132 De lancea

On the lance

133 De principali fundamento ad iaculandum lanceam telum et vectem

On the principle foundation for casting the lance, the javelin, and the pole

134 Quomodo lanceam iaculari debent illi qui paucam vim in manibus habent

How those with little strength in their hands should throw a lance

135 De lapide grosso qui ab hispanis schina vocatur

On the big stone which the Spanish call *schina*

136 De stipula siue baculo qui ab hispanis variglia nominatur

On the *stipula* or staff, which the Spanish call *variglia*

137 De modo iaculandi lanceam dum equestres sumus

On the way to throw a lance when we are mounted

138 Quomodo staffe manere debent ad iaculandum lanceam dum equestres sumus

How the stirrups should remain, to throw a lance when we are mounted

139 Quo pacto sella in equo ad proijciendum ordinanda sit

How the saddle should be arranged on the horse for throwing

140 Remedium contra dolores brachij dum ex causa iaculandi dolet

Remedy against pains in the arm when it is painful because of throwing

141 Documentum in leuitate

A note on lightness

142 Quatenus volte siue giri in equo fieri debeant

How vaults or turns should be done on horseback

143 De euolutionibus que super equo vel sella communiter fieri solent

On rotations which are commonly done on the horse or in the saddle

144 De quibusdam voltis que fieri solent dum equus currit

On certain vaults which usually happen when the horse is running

145 Quam viam volte magne obseruare debent et que earum petit vim in vno brachio et que in alio

Which way great vaults should be observed and which of them requires strength in one arm, and which in the other

146 De voltis damicelle siue dame

On the vault of the damsel or lady

147 De modo saltandi iunctis pedibus

On the way of leaping with joined feet

148 De modo currendi

On the way to run

149 De aliquo ordine obseruandi personas nostras dum in viribus preualere volumus

On some order of observing our persons when we want to prevail in strength

150 Regula super intentu quem homines assumere debent vt in variis rebus magistri fiant

A rule on the attention which men should assume to become masters in various things

151 Qualiter habita de complexionibus cognitione cuique intrinsece scientie prodest

How having knowledge of the temperaments benefits every inner knowledge

BOOK 3

Petri Montii's books on training and the military art, to the Lord Galeacia Sanseverino

Prologue

1 Quatenus intelligendo modum preliandi ad singulare certamen et partes que necessarie sunt eodem modo cognosci potest illud quod paruis ac magnis exercitibus conuenit

To the extent that one has a mode of understanding of fighting in single combat and the parts which are necessary for it, in the same way it can be known what is appropriate for small and large armies

2 Quonam pacto animus hominum principaliter in ratione ac dexteritate consistit

How the courage of a man principally consists of reason and dexterity

3 Quomodo militarium virorum conflictus iuxta complexionem ordinandis sit

How a conflict of military men is to be ordered in accordance with temperaments

4 Quis in prelijs precessurus sit causa roboris et valitudinis membrorum

Who should go in first place, because of the strength and health of the limbs

5 Quo pacto iuxta communem viam homines cognosci possunt ad militiam apti

How, according to the common way, men who are suited for warfare can be recognised

6 Quonam pacto homines septentrionales non sint animosi eo quod sanguinei

How northern men are not wrathful, because they are sanguinics

7 Quarum prouinciarum sint homines plus ad militiam dispositi

From which provinces come men who are more disposed to the military

8 Cuius factionis magnitudinis ac temporis homines esse debent ad ineundum certamen

Of what make up, size and age, men should be to enter into combat

9 Quomodo turma vel quod magnus numerus gentium dicatur ad conflictum accedere debeat

How a company or what is called a great number of men should go to battle

10 De principali exercitio quo militares viri vti debent

On the principle exercise which military men should practice

11 Cuius proprietatis imperator militum esse debeat

Which qualities a commander of soldiers should have

12 De partibus homini competentibus vt proprie animosus vel optimus militaris vocandus sit et quod necesse est in quacunque armorum conditione varijsque industrijs membrorum habilitatem valere

On the parts appropriate for a man so he may be properly be called a courageous or excellent soldier and that it is necessary in any condition of armament to and in various activities to have strong and able limbs

De eodem

On the same

13 Cur experientia competat varias gentes cognoscere vt possimus ipsas in consuetudinem habere vel occurrentibus necessitatibus resistere

Why experience of various peoples is suitable so as to have familiarity with them when indeed it is necessary to oppose them

14 De ordine contra ordinem quem germani obseruare solent

On the order to counter the order which the Germans usually keep

15 Qualis imperator esse debeat vt tempore necessitatis milites verbis eius obtemperent

How a general should be so that the soldiers obey his words in times of necessity

16 Quod exercitium cuique competat ad proprietatem sue etatis

Which exercise suits each person according to the characteristics of his age

**PIETRO MONTE'S BOOKS ON EXERCISE AND MILITARY ART TO THE LORD GALEAZZO DA
SANSEVERINO.**

THE FIRST BOOK OF PIETRO MONTE'S COLLECTANEA.

PROLOGUE

Thinking to myself of how weak and fleeting the memory of men is, and that every day it lets whatever we command to it quickly pass, I have decided to write these collected works, to make it easier to hold in the memory some part of the things or exercises which have hitherto been worked between us. This conversation will easily set out the whole order and brevity of words, though they do not attend to proving all parts individually. For he who has a discourse in things, for him is it enough to recall some trace of the way. For then it is very easily spread out and extended through the entire matter. And this recollection at any rate we should seek at the time we need it. But if we have knowledge about this, it is appropriate to note it down in writing, to make sure that in the future it is under no circumstances lost for the sake of taking necessary precautions, which very frequently tends to happen to a man, and even though the usefulness of such a remedy is clear to everyone, it is not equal in the same degree. For the greater the favour or loss which any thing brings to us, the more need we have of it. Therefore the suitable way is for us to apply the art of the limbs with the intellect, so that we can more easily show the universal and particular means according as it fits those men who use the strength of their limbs and intellect. For those who govern or conquer by chance, very often their ascent is the eve of enormous ruin, and to avoid similar stumbling blocks we shall write down a few things briefly, which may be expanded to teach more exercises, and partly also may indicate the temperaments of men. And the exercises in this little book I shall distinguish in two parts. The first of those will sometimes be quite lengthy and general in accordance with what is discussed. But the second part will be very brief, though it deals with many exercises particularly divided, and some principal parts are placed near the end. However, in a few words it will be said what the fundamentals of the other parts will be. In between the two parts we shall explain the temperament and the way to learn their order when we want to use them. And we shall discuss different persons in accordance with different provinces. And since I have applied myself to writing this for the practice of the strength of the limbs, we shall begin from the practical exercises of the body, and here we shall place wrestling first. But if this matter is treated more extensively in another book, in which we discuss *De Cognitione Hominum* (On Knowledge of Men), it will be found at greater length, and around the end we shall explain some rules about how to adapt oneself to it. Then, at the end of the whole

work³⁵ we shall place some chapters on military order. But since I have written more extensively on certain exercises in *De Cognitione Hominum*, we insert, two very brief sections discussing these, in this little collection, one of which will be somewhat longer than the other, yet as brief as possible, so that we gradually follow the road from lengthy to brief, or to let us have a way to prolong and abbreviate that which we are treating. For until we are able to comprehend very long things in brief terms, and stretch out the small into long, we can be called insufficient craftsmen.

I. SETTING FORTH THE TERMS.

To let your lordship understand more easily later, we shall, before going on to the exercises, explain some terms, in Latin as well as the vernacular, or all together. At least we shall say much about Spanish, since we first wrote this book in that language, as about the practice and strategems of wrestling, for here we shall frequently use terms at our pleasure. And I, among others, have found some unusual terms in the vernacular that relate to the seizing and letting go of limbs. Likewise, in playing and fighting with weapons, there are many blows which are not found in Latin use at all. We shall therefore describe those according to likeness or as suits. We handle different and new offensive and defensive arms every day, but since we name them in the vernacular, the Latin should imitate the vernacular language. Now and then we shall, to improve understanding, explain some terms, which is not usual in the vernacular, unless it concerns how well or badly we act. But we shall take it for granted that (as long as they are not new) everyone understands, as we have written in the book *De Cognitione Hominum*, the actions of vaults or the way of vaulting or turning on a horse, since in any vault, and in the greater part of them, we have said something about the way of placing one's hands on the saddle or the horse. Also Gundisaluus Ayora, when translating *De Cognitione*, explained most things; I certainly agree with his explanation, and there the explanations of other strategems can be found. And it is to be noted that there are two reasons why we shall write at much more length in Latin than what has been written in the vernacular: first, because exercises of the limbs where very great bodily strength is required, occur among the unlearned rather than the learned, and therefore, to let those men understand more easily, arrangements are brought forward through describing them in outline. The other reason is that, while in the vernacular there are set terms, or terms which are considered to be set, concerning any exercise, which are understood by everyone, while the opposite is the case in Latin. When

wrestling, we call the strategems of feet and arms *magnas* in Spanish, and we call it *tornus* when our foot meets the other's foot by the front part. And when we pull him towards us with the arms, so that he falls headlong into the place where we were earlier, it is likewise a *tornus*, since we do not pull the adversary towards us in a straight line, but rather in the way of making a turn or a circle. *Saccaligna* it is called when, with the heel or the point of our foot, we receive the other's foot, pull that foot towards us, and push his body away with our arms, so that he falls on his back. But to do this *saccaligna*, our foot must enter between the legs of the other. *Desuium* takes its name from turning our body sideways (*devio*), since, while taking by the neck of the doublet or from the collar, and the other imposes his force on us, we turn our body to the side and let him fall forward. The body can be turned sideways from other places, too, which would be deservedly called *deviatio*. Others call that stealing the other's body in order to leave him in emptiness. The *mediana* we name from the fact that our leg enters between the legs of the other and we put our leg around one of the other's legs, and so that can be called *mediana circumdata* (encircled) or *mediana reuoluta* (turned back), which Ayora calls *anguigera* (lit. snake-bearer). *Discaderata* or *disclunata* means receiving the other on our buttock and with our foot lifting his leg through the front part. *Cargum* or *oneratio* we call it when we take the arm of the other and roll our back on his stomach, and when we turn our body away, he falls over our shoulders. *Antia* or *ancha* or better *tollens pernam* ('lifting the haunch') we assume when we insert our leg between the other's legs and lift one of his legs high, so that he almost falls, as if we were placing a *disclunata* or *clunileuium*. With *transpes* we understand when, with the point of our foot, we take the other's foot through the outer side, and he goes to fall on his back. *Voltas* it is called when we lift the belly and pull it around us in a turn or a circle. And all these strategems or practices can be done in different places and with different grips, such as sometimes by the neck and in other circumstances by the arm, and sometimes, staying very close, one should take hold by the chest or the loins, so that we either receive the other's side, or he seizes ours. The universal stratagem is called *magna* in Spanish and only requires taking the feet in wrestling, when our feet are attacking the other's legs to make him fall. *Armare* is likewise the common Spanish term for any practice of the feet in wrestling. On the way of seizing, we say 'collar-wrestling' (*luctari de collari*) when one of our hands takes the adversary by the neck, and the other by his arm or hand. On 'divided' or 'shared arm' (*brachio diviso/partito*), that is when chest stands against chest, one of our arms staying under the other's arm and the other on top of the other, and so we seize equally. 'Single arms' it is called when we take the other's arm with both our hands, which the other should also do. *Grasping* or *seizing of the hands* it is

called when the hand of one is coupled with the hand of the other. We say of the side when the side of the other is taken and our shoulder is joined under his armpit, or the other enters under our arm. When we seize the other's back or ours is taken, we say, in the Castellan language, 'give or take *spaldas*'.

In play or fight with weapons, we place yet some other new words beside the vernacular, about offensive as well as defensive arms, and on the way of striking blows some things should be explained by comparing with movements of the arms. As is common among the Spanish, Italian, and French, when we practice with a sword, we call it *taglium*, *reversum*, and *stocchata*, which is nothing other than right-handed blow, left-handed blow, and meeting (*obviatio*), or tip (*cuspis*) or point (*puncta*). The right-handed blow is understood because the blow comes from our right side and is aimed at the enemy's left side. A left-handed blow or *reversum* is when we bring the sword from our left side and strike the other's right side. *Obviatio* or *cuspis* or *stocchata* is understood as by meeting the adversary directly with the point of our sword. *Stocchata*, however, derives, I think, from the *mucro* which is called a *stocchus* (*estoc*), since the *stocchus* has no way to cut except to meet with the point. Therefore, by the use of *stocchus*, it is called a *stocchata*, and in the same way we can in Latin understand *cuspis* from tip. Other blows we shall clarify in their own chapters, at least if we do not anywhere find the terms we search.

About offensive weapons something must be said, to let us understand the vernacular names. For among the ancient peoples perhaps not all weapons which exist now were found, or we do not understand them correctly.

The poleaxe (*aza*), as it is called in the vernacular, is made of iron and wood and so is understood to be among the hafted weapons. Its length is somewhat longer than a man. In its higher part it looks to a certain extent like a hammer, except that at the top it has a strong point, and one part of the hammer is blunt, the other sharp. In its lower part, which is called *calx* (heel), there is another point, since it is very often necessary to fight with the *calx* of the *aza*. A partisan (*partisana*), also called this in the vernacular, is a weapon combined with a staff, and is a little longer than the height a man can reach with his arm raised, of which the iron seems to be like the iron of an ancient broad sword. But the iron of the *partisana* is shorter, though it cuts more widely on both sides, and it has a point. A ronca (*rhonca*) is almost like a *partisana*, but has some points at right angles and also has a stronger point at the

top than the *partisana*. Therefore the *rhonca* must be worked between the *partisana* and the *aza*.

Defensive arms, which we normally hold with our left arm for the sake of defence, can very often be adapted to Latin speech (for there we have the *scutum* or *clypeus*) inasmuch as they are also in use in the vernacular, and the *pelta*, which we call *brocherium* (*buckler*). *Parma* we say for arms made of leather; in the vernacular they are called *darghe*, though in the vernacular we shall apply some other names, such as when we say *rotella*. But in truth a *rotella* is nothing but a big *pelta*: because of its size most men take the *rotella* in their hand differently from the *pelta*.

The armour in which soldiers are dressed can be altogether reduced to the doublet (*diplois*), corslet (*thorax*), mail (*lorica*), sleeves (*manice*), gloves (*chirothece*), and to the *galea* or *cassis* (helmet) on the head, and shoes (*calcei*) on the feet and, though there are other recent models, they are called by these names and can be rightly called so. But we shall indeed use bevoir (*bauera*) or gorget (*gorgialinum*) for the cover of the neck; it can also be called *gutturarium*. And over the groin, we call *bracche ferree* (iron breeches) or *lorica ferrea* (*iron mail*), and that which is attached to the shoulders, we name *spaldaze* or *humeralia*.

On the method of fighting on horseback, in play as well as in wrath, there are many terms. In what is called *iustra* (*joust*) in the vernacular, we shall find some unusual ones, though a joust is a meeting or an encounter or clash between two riders with large breastplates and very strong shields, and for the meeting they also carry large lances. And as we explain about these, just as about the other exercises, it is to be understood though that we do not always insert Latin terms but, in order that these matters be more easily understood, I shall, as far as I am able, write in a familiar and clear way, but more lengthy than in the vernacular, since we shall unfold other explanations beyond those which are in it.

II. WHY IT MUST BE NOTED THAT WE CANNOT LEARN MECHANICAL OR MANUAL ARTS THROUGH WORDS ALONE.

In this area of exercises it must be noted that we cannot learn through words only, unless in the speech there is, together with demonstration by the hands, work of exercising the bodies in tangible work of the senses, when we are already working outside mental theory, and the limbs demand another order of learning than the intellect; therefore, though manual practice

more than theory deals with rather lowly, or at least tractable, things, we should nevertheless be taught by signs or examples of the limbs what we shall do, and so, though the wise, in sublime doctrines, approach to learn figures or machinations about manual operations, they understand little or nothing of those things which they are about to do in a similar capacity, even though they can understand words with ease; but to do what the words signify is truly difficult if they do not first test, through deeds or designations of the limbs, how these descriptions are brought to work. And so, though it be called mathematics since it falls under figures, it is not understood to be in the first sign of certainty (since we easily understand mathematics and its figures without actual demonstration by teachers), unless we conceive those figures afterwards under the teaching of a practical author, and then the teaching of working with the hands is clear and easy; and thus, since this book almost completely belongs to the faculty of operation by the limbs, though with reasoning with facts as far as will be possible, in the end it will eventually be difficult to understand at first, until something in it is learned by practice. And it is to be noted that, though it be said that when the meaning of some figure in mathematics has been shown, the pupil immediately knows as much as the teacher, this does not hold at all; for though the pupil immediately, through the teacher's demonstrating the figure, understands what the letters say, he does not from this at once know how to make the figure as the teacher makes it, since also in doing figures, even though we understand them, one must first spend some time explaining, so that we make them correctly. And so this happens in working exercises since, if we have a capable teacher, we almost instantly, with an example of action by the limbs, understand simply and easily what the letters say, but we do not so quickly operate with the same correctness as the teacher.

III. ON WRESTLING, AND THE CUNNING AND MODERATION WE SHOULD USE IN IT.

At the beginning of wrestling or coming to grips, we should take short steps. But if the other comes to our front, we should step back gradually for a little while, and if he discharges a *transpes*, or wants to place a *tornus* or *saccaligna* in our right foot, we should, while going back place that foot on the other, by which the adversary is supported, and the left side should be placed in front. But if the other wants to reach at the left part, it will be necessary to go on our right, in the way we have explained about the other foot. But since he can escape in many ways, we should, for the sake of carrying out a deception, walk lightly, so that we can unroll ourselves from whichever side at the moment when the other wants to escape. This rule is

truly to be heeded in any grips, and it is especially advantageous and useful to bend down on the knees and also it is sometimes seen to be good to jump or to dance with our foot, namely in the place where the other has directed strategems or *armas*, but the foot is to be drawn from behind or it should creep along the ground. But if we throw our hand in against the chest, it is an immediate destruction or a remedy against any strategems by the adversary which is usually done without danger threatening us.

For if our hands are not yet joined to the other, we should walk with long steps and straight, and use a *saccaligna* or *transpes*. But if the enemy comes impetuously, we should place a *tornus* or *transuersum*, drawing him forwards. And these strategems, as we have explained in the prologue, are called *tornus*, *transuersum*, or *incontrum* by the Spanish, and in accordance with the nature of Latin, it can be called *obuiatio* (meeting, clash, opposition); by seizing the other's neck with our hand and the other under the arm by the chest or in a similar place and with our right foot we should place an *armare* on his left, so that his body should fall completely on his left side. And after he takes the collar with the left hand, in the opposite case one must *armare* or make a strategem. But when, through divided, or I may say doubly divided, arm, which means chest with chest connected at the part where our arm is under the other's arm, with our foot meeting the other's foot, and also a *saccaligna* should be placed with the heel in the same leg in which the *obuiatio* is to be made, although the *saccaligna* is extended between the other's legs and draws the adversary's foot towards us, and with our arms we drive away his body, so that he falls on his back. Likewise, when we receive by the collar (*ex collo*), at the moment of the clash a *saccaligna* should be applied. Nevertheless, sometimes we throw the *saccaligna* towards the other foot with the point of our foot.

And if we seize by a single arm, we give an *obuiatio* also in the other foot which remains far away; and a *saccaligna* should be placed with the heel to the other's foot, which remains close to us, if we seize with the right arms. But when the hands are seized by hands, that is the place to apply a *saccaligna* with the point of the foot. Other stratagems are not that good, such as the *transcuruata* and the *nescia*: these strategems are frequently used by the ignorant. The *onerata* or *cargum* or *tollens pernam* are often done by practiced men. But if, applying a *nescia*, we roll out our body, it is just like a *disclunata* or a *britona*, except that the arms grip differently. For the most part, when in equally shared arms we should press in with the foot with which we oppose, in the other side we go with the *disclunata*.

IV. ON WRESTLING, SEIZING WITH A SINGLE HAND, THAT IS, BY THE RIGHT OR THE LEFT.

If we have changed hands (*manus cambiatas*), as is understood right with right or left with left, assistance is quickly required with the other hand, which remains free of the arm of the enemy. And this obstructs any opposition, and this grip can break the arm, hand, or a finger. But if we receive the right hand with the left, we should tighten our fists and draw them to us, likewise rolling the hands below, at least for the most part.

V. ON COLLAR-WRESTLING OR *AGAGATHE CAPIENDO*.

When seizing by the neck, *obuiatio* and *retropes* (pulling the foot back - tripping) are to be placed, but it is best when one of those practices comes forth from the other, that is, when we apply both practices without pause. And from this grip the *saccaligna* and *deuiatio* are to be implied, sometimes also the *onerata*.

VI. ON HOW TO WRESTLE WITH A SINGLE ARM.

When wrestling by single arms, an *obuiatio* or *transuersum* can be put in the farther foot, and a *saccaligna* in the nearest, and sometimes an *onerata* or *britannna*. However strongly and with swiftness, it is fitting to unroll our body, our back sticking to the chest of the other; meanwhile, a *saccaligna* and *circundata* is made in the furthest leg.

VII. THE WAY TO WRESTLE WITH BOTH ARMS EQUALLY.

With the equally shared arm an *obuiatio* is to be applied to either foot, though it is better in that part at which the adversary looks, and a *saccaligna* is appropriate for the same foot, and sometimes a *mediana* or *circundata*. And when we can take hold of the hand which the enemy is inserting under our arm, by putting it above his stomach we very easily lift him fully from the ground.

VIII. ON SEIZING BY THE SIDE.

When we take someone's side, it is very useful to seize his head, hurriedly making a *saccaligna*, a *circundata* or *mediana* as well as the *disclunata*, all made almost at once, for it is not possible to take precautions between one and the other, and taking hold of the other's side it is necessary to attend to devastating whatever the enemy can *armare* or bring against us. Then one must proceed in an upright manner; this grip having been made, it is very easy to go after the other's back.

IX. ON SEIZING BY THE BACK.

When taking hold of the back we should use a *transbuccata* with our foot in the hollow or curve of the other's leg, so we cannot be thrown down, and to throw him we should do a *saccaligna* or *disclunata*. In this way, taking hold of the enemy's arms with the hands in front of our stomach, so that we feint wanting to lift him on the back, and at the same moment we should dance with our feet towards the front, weighing strongly with our shoulders and entire body on the adversary's shoulders, so he bends down by the loins and knees to place his stomach on the ground. But if we seize from the back, we should apply an *incontrum* or *obuiatio* to each foot. However it is better to roll him in the direction where he himself rolls, or to place our leg in such a way that it passes between the other's legs and is applied in front of the knee, so that he falls on his face. And it is fitting that we lift up our leg very much.

X. A RULE ON CUNNING CHOICES AND CHANGE OF GRIPS.

Those strategems which have been noted down above, at least until we mentioned the side, are all safe and can without doubt be used against any men, strong, weak, skilled, or otherwise. Other strategems or methods of *armare* are dangerous for those who practice them. And when an *armare* or an attack is taking place, it is very much more useful to defend ourselves than to break the enemy's activity with similar activity by ourselves, since he will *armare* in one of our feet, and if we lift the other from the ground that is very often risky. Therefore we should move away from the other's attack, and then see to it that we throw him down by our own activity. And one must not proceed too far or persist with any grip, except that once or twice each of these strategems be made, and sometimes not all, all the more when

we see that the adversary goes unharmed. For it is healthier to devise grips where the other knows less and restrain him.

XI. ON THE UNIVERSAL AND PARTICULAR METHOD WHICH WE SHOULD USE IN ARMS

In all weapons one should proceed in the same way as when we arrive at or enter the wrestling-ground, especially when we apply a *retropes* or want to avoid one. For this practice teaches (how to) escape or turn away the side which the enemy wants to strike, and that we also throw or strike where he is the least prepared. But if he leaves a part uncovered, one must rush and enter in, though the first blow should in most cases be short and brief, provoking or moving the companion in some way. The second blow, however, is to be made in an extended way.

On the sword, a left-handed or right-handed blow is very often good, since it strikes very strongly and is quite safe. But after making a return, the foot is drawn towards us, and the hand in front should come back again with the point, and each person should always walk otherwise than the enemy, making blows which are generally light, and frequently following the adversary's hand when an other part is shown uncovered.

XII. ON PLAY WITH THE POLEAXE AND CERTAIN PRINCIPAL BLOWS IN IT.

Any weapon that is hafted or contains a shaft should be handled like a poleaxe or *tricuspis*, when we carry it by its lowest point or extended forward and held by the *calx*, and the blows which should be struck are those which we use in *leuata* (raising up) or at the beginning of teaching, and these at least are the principal ones. Right hand preceding, one should enter through the upper part with the right foot to strike, and at the same time return with our foot on the front side, so that the *calx* of our *aza* comes to strike in the foot or leg of the adversary, and all these things are to be done at one and the same time. But if we want to strike through the lower part, we should cover our head and turn aside,

And that blow for example rises up to hit the head of the other. Similarly one plays or fights on the left side, and sometimes makes a show in one place and attacks to the other, and for the most part we should strike with the points of the poleaxe. For the hammer, or the blunt part, is altogether potent in matters of strength for feinting or striking, but for fighting the sharp

points are best. However, it is useful that, for every blow he wishes to strike, to throw with the *calx* of our poleaxe into his face, drawing our body upwards.

On our language, we call any individual weapon an *arma*, even though we mean a particular one. Just as ‘animal’ covers a great number of kinds of animals, and each in particular is called ‘animal’, we can say the same about weapons, since there can be no race which does not include individuals. But the individual should be similar to the race inasmuch as it is derived from the race. Keeping this rule, we shall sometimes call a sword an *arma*, as well as other types of weapons, in spite of the fact that in Latin it is declined *arma armorum* and is only found in the plural, since in accordance with the Latin tongue it is irregular.

XIII. HOW IT IS DAMAGING FOR US TO REMAIN FIRM WHILE WE ARE FIGHTING WITH WEAPONS.

It is very often dangerous to remain firm thinking about the parrying of the adversary’s blow with our weapon: therefore we should cover and turn away the part of our body which is in the greatest danger.

XIV. ON PLAY WITH A SWORD FOR TWO HANDS.

The way of the sword for two hands is also used for play with short weapons, and this play is called *levata* in the vernacular, which is to be understood for the first blows which we begin to teach or to learn, although it is the strongest cause for bodily exercise, and we make many blows and circles with weapons. The chief blows of the sword for two hands, however, are two rising blows, which we call *montantes* in the vernacular.

If they are made from the right side, the right foot should begin to move entering with a rising blow or *montante*, the second immediately with a *reverso* either returning the left hand rising from the left side or covering the head with the sword. It is also extremely useful when we make a show that we are going to insult with a rising blow, and, in the same way, we should inflict with the point. Our arms in particular should remain upright and also stretched out in front, and this is safe when we attack and defend ourselves. For when the arms are bent to any extent, the danger comes to meet them. Similarly from the left side one should make two *manureversos* (left-handed blows), so that they ascend, or the last one descends with the other

ascending, from the right side against the adversary's hand or covering our highest part. The first left-handed blow is just as good entering with one foot as with the other, but at the last the right foot should enter and leave. If however we do both *reversi* or *sinistri* with the right foot, that is, entering to make them, the first step should be short, the last long, and it is always useful to make a show in one place and approach from the other, which is certainly enough when we contact the adversary's sword at the first blow. Next quickly return with another blow through a lower place to the hands of the other, since for the most part rising blows obstruct descending ones. But coming from above with a *findente* (cleaving blow) even though we are first touched, we very often bind him who remains below, for relaxed upper arms coming from above have the greatest power, and therefore we should receive with little of the sword, or the point, those who deliver blows of this kind in their right arm, in the same time our body should be turned back towards the rear and united. However the point of our weapon should face higher up, where there will be no defensive or parrying *pelta* in the left hand, and so, in the absence of covering for the head, blows coming from below are often dangerous and must be avoided. Also, when the other touches our weapon, we should immediately return from the other side, which indeed disperses and drives away the enemy's deceptions and does damage. For the most part it is good to feign on one side and attack through the other by leaning (lit. 'nodding') the body to the other side and releasing the weapon into the place at which we want to strike, yet in such a way that the weapon stays in the same place as before; so that we strike more rapidly. Whenever the other tries to do anything he wants, we shall move our person back and forth and sideways. And our hand should frequently go against the hand of the adversary. *Stocchatas* or *punctas* done when entering are altogether best through the lower parts, when retreating, though, through the upper. But if we want to join with the adversary, we should first enter with a left blow and the left foot, and similarly immediately with a right-handed blow and with the point the right foot advances, and in the same instant, or quickly, we must withdraw to the left side with a *manu revrso* (left-handed blow) which rises.

He who is ignorant of the play with a sword for two hands can hardly protect his hand in a suitable way, or his leg and head, unless he knows play with the poleaxe or *tricuspis*. And with the poleaxe it is commonly useful to throw committing with the hammer part and to strike with the point. But if the other wants to get out, it is good to obstruct with the *calx* or the lower point, leaping backwards or to the side.

XV. HOW DEFENSIVE WEAPONS SHOULD BE HANDLED.

If we have a defensive weapon in our left hand, it should be placed beside our body. Nevertheless, when we want to insult or are being insulted, the left hand should be extended as far as possible to join the right hand.

XVI. WHAT KIND OF ARMS TO CHOOSE FOR A CONFLICT BETWEEN STRONG MEN, AND WHAT KIND FOR THE WEAK.

Against strong men one should choose few and light weapons and spacious places. But if the men are weak, one should choose otherwise, although for a weak man it is healthier to take precautions, a strong man does not join with him without the greatest harm. Likewise he who is strong should pay attention not to let the weak man have a chance to escape. And with all who know very little altogether, one should cover as long as any of their limbs are uncovered. For some are bent on to strike or touch the enemy in an armoured or unarmoured place, and this is done especially by those who are rash and unskilled. Therefore, by placing our armed limbs before them, their blows are discharged, and then it is easier to hurt the enemies.

Always in the beginning, when bringing a left-handed blow, one must walk on the left foot, heading sideways. But the right-handed blow and *puncta* (go) on the right side, and for devastation or hindrance, it is fitting to go back with the same foot and strike a blow through the lower part.

XVII. HOW WE SHOULD PARRY WITH A LONG WEAPON AGAINST A SHORT ONE, OR IF WE HOLD A SHORT ONE AGAINST A LONG ONE.

When holding a long weapon against a short one, we should, whenever we engage in fighting strike two blows, one high, the other low, and with each the hand and head should be taken back, so that the body hangs back a little, for the reason that if the adversary turns away our weapon with his and wants to join with us, the point of our weapon should always meet him, and when he wants to try to enter forcefully, our feet are to turn back a little. Nevertheless we should pursue the same blows as we have already said, which helps greatly against anyone who rush forward thickly. And if we hold a short weapon, the other's weapon or blow is to be turned away, so that it passes far away, and then we should approach the enemy. And there

should be promptness in all these things as usual; when someone approaches in a rage, we can parry the weapon and join him, turning away on the side, which is safer when we are armoured.

XVIII. ON PLAY WITH THE DAGGER.

When playing with the dagger, there are many grips with hands and feet, and the principle strategems are those which we also use in wrestling. When we approach to fight, the other's hand should be taken, and ours turned away to keep it from being seized. But if we wish to throw the enemy down, it is good to send in our right foot and hand in his chest, or to quickly strike the arm holding his dagger, and restrain him so that he cannot escape. And if we bring a blow over the arm and the adversary receives our arm with his own, we should slip a little, raise the point of the dagger high, and return through the lower part to touch the enemy, or hold our hand firmly over his hand so our dagger comes forward rending the enemy's hands. If however he wants to parry with the point we should return to his face and through whichever place he wants to enter to capture our weapon or our arm, our forward foot is to be diverted towards the rear, and at that moment another blow is to be made through the other part. Therefore it will be difficult for anyone to tear away our dagger, other weapons should be used likewise as well. For by remaining firm during a conflict, anyone can quickly receive loss and also harm; by heeding this rule it will be difficult to harm us much.

XIX. ON THE METHOD TO CAST OR THROW FORTH

When we want to throw something with the arm, we should come to the mark in which we must brace the feet to achieve impetus and speed. But having discharged and thrown the missile we must depart quickly after it with our body directly upwards and proceeding on the right side, and our arm should be stretched upwards as much as possible at the same time with brandishing it and great speed of discharge and stiffness.

But this method of throwing high is best for long throws. But when one throws against enemies, it is better to quickly lower the arm a little on the right side.

XX. ON THE METHOD TO CAST OR THROW FORTH

A shaft should be discharged almost under the arm, so that it ascends, and the feet are to be placed almost equally on the mark. However the right foot must go forwards at the same time as the shaft, and a *volta* (turn) or *girus* should be made, very large and quickly, when we rotate our body, and it should become completely rigid, holding the breath.

XXI. HOW WE WILL THROW A SMALL STONE.

To throw a small or flying stone, which in Spanish is called *volandera*, it is appropriate also in this throw, among all other things, to lower on the side or towards the right arm. It is necessary moreover to look out, that we do not go over the foot or the left side. For this keeps the missile from going crosswise.

XXII. THE METHOD TO THROW A BIG STONE OR ROCK, CALLED SCHINA IN SPANISH.

A *schina*, or big stone, is to be discharged from the upper part of the shoulder, and lengthening the arm as much as at all possible, and when the stone leaves the hand, we should lower ourselves over the knees, especially the left one, to keep from going after the stone, for in this way of throwing the feet must remain firm.

XXIII. HOW WE SHOULD THROW A LANCE WHEN MOUNTED.

When throwing when mounted, first of all the stirrups, in which we brace our feet, should be level, and not with one long and the other short, but so that the body turns around greatly over the saddle to throw and the legs remain very strong and tight, for otherwise we are in danger of falling, and at the instant when the man wants to discharge the lance, one must rise, standing on the feet and the arm remaining up, and from this place the lance or missile should be discharged, do not go to the horse's neck or sit over the buttocks.

XXIV. ON RUNNING EXERCISES.

In running or the method of running, our strength should be gathered in the chest, and we should always be attentive that the whole body is raised upwards and that in the front part it is heading so, that the forehead comes to be in a straight line above the points of the feet, and only the points of the feet are to be put on the ground, tending somewhat towards the outer parts, by which you should understand the toes of the right foot towards the right part, and those of the left towards the left; the strides are to be kept long and fast, and the legs should be raised by bending them by the knees, and the arms should go stretched upwards. The hands are to be carried open and extended or contracted. Nevertheless the fingers should be held tight between themselves. For in this way we raise the strength to the upper parts. And very frequently when running we gird and draw together our loins with one tight strap, so that the strength remains in the upper parts, even though it takes away some of our breath, in such a way that the strap can only be of help in brief running, since it brings detriment to long. We say that it is useful however for running to extend and raise the neck. For then other limbs are necessarily raised and made light, but if we draw back the neck in itself and raise the other limbs, the whole person is rendered stronger and not so light. And when we want to run with another, the first step is always the most principal in the whole running. And therefore it should be made long and as fast as possible.

XXV. HOW A PERSON ON FOOT CAN RUN TOGETHER WITH ANOTHER WHO IS ON HORSEBACK.

If someone wants to run on foot with a horse, it is necessary to take hold by the stirrup, to unburden one's body on the hand as much as possible, lifting the feet upwards to have the opportunity to make long strides, going before the rider's leg. For then the horse brings us as if at a charge (*incontrum*), and so is very helpful, and if the body of the man on foot is left behind the legs of the rider, he cannot last in running, because the horse's speed drags him quickly towards a headlong fall.

XXVI. ON THE METHOD TO LEAP AND TUMBLE

Leaping and vaulting do not contain much art in themselves, but only demand continuous training and exercise. It is crucial however that the man lifts himself upwards as much as he can, and where taking part in running one must go opportunely and furiously, and in the leap the whole body is to be lifted upwards and raised.

Tripudiare (tumbling) is called *volteare* in Spanish, but *voltizare* by Italians, which is the same, and it is deservedly called *volteare* as it derives from *volta*. But since in Latin we have *girus* or *volta*, we can suitably say *volteare* or perform *voltas*.

XXVII. ON CERTAIN *VOLTE* OR CIRCLES WHICH ARE PERFORMED IN THE SADDLE.

When we want to leap or vault on horseback or in the saddle, our strength is to be gathered in our chest, and when we begin to rise, we must quickly go through the circle, and the feet should go as high as the head into the circle, when we perform it, so that the body turns balanced over the left arm. For if the body would lean more towards one part than the other, it would not go exactly as it should, and would not remain there firmly with grace. And if we are equally firm on the arm, a *volta* (turn) without effort or stiffness results, like a wheel with an axle in the centre. Therefore it seems to circle without labour, and then it has the most grace. If however it would lean more towards one part than the other, there would be great difficulty in bringing the wheel. And when we want to perform a circle, we should support ourselves with great strength and turning when we begin to rise, and the arms are to be held rigid and without entanglement until the *volta* is finished.

XXVIII. HOW MUCH GOOD COURAGE PREVAILS IN ANY EXERCISE.

In any exercise courage helps and fear impedes, and for that reason, when we are tumbling (*tripudiamus*) a rule like this is to be observed, as if we were jumping on level ground, though we would not always reach the mark we want. Nevertheless by having entered into that which we have begun, for as long as the strength can be sustained, and in any circle, especially in those where someone is observing us, we should, in order not to fall, direct our persons towards the goal we have already assumed. For a new plan on the road already taken is found to be useless in almost all exercises. And when we want to vault on a horse, the right hand

should strike vigorously on the saddle, and our whole person should be gathered with joined feet wherever we want to place them, and at the same time the body is to be raised up. And if we are sitting in the saddle, the legs are to be opened and the body lifted so much that we may make the arms firm and rigid, so that we can go through the whole circle on them.

XXIX. A RULE WHICH IS QUITE USEFUL FOR THE WAY OF TURNING AROUND

Finally, in this exercise, we should always commit this rule to memory, namely that the feet, head, and likewise the torso should go, as it were, equally high, as high as the outstretched arms, since in circles it is not fitting to bend the arms, they should be stretched upwards and rigid, and it is always appropriate for us to have this imagination at whichever height or depth, and sometimes we should be made firm on the right arm and sometimes on the left, in accordance with the various turns what we are going to make, imagine by the way we do *caualcatam** or *equitum* (cavalry), then the strength is to be placed in the left hand; this *equitata* or *caualcata* is nothing but entering into the saddle, and, in the way in which the *media pomata* and *tota pomata* is usually made, one must also pass to a *dimidia mora* and *tota mora*. However, by the *volta* of stirrup-leather, from which the stirrup is hanging, *remontata* and *tota mamia*, *peregrina* and *galeatia* are to be made. And in these last ones, it is appropriate for us to attend to placing all strength in the right hand when we work those circles, and little strength in the left hand, and here the right fist is to be placed beside the left hand, and a small turn or *undeata* (possibly undulation) is to be performed with the body. For especially in these turns it is appropriate to lift the whole body upwards.

* Note: these vaults are identified in Book 2, Chapters - 142 - 156

XXX. HOW MUCH USEFULNESS ARISES WHEN WE KNOW HOW TO DISTILL THE SECRET OF ONE KNOWLEDGE TO ANOTHER.

I imagine that no one will be a great and distinguished master in just one single skill, or even with many, unless he first knows how to distil the secret of one knowledge to the usefulness of another, and to gain this knowledge will by no means be great labour, as long as we shall want to consider correctly. For he who performs a leap upwards, directing his strength towards the front part, can easily go forward. If someone is riding with reason in a flat saddle or one with small saddle-bows, they will with little further training be able to ride in an *arcionata* saddle, or should we say, one with high saddle-bows. Those however who use

some skill only along the way of continuation, always remain new or unlearned, with great exhaustion of their limbs, and to avoid those errors we instructed already at the beginning of this book that all play with weapons are to be reduced to play with poleaxe and two-handed sword, and those two weapons we have explained under a few blows.

XXXI. ON CERTAIN ACTIVITIES WHICH WE SHOULD USE TO BE ABLE TO BE ON OUR GUARD AGAINST ADVERSARIES.

It is indeed difficult to recognise all deceptions which those make who want to attack us, since deceivers approach in different ways; sometimes showing themselves calm in every part with few and tender words and bearing gifts, until they have conducted us to the pit. Others show simplicity and mild words, but in their way of speaking various things can be understood, different every day. And some, who want to offend with their hands change their colours in different ways, commit various acts with the body, and it seems that they continuously want to begin a new thing. For they do not seem to have any rest in themselves, as when we remain near a dull man. What we seem to feel no differently from what we feel when we remain beside a dull man; for these traitors seem to keep their breath in themselves, and they walk in a hard and intemperate way. And when we want to defraud the deceivers or seize them very easily, it is appropriate that we are good, to keep the other from thinking that we are considering his cunning, and we must show flattery in the limbs, and dissimulation, which should not seem to come from us.

XXXII. HOW USEFUL IT IS TO LEARN OF THE TEMPRAMENTS AND HOW DETRIMENTAL TO BE IGNORANT OF THEM

We say that knowing how to recognise temperaments results in great usefulness, since men are by nature various and different in limbs and operation in accordance with those; where indeed to be sure, it is necessary also for our limbs to be exercised, for the reason that, when they see another's limbs being moved, they sense labour or detriment themselves, and go differently from how others come, or to parry where we see the greatest danger. And he who does not know how to correctly recognise temperaments and, likewise, exercises, cannot consider these all; if finally there were some examination, we would know to assume a true remedy, for knowledge induces assiduous vigilance into the eyes and limbs. For even if hearts

forget, we discern out of habit any persons with our eyes, and the inconsistencies which they can bring.

XXXIII. PARTICULARS OF SOME PROVERBS

He who possesses what others want to take over, needs always to be vigilant in order to keep himself safe.

He who should observe himself and deserts himself for the sake of dissimulation is his own murderer, we say.

Nobody puts himself in extreme danger, when he is certain that he cannot attain the principal thing from which he is separated.

He who does not know those who want to injure him guards himself against everyone, for with a little labour he supplies his limbs with safety and his mind with rest.

The weak in mind grows in cruelty and godlessness because of fear.

He who offers peace to others suffers adversity unjustly.

No one is so pious that, if he holds some governing position, he is totally free of unpopularity.

In some conventions one should tell the truth and guard oneself, but where we are wont to fight, anyone can use all frauds, when there is such a convention between us.

There are those who employ the rule of deceiving in combat and then keep the same norm in all business, which can in no way happen without enormous offence and blasphemy.

About the things which we are going to do we should observe the proclamations of our culture when we come to a result, and since in some of the deceptions we agree with, and in others not however, we should always walk in accordance with the first.

When we buy or sell, lend or borrow, or when we should follow someone, or he us, in other pacts of this kind, we should always proceed honestly without any cunning or deception. In fights, however, it is different, when there is such a convention between us.

He who knows much should not be reproved, except for he who uses his knowledge evilly; therefore, knowing to apply altogether necessary activities in games and battles is commendable in all, as long as we break no pacts.

It is shameful to write about activities in which the worst persons can learn and be able to perpetrate worse things. However, our intention of writing should be for the good and not for the evil.

As long as we are living and have our writings in our hands, we can altogether prevent that they reach the worst persons. But after our death it is not our task to keep others from reading them, even though when we write we consider the good, we have no burden.

Not all writings are to be concealed from malicious men, but only the activities by which they can fight and perpetrate more evil. Artists are able to act for themselves more than others.

It is more honourable, we say, that the worst have profit instead of the good, than that the just suffer because of the evil. Therefore the good should not be hidden from the good from fear that the evil will get hold of some small part of it.

Here, setting out the difference between exercises of the limbs and exercises of the intellect, we could properly add one common proverb, which says, at least according to the people: *Test all things and hold on to those which are good*. However, we feel very differently about the first proposition and think that it fits the mind of the inventor of this proverb, since no one of sound mind would give such advice, that we should try *all things*, taken absolutely, but only those things which are good, for *all things* includes killing other people, hanging ourselves, cutting off hands and feet, drinking poison, bringing injury against our parents, stealing the property of others and placing our own property in the hands of robbers; activities which are not to be tried under any circumstances, but must be completely shunned. Therefore one should say, *try all good things and hold on to the best*, but bad things are never to be tried; and so, in our case, exercises of the limbs are good things, however not the best in comparison with exercises of the intellect, but since they are good at least in the positive degree, we can, when we are young, employ exercises of the limbs, such as running, jumping, throwing, riding, and similar things, about which we shall say a few things in this book; however, when dealing with the best works, always totally commendable at all times in this life and the next, this should be taken as the labours of the intellect, and when those are durable, we shall rightly say *test all good things and hold on to the best*, namely, when you are young, also do

exercises of the limbs sometimes, but as being perfect hold the labours of the intellect as being the foundation.

PROLOGUE ON THE TEMPERAMENTS.

In the book *De Cognitione Hominum* we have treated all temperaments extensively, and for this reason we shall here explain just a little in brief on the four principal temperaments, for knowing those, the other temperaments will be understood quickly. For when the body contains two temperaments, it will have the composition and operation of both qualities in almost equal degree, and so by dividing the quality of the body into three or four equal temperaments. This is the correct way for knowing them, since when seeing one man whose head is somewhat large and fleshy, and whose legs and hands are thinner than would fit a choleric's characteristics, then we assert that he is allotted choler and sanguine in almost equal parts. And if there would be phlegm in place of sanguine, the body would indeed be fleshier and more tender. And if there were melancholy in the second place, then the body would be harder and bigger-boned.

XXXIV. ON THE APTITUDES AND COMPOSITION OF THE LIMBS OF SANGUINICS.

Sanguinics have this composition: a face which tends towards largeness and averageness, tends to be somewhat fleshy, especially in respect of its bones, and even in length it is short. The head is neither big nor small. The neck is thick in a good way, the shoulders extended or long towards the direction of the arms. The upper arms and the thighs of the legs are thick, the knees and elbows below are slender in respect of the upper parts of the legs and the upper arms. And the hands are quite short and tender to the touch, the fingertips somewhat hard and tight. The palms of the hands are somewhat thick and full of flesh, but in respect of the softness of the hands, all other flesh or limbs display hardness, and are indeed beautiful to see. The colour is between white and red, with greater brightness than any of another temperament. They have good delivery of speech, however with a rough or slightly gruff voice.

XXXV. IN WHICH FUNCTIONS SANGUINICS ARE STRONG ACCORDING TO THE CHARACTERISTICS OF THEIR NATURE.

Sanguinics are fit for anything which demands accuracy and nimbleness of the hands, such as the skill of a surgeon or barber, to play a stringed instrument, and to serve at table, as well as

writing, embroidery, and other exercises of this kind which pass quickly. They are quick to understand anything. Rarely, however, do they find the secret of that thing; for they do not strive to stretch their intellect to discerning various and profound things, since by their own nature, there is not much steadfastness in them, and thus they do not recall to mind so much that they can correctly discern what they are investigating, since as the first thing they find occupies them. They have a competent memory however, although it seems excellent, since they quickly recall that which they are going to think of. But they are little intent on taking on labour; they are calmer in the beginning than in the middle and end. They observe little stability and constancy, and when they are ill they suffer great damage in a short time, but their diseases can be cured easily if they are treated soon. They run fast in a short while, but the place for running should be somewhat sloping, and likewise they are good at jumping and vaulting, when here much quickness is required. They throw any weapon well, the better the lighter the missile is, since they are allotted great thickness in chest and upper arms compared to the size of their bodies. Therefore they can easily bear the labour of throwing. They have thin hands and arms, and thus they can brandish or cast off. And their strength and courage is in the beginning, nevertheless they pass away quickly.

XXXVI. ON CHOLERICIS AND THE APTITUDES OF THEIR LIMBS.

Cholerics possess a thin face with little flesh in it, the neck is medium-sized in thickness but more than medium-sized in length, and it is sinewy. The shoulders are low or tending downwards. The upper arms are thin in respect of the thickness of the forearms and elbows below. The legs of each are slender in respect of the shins. The hands are medium-sized in length and excellently divided, tending more towards hardness than softness. The palms, or small of the hands are almost equal in thickness to the other parts. Their hardness is slightly greater in one part than in the other, though a little more in the fingertips. The other limbs are gentle to the touch. The feet are like the hands. This rule is kept in all temperaments, and according to it the foot can be judged from the hand, and the legs from the arms. The loins and waist are conformed with the ends of the arms and legs, that is with the forearms and lower legs. And since cholerics have these three parts strong, they apply greater force with them than with others of the whole body, for wherever greater quantity or thickness of bones, sinews, and flesh is inherent, there the strength is greater.

XXXVII. HOW CHOLERICS ARE RECOGNISED.

Cholerics have a pallid colour, especially in the face, though when they exert themselves they show it better or more vigorously. Their speech is weak in expressing, but the voice is sweet, and when they remain naked, they are better than others in the build of the limbs; they have an excellent inventiveness, though at the beginning they show some impediment. They are constant in any operation and any kind of governing or commanding peoples. They are astute and vigilant, learn a little more in one art than in another, and from this they are more suited than others to wrestling, because of their temperance of breath and balance of limbs; you should understand that one limb is a little stronger than another. In a wonderful way they bear and undertake arms, they run, jump, and throw better than the average. And they work better on a plain than in other terrain. In whatever official duty which they endeavour to carry out, where discernment and temperance come together, they have great aptitude, as in the way of building and also fighting. They do not have a very great memory, because they are spread out to so many things that they cannot pay attention to so many, and moreover it seems that they can say by themselves whatever they can learn from others, or at least a great part, though in the way of inquiring they easily find past things. They are very rarely ill and are easily cured. But when the illness has taken root in the limbs, it can hardly ever be removed or expelled, not because the flesh is disobedient and hard to receive medication, except that the connection and moderation of this temperament are extremely strong and joined. At that time indeed, they do not allow medicines to penetrate the joints. They have good conduct at all times, but better at the middle and end than at the beginning; when they become angry they show violent fury. But they soon return to calmness.

XXXVIII. ON THE MELANCHOLIC TEMPERAMENT AND THE SHAPE IT GIVES TO THE LIMBS.

Melancholics we accurately call robust. For those of another temperament can endure very many labours for various reasons. For melancholics from nature or innateness are hardened to fatigue and in this way they are recognised. They have a big round head, but the face is high at the temples. In the jaws the mouth is very big and raised, the neck is thick and short. The shoulders are broad and leaning forward. The chest, however, is broad and not round but flat. The arms are short and curved in, which is called *esteuados* by the Spanish. The legs and upper arms are allotted thickness, and from the knees and elbows down they possess a thickness between that of cholerics and sanguinics. By the waist or loins they are of medium

size, that is, neither thick nor thin, the hands are strong, thick, short, and very hard. But their thickness and breadth through the palms and small of the hand are deep, solid, and very hard, the fingertips are between sanguinics and choleric in thinness. The feet turn by the points towards the inner part. Their shins are curved, as the arms, especially at the bones of the ankles, and also the thighs. The flesh is extremely rough to the touch. But the chief sign for recognising melancholics is that when touching them we find them exceedingly stiff and hard, almost as if they would have no joints, those who have touched them in any place send all their strength into them. They have choler between black and green, or intermixed with redness. And their pronunciation and voices are strong, joined, and rough.

XXXIX. ON THE WORKS OF MELANCHOLICS

Melancholics are not as strong as it appears to them, or even as is said in public opinion, and that they are not as strong as they say becomes obvious, for when we hold them to test, we do not find that strength which was seen before, since when touching them it seems that we are moving something of marble, which is caused by their lack of temperance; therefore, when they begin to bend themselves, they do not find a place where they can become firm, until they reach the ground. For they are like dry wood, which indicates great hardness to the touch, and when it begins to be bent, it removes all the labour of breaking itself apart. But if the wood were fresh, it could be turned around towards all parts, and would be broken with weariness. And those of this temperament lift a very great weight and throw heavy, hard, and short things. They jump with average skill and run little, they bear labour well without feeling it much. They are more suited to being commanded by others than to giving orders to others. For staying in camp or in fields and sieges, whether in prosperity or adversity, they are better than the others. For it is not very hard for them to lie on the ground and to use a pillow of stone for sleeping, nor do they have too high an opinion of luxurious things. They are not suited for command, as they do not have much shrewdness, indeed they are dull by nature, and learn little art, and even when they have learned it they would not know how to apply it correctly to any conclusion, even though melancholics are good at any things which are carried out with little intelligence, and they wrestle well without skill. It is hard for them to suffer any loss from themselves when fighting, whether seriously or in jest. They are very good at retaining in memory whatever they have once learned. For just as the entry into them is difficult, so is the exit. Therefore they are good lawyers and suited to excavating and

breaking stones, and carrying burdens furiously and because of their hardness they do it quickly. But not as quickly as sanguinics or as slowly as choleric. Their steadfastness is like their hardness; when we do not place them in another adverse place they are tiring, for though the strength in them diminishes, their hardness remains. Their resistance is very great, for they are slow to feel the beginnings of all illnesses.

XL. On PHLEGMATICS AND THE PROPORTION OF THEIR LIMBS.

Phlegmatics have big and fleshy heads and faces. Their necks tend more towards extremes of length and thickness, than towards the average; the shoulders are sufficiently broad, the arms long. The upper arms are slightly thicker than the forearms. The hands are large in length and fleshy and tender throughout. The fingertips are broad and soft. The breadth and softness of the hands are extended almost equally through all parts, and the flesh of the other limbs similarly tend towards softness, but they are not gentle to the touch; round the waist they are broad or little compact. They have long and indistinct thighs and lower legs. The feet are very big and fleshy, the colour somewhat whiter than that of sanguinics, pronunciation is quite clear and very slow, the voice is scattered and thick.

XLI. ON THE WORK OF PHLEGMATICS.

It is evident that phlegmatics are slow in everything they are about to do, especially at the beginning. But when pursuing longer-lasting work they are found with a better suitability. In running and jumping and other operations they are slow and late. In jumping they search for downhill slopes for operating, and in vaulting they are inferior to all others; they throw long weapons. They cannot abide excessive heat and cold, since they contain no extreme redness; they are suited to commanding others, but when they are ordered they act slowly. What they commit to memory they retain very well, but they read many times before they learn. They are fit for gathering tolls, for the trade of a cobbler, and others of that kind. And their illnesses come without impetus; they bear them for a few days without sensing them much. For the slowness of this temperament offers no opportunity for illnesses to quickly rush through all limbs, where great torment could result from the occupation of the organs, but they cannot be quickly cured, because when they are slow to fall ill, they are just the same in healing. For the reason which impedes illness, also impedes the remedy of the health, and even though help is

not quickly given to them, great danger would in no way be suddenly threatening. Their conversation is quite good, but often boring because of the slowness. And strength and courage come to them gradually and late.

XLII. HOW EVERYONE CONFORMS TO THE ELEMENT WHICH HE ASSUMES FOR THE MOST PART.

Just as fire rises high with speed and quickly finishes its course, men likewise, and also other sanguinic animals, have the same characteristics. For the composition of their limbs is high and reinforced in the upper parts, and they are quick in work, and they also fail in a short distance.

XLIII. ON CHOLERICS.

Just as air is temperate and well distributed everywhere, though it is somewhat stronger on level ground, so are choleric temperate and well proportioned. They are great of breath and have limbs which are well distributed, though they flourish with somewhat greater strength in the lower parts, and they work along level ground.

XLIV. ON MELANCHOLICS.

We say that the earth is hard and intemperate, heavy and thick, and in its likeness melancholics are hard, intemperate, and thick in wits.

XLV. THE DISPOSITION OF PHLEGMATICS SUITED TO THE ELEMENT OF WATER.

Water is slow and soft and gradually spreads out, and runs downhill into the lower part. And we do not assert otherwise about phlegmatics, for they are slow and soft in their works, and prefer to search out downhill slopes, and always seem tired to some degree.

XLVI. HOW TO DEAL WITH ANY PERSON IN ACCORDANCE WITH THE VARIETY OF THE TEMPERAMENTS

Here something we must observe about how we should conduct ourselves with everyone in accordance with the characteristics of his temperament, which indeed is understood in each thing, so that we attain victory over them. For we should always take on that part which is prosperous for us and adverse to the other, and in this way we can easily overcome the enemy.

XLVII. HOW TO WORK WITH A SANGUINIC IN ANY EXERCISE.

The sanguinic brings enormous passion and speed at the beginning. Therefore one should wait a little, until his strength flags. For a sanguinic, because of his quickness and swiftness, soon enters at some uncovered part, but the impetus passes quickly. And when it fails, we should arrange that we join with him, since he is weak in legs and loins, for when he remains in a sideways grip, that is, by the hands, arms, or neck, he can strike sufficiently, since his strength is greater in the chest and the upper arms, but small about the loins, so that one must reach *divided arm* with him, It is also appropriate that this rule in arms is observed in running, and that he declines in throwing, he reaches his last ability through two or three throws. Therefore the condition of throwing many times is to be placed on him. And if it is fitting to come to strength of hands, one must first seek spacious, and finally restricted, places.

XLVIII. HOW TO WORK WITH CHOLERICS.

If we work with choleries with some strength, we should go far away or turn aside, because they have greater strength in legs, loins, and forearms than in other limbs, and therefore it is damaging to be joined with them. We cannot shorten or prolong the time of fighting after we have come to fight. For almost always they remain in one way or the other, though at the beginning they seem to have some obstacle before their eyes. Therefore one should attack in any moment, and likewise we must beware of them, and with them we should select spacious places; they run better over a plain than other places, so that to oppose them we should threaten a short run downhill. In throwing, in accordance with their characteristics, they require missiles which in hardness, length, and weight, tend towards the extreme rather than

the average, they want to throw along a plain, and in five or six blows they reach almost all their power. For this reason with them one must throw in a great or in a small number of casts.

XLIX. HOW TO WORK WITH MELANCHOLICS.

Though melancholics are not fast in their way of working, however extreme hardness is nevertheless found in them. Therefore one must press them temperately; which is a great and very powerful opposition against them. Because of their hardness one must not join with them, and also because many of them have great strength, though they have little activity and agility. Finally, when remaining in a constrained way little skill is sufficient for them. But then, in these constrained grips, free agility cannot be restrained. But when remaining far away or in grips of the arms, greater knowledge and agility can be worked, in such a way that with melancholics is is very useful to fight at a distance and temperately. In the of running way they need a short course, and especially through places sloping upwards; therefore to oppose them one should use a long course downwards. In throwing they require short, heavy, and hard missiles and upward slopes, against them one should inflict many blows with shafts or sticks which are long, delicate, and light.

L. HOW WE SHOULD BEHAVE WITH PHLEGMATICS.

Phlegmatics have little strength at the beginning of working, and are as it were relaxed, and in the same way we should show our aptitude with them. But in works one must complete very quickly, that is, so that they sense nothing, in such a way that they fall, as if inexperienced. And if we strike them many times in any attack, we cause them to grow a little in strength, in such a way that they gradually grow in strength so much that it is difficult for them to be further defeated, in the way it seemed at the beginning, since in any lengthy exercise they act a little better; and with them it is very useful to join closely, as most of them are big, and since they are slow we can enter altogether through the lower parts. For when they come to close grips, they cannot defend themselves so much that all their strength weakens. In arms they do this kind of running downhill, they need long running, and to oppose them one must seek a short way upwards. For *brachiandum* or throwing, the most convenient for them is a long and delicate spear and by downwards sloping places, and with ten or twelve casts, they throw the

last they can. For the thing which is counter to this, one should take short and stiff missiles and they should be thrown in two or three blows.

LI. HOW TO WORK IN DIFFERENT WAY IN ACCORDANCE WITH THE VARIETY OF BODIES, AND WHAT KIND OF ARMS AND PLACES ARE TO BE CHOSEN TO CONFORM WITH DIFFERENT PEOPLE.

If men are fleshy, they become ready at the beginning, but soon decline. And one should sense the opposite about those who have been allotted big bones and sinews. For bones and sinews show little at the beginning, but are thereafter found to be strong. In any act or way of fighting with strength, we say that it is very useful to choose hard, wide, and spacious places with the strong, with few weapons and clothes, so that they cannot take firm hold. With the weak, on the other hand, a place which is narrow, close, and delicate, heavily and short or constricted, so that we are able to seize them with the hands to collect them; and with those who know little, we should work in the same way as with the strong, with the dexterous, however, or those with skill, in the same way as with the weak.

LII. HOW EACH ONE FOLLOWS THE QUALITY OF HIS ELEMENT, FROM WHICH HE RECEIVES THE GREATER PART OF HIS COMPOSITION, WHEN HE APPROACHES TO FIGHT.

Manner, disposition, and the time when anyone is found to be stronger with better courage and agility, can be very easily recognised, for all follow the qualities of their elements, and fights with arms are to be ordered in accordance with this norm, first to take sanguinics, since they cannot attack unexpectedly, because nothing is missing from their strength and not even from the disposition, in which they should rest until they come to the main work, and in this way slowness in coming to a clash removes some part of his strength, for truly in any man, when his strength flags, his courage declines likewise.

LIII. HOW, HERE OR IN THE WAY OF FIGHTING, WE PLACE MELANCHOLICS IN THE SECOND RANK.

In this military conflict, melancholics should be put in the second place, or close to the sanguinics, though they are not very quick, but the hardness of their limbs introduces great strength and power at the beginning, and therefore they have the opportunity to oppose the readiness of the sanguinics, as well as striking where others are slow.

LIV. HOW CHOLERICS ARE TO BE PUT IN THE THIRD PLACE FOR ENTERING A FIGHT.

Cholerics seek to assume the third place in combat, for at the beginning they are found to be somewhat impeded, though they are of an excellent suitability. But with this occupation which is innate in them like a skin it is best at the beginning to delay for a short while. For in seeing the fights of others, their strength is strengthened, even with that delay, and reason should go with them. To a higher degree than if they had been of another temperament, some delay is good for them at the beginning; they want their bodies to be roused somewhat before they come to the fight.

LV. THE REASON PHLEGMATICS ARE TO BE PUT IN THE LAST PLACE IN A FIGHT.

In any fight, phlegmatics are to be in the last place, since they delay very much before strength, disposition, and courage are strengthened in them, all of which rise together, so that when the body is found to be weak, it cannot assume its own amount of working which has been determined. Therefore, though the strength of phlegmatics is as great as that of sanguinics, when at the beginning they are like sleeping men, they should frequently exercise their limbs before they come to the main fight, and when they have been exercised they are difficult to defeat, since the advantage held by sanguinics over phlegmatics at the first impetus, phlegmatics afterwards have over sanguinics.

LVI. THE REASON, WHEN KNOWING SOME SKILLS, SOME SHOULD EXERCISE THEM DAILY, OTHERS RARELY, TO CONFORM WITH THE VARIOUS TEMPERAMENTS.

To everyone it is useful to learn a skill. Nevertheless it is very wholesome for some to continuously exercise the limbs, not actually for others. When sanguinics have learned a skill they need little habitual training, as they remember everything they have learned and do them with agility, and if they would continue those which they know, that would be a great disadvantage to them, since by excessive vigour or quickness they often break things, when frequently labouring in this way. Choleric require sufficient exercise in their skills, for they can bear labour with great ease, especially when exercise takes away from them the first impediment, which choleric have by nature. Melancholics do not much need to use their limbs continuously, since their hardness gives enough quickness. Phlegmatics need frequent exercise, since continuous labour renders them slightly more ready, and also because they direct their strength to where greater necessity is looked for, and they cannot devastate their limbs by much continuous training, since they are never supported by their entire strength at any moment or place.

LVII. TO WHICH EXTENT EVERY ANIMAL HAS SOME INDICATION ASSIGNED BY NATURE OF ITS LIGHTNESS AND STRENGTH AND OF THAT TO WHICH IT IS ADAPTED.

If we want to consider and examine the characteristics nature has placed in any animal according to its quality, to which each species is inclined or directed, we shall in this way easily recognise among the particulars of one single species, which one has limbs suited for lightness, such as for running, leaping, which one for remaining firmly, which one for wrestling, and which one for throwing, and so on running through various exercises, for though commonly fighting with lightness tends to throw a lot of those things which are light, the arms should be extended and so straight that he cannot stand firm, if the man has not in the first degree received a great part of choler, in the second sanguine, and in the third phlegm. But it should be little, and in bodies of this kind temperateness is greater than the lightness. However commonly fighting is prolonged with lightness; and going back to our proposition on the various animals, nature has to some extent given the animals which are nourished on the ground four feet or legs for walking, almost equal in length, composition, and thickness, and what man has been given is very different altogether. Therefore we talk about legs and arms in a man, though in the number of four, we conform with the brute animals. But a man has, from the groin to the heel, one third more in length than the arm as far as the heel (the little fleshy part) of the hand, and brute animals, like dogs or horses, have

hind legs which are only a tenth part longer than the forelegs, or legs than arms. In thickness we are likewise very disparate between legs and arms, and brute animals almost equal, though their arms are somewhat stronger, and we have much thicker legs than arms. You must not understand however that such great variety has been distributed without legitimate cause, given that by nature or divine command a man should walk with his head upright, and brute animal with their head extended and lowered, so that as well the raised haunches as the shoulders and both of them together are level with the head. And so it is fitting that the arms, or forelegs, were as high, or with little difference, as the hind ones, since they will support such a large body continuously and equally balanced. And since commonly brute animals tire more with the arms than the legs, nature has given them somewhat stronger ones. But since a man continuously supports the whole body on the legs, nature has indeed provided to make them thicker and longer than the arms, and thus, even though we would want to act against our nature by walking like brute animals, we will find great labour, and in the end it will be of little benefit to us; we have legs which are much thicker and fleshier in the size of our person than any other animal in respect of its own. In the size of our feet and hands we exceed other animals in proportion to our body, although some birds of prey have large feet and hands with which they help themselves, and no two-footed animal is to be compared greatly to man, because of the size of his feet, legs, and upper arms. In the aptitude of the arms we are highly superior to other animals, in the legs however not so much, especially with the hands because of the great distinction of the fingers with which we carry out various duties, which could not be done by any other animal. Light animals have slender legs, small belly, and ample loins, and the upper arms however are raised or gathered upwards, and the legs are thin or sharp, the feet are not big, and the hands are not bigger on the long than on the round with respect to heavy animals, and with this rule we can observe in the particulars of any species. Therefore, men who will have slender or thin feet and legs, raised upper arms, longer from the sole of the foot to the groin than from the groin to the top of the forehead, small belly and ample chest or shoulders, will be light; those with thick legs and forearms, heavier. However they will have greater ability for bracing the feet and seizing with the hands.

LVIII. HOW VERY WELL-PROPORTIONED ANIMALS QUICKLY FEEL ILLNESSES AND CAN RESIST THEM, AND HOW DISPROPORTIONED ANIMALS ACT DIFFERENTLY.

We recognise that it is a natural rule that well-organised bodies quickly feel adversities and illnesses, and also have the strength to resist them. But those who are badly proportioned act differently, for they do not feel them soon, and thereafter they are indeed unable to bear damage and injury for a long time.

Commonly we see how animals with a weak temperament eat little and are unable to fast. But those who have a strong and robust temperament can, when they want to, take much food and also resist hunger.

But the weak or not correctly organised neither eat much nor bear hunger, and here it seems reasonable that the weak can be compared to the sick. For the sick eat little food at a time, but continuously ask for it. And a sick person is nothing but a weak person, or someone whose limbs are in confusion; indeed, all badly composed animals have this difficulty by nature.

LIX. THE NATURAL DIFFERENCE BETWEEN THE HEALTHY AND THE SICK.

A natural recognition should be accepted between the healthy and the sick, as we have said in another book, where clear and occupied temperaments are treated; for we do not say that someone is sick by nature if he is crippled in a limb except when he is subjected to illnesses, for they are caused by the course of nature or by an accident, even though any temperament has found danger by chance. Illnesses however which we somehow call natural passions, do not occur to all temperaments equally. For the less worthy the matter is, such as earth and water, the more it is subjected to illnesses; furthermore, each temperament is better or worse tempered in accordance with the disposition of our fathers and the elements during our conception, and hence it happens that some who are of inferior matter are healthy, because the fathers were healthy and in the flower of their age when conceiving them, and the air which was blowing at that moment, or the south or west wind was reigning, and it is even shown that the sun and the moon was neither in opposition nor in conjunction. And some say 'sick' about those who have not grown up, and likewise about the old and the weak. But in truth we cannot correctly call these sick, though when illness approaches, it has an easy entrance to them, for that is the fault of their age and not their body. We do not place another rule in accidental sicknesses, since, as we have already indicated above, they happen to all men, except that they are quickly healed, and those who avoid the greater dangers are those who are of the more agile and strong temperaments.

LX. HOW GREAT IS THE DIFFICULTY TO RECOGNISE PERSONS OF THE SAME TEMPERAMENT

We say that there is great difficulty in recognising the difference between two persons of the same temperament, because, even though those two are almost equally choleric and the other three temperaments follow in a similar way, one would still find great disparity there. For one is more quick and lighter in practical bodily things, the other is allocated more intellect. And this part or recognition could not be so distinctly ascribed that it is recognised quickly; nevertheless, we can very easily teach it visually, since everyone in himself somehow shows his quickness, hardness, or softness, as when we see a choleric demonstrating his quickness, and his limbs gathered, or short and hard on him, which is given to simple choleric. And here one should similarly understand that he will be strong and sufficiently quick in the acts of his limbs. And if another, who is also a choleric, shows some sweet temperateness in himself and can remain above himself without stretching or gathering his limbs, he can be very strong in intellectual practices and others, which are suitable for the body, even though he may not be that quick, or light at the beginning. If however he shows that he has limbs which are enlarged, soft, and sufficiently fleshy, he will excel in works suitable for the intellect rather than in the practical things of the body.

In every temperament there are some who have a good appearance, and they are seen to be somewhat stiff and intemperate with respect to beauty, since they assume a much greater quantity of melancholy and phlegm, which they show in the composition of their limbs, that is, when we watch them at first sight. But when we pay attention altogether, we recognise that their voices are sparse, as if coming from phlegm, and hard, in likeness with melancholy. In their characteristics, however, they are seen to be choleric, though a little more red in colour. But when turned or bent, they show hardness, and in this we must look at who shows these properties more and less, and in this way there must be consideration of every temperament. These disparities or similarities though are wont to occur in various ways in accordance with the dispositions of the fathers and the elements when we are conceived, and in accordance with the quality of the land from which we originate, for according to that cold, heat, altitude, humidity, or dryness, we are healthy, sick, strong, or weak.

LXI. ON WHAT MEN WILL PAY ATTENTION TO WHEN THEY ATTEND TO CONCEIVING SONS, TO MAKE SURE THAT THEY ARE BORN ABLE.

Since by nature all animals which have able limbs are esteemed above others of the same species and kind, one must pay extreme attention at the time of conception, that the fathers are in prospering health, so that the sons who will be born can be like them. About the likeness, in good or in bad, there is no doubt, but one should seek the good. And to let us learn all the more easily from anything that which we are saying, we shall bring in some examples often seen in brute animals, so that we may all acquire the teaching in another's head, for if we want to it will be easy, as long as we want to follow our rational nature. The examples are such: it often happens that wild and tame animals mate, like geese, ducks, and pigs; even though the offspring or sons which are born are nourished in our houses and among humans, they keep all their life a certain shadow or instinct of the wild. They are only lighter and stronger than if they had been born of a tame father and mother, though these animals belong to the same species; only because the male is wild and the female tame, the son keeps forever some likeness to the wild and strong father, and because of this it defeats all tame pigs. Here we can obtain a full example for recognising how men and women should behave to bring forth sons, when they come together. For if the fathers are old, they add intemperate seed, and thus the sons are born intemperate and grow old soon; if the fathers are young men, weak offspring is born; if they are sick, so are the sons. Under this sickness of the fathers, you must only understand that they are not able and ready to fall ill. But let us leave this and go to other explanations, which are caused in accordance with the exercises and the food which we take. For if the fathers live in idleness and take food in abundance, they conceive sons like purely tame pigs, for they pass on to them no strength and no ability, of true ability they can be conversant when talking or good at learning, as long as their fathers are courtiers or diligent in polite conversation with many men, as is common with princes and certain other magnates, since, though they take an enormous amount of food and remain just as idle in the movement of their limbs, since they always diligently understand about conversing with many men, they conceive sons of good disposition, who are prompt to learn; they are, however, rarely strong, if their fathers remain idle or in closed or occupied places, since in this way princes, just as other men, can exercise their limbs in this way if they want to. And then they will conceive strong and able sons. For peasants, moreover, who are slow, conceive sons who are slow and unlearned in conversation, for their sperm is very unable and, as it were, wild. On conversation, since, when our limbs remain able and healthy, everything in those limbs is in the same way, and therefore limbs which are filled with food and idle produce rough and impure sperm.¹ One must not at all infer that the example we have already given about brute

1 According to Castiglione, pure sperm is produced by those who train continuously in arms

animals should be understood to concern different species mating with each other, as a male horse and a female ass, but that in one single species similar differences do not occur, it is however proved that wild and tame pigs belong to the same species, since the sons which they conceive together also conceive others, and that which is born of parents of different species cannot conceive sons. And this is an extremely trustworthy rule for understanding without ambiguity which animals belong to one and the same species, and which to different species.

Following in this way, animals of different species can, as long as they have genitals suited for coming together in a sexual act, conceive sons together, except for man, who can only conceive with his own species. But on the proposition, when animals of different species conceive a son, he is unable to conceive; and what is born of a tame and a wild goose, and what is born of a tame and a wild pig are able to conceive; this makes it clear that wild and tame pigs belong to the same species. And going in this way it can be easily understood how all dogs belong to one and the same species, since when they mate, whatever kind they belong to, what is born of them also conceives sons. About the dispositions of the places where sons should be procreated, one must note that all animals, plants as well as those with sensation, know much about the disposition of places in producing fruit, and they look not only at the beginning of birth or where they are conceived, moreover questioning where they are transforming every day. As an example, we bring a stallion and a mare from Spain to France, and afterwards they conceive a son; a horse which is conceived and born in France, even by a stallion and mare from Spain, never turns out as good or able as if he had been conceived in Spain, and the sons who are afterwards conceived by him are even weaker. In this example we can take note of the places appropriate for conceiving sons.

LXII. THE PRINCIPAL SIGNS FOR RECOGNISING MEN WHO TEND TO BECOME FAT.

The briefest and most principal signs for recognising men who run the risk of growing fat are three, we say; first, they have slender fingertips, second, the tips are hard and solid, almost as if intemperate, or smooth or solid and bland to the touch. The third is that, even though the man may be very thin at whichever age we receive him, he has a solid face or skin which is extended, so that it is seen on all sides to be without wrinkles; for he who has a temperate appearance or in a lesser way, even though he is full of flesh, he does not grow fat in white at least in quantity. But here he will have fingertips which are rather broad, soft, and temperate;

for this is why those do not grow fat, who, when little boys are said to be plump and afterwards grow thin, and others who were slender in adolescence and have become fat in the course of time. Those who would have known at a tender age to consider themselves under those conditions which we have placed here, would have recognised who should grow fat and who should grow thin or follow moderation which he showed in youth in accordance with the characteristics of the temperaments.

LXIII. A RULE FOR EASILY RECOGNISING WHO HAS A LARGE MEMORY.

To easily recognise who has a large memory without a lengthy foundation, one should look at three main parts, first that the head should be round, high, and raised at the temples; second, that the forehead should be big or raised in the front part of the eyebrows. Third, that all limbs should show liveliness together with hardness, in such a way in these a large memory is allotted, and even if he has only one of them, he will always contain enough memory, whichever temperament he belongs to. For these signs denote prompt or well-tempered melancholy, and sanguine follows it.

LXIV. ON CHARACTERISTICS WHICH INCREASE OR DECREASE MEMORY.

All men of a hard temperament grow in memory in likeness of hardness or melancholy. But when the body is relaxed, memory is weakened in them and it grows in sweetness and inventiveness. Here 'relaxed' correctly means nothing but somewhat softened or temperate. One must also consider what this hardness is like, since any person of any temperament, if disturbed or occupied, will be slow in comprehending and will have a small memory. About men's memories and intelligence the quickness, slowness and inventiveness, just as it must be considered that the outwards actions of their limbs demonstrate their intrinsic characteristics. For just as a melancholic walks in an integrated way or rigidly, his memory behaves in the same way and, though not quick, it is very retentive. Sanguinics, on the other hand, are quick in catching and letting go in the acts of their limbs, and thus their memory is such. Choleric are more temperate and ordinary by whichever acts, therefore their memory is seen to always run in different directions in inventions, but what they discover they heed little. Phlegmatics are slow at the beginning and finish of their works, and likewise in memory, and drawing from this similarity so we can speak about memory. Melancholics seem to inscribe in marble

whatever they receive; choleric on a writing-tablet; sanguinics on paper; and phlegmatics in weaving.

LXV. HOW THOSE WHOM WE SAY POSSESS GREAT MEMORY HAVE LITTLE RECOLLECTION

Those we say to have a large memory have poor recall; though recalling a few insignificant words they afterwards relate a whole chapter in their mind; but when they forget all words they seem almost to bolt the door afterwards. And therefore they have to return, almost from the beginning, to learn that which they knew earlier. Although some others, such as choleric, retain less, though they completely forget about some ability known before, when we begin to relate the history or the matter, they recall, or it comes into their memory otherwise, that they have understood that sentence, since mostly, some trace or sign remains of what they had learned earlier. And here, in similarity, we say that the memory behaves like when we suffer from some wound in our limbs, since, though we may seem to be healthy, there is always some semblance remaining where the wound was, and therefore, if we want to open the scar, it is easier than if otherwise that place had not been cut, and memory is like that, since, even though we forget about what we know, there nevertheless remains in the memory some trace or ability, through which it can be easily brought back to that which we once knew, than with other abilities which we have never known.

LXVI. HOW ONE MUST CONSIDER THE DIFFERENCE BETWEEN SPECIES AND SPECIES, JUST LIKE THAT BETWEEN ONE MAN AND ANOTHER.

Just as we have already in many places treated the difference between men's temperaments, so we must likewise consider these between one species of animal and another. For a species generally assumes a great part from one temperament, and something from another. And this variety grows about different provinces, since in Spain or Greece animals universally receive much from choler and sanguine. The French, on the other hand, and the Germans and Hungarians, are for the most part composed of phlegm and melancholy, and also, if we take different species, even though they are in the same province, one of them receives much melancholy, like a bear, and another choler, like a lion, and similarly it follows in other species, assigning difference according to the various regions and animals, and following the same way, food is healthier and more temperate in one country than in another, and in the

same way meat of sanguinics is tender and thin. That of choleric is dry, or with little humidity, and temperate. That of melancholics is hard and thick, that of phlegmatics soft and sparse. Prepared hides of choleric animals are solid and not very wrinkly and show great density in themselves. Therefore they last longer than others. Hides of sanguinics are smooth or solid and thin, those of phlegmatics soft and sufficiently thick, but not downy. That of melancholics is thick and the wrinkliness is thick or lumpy in an amount.

LXVII. HOW TO CONSIDER THE BUILD OF ANIMALS, AS WHERE THEY SHOULD BE LONG OR SHORT, AND HOW TO MEASURE SIMILAR LIMBS.

By common custom we look at the build of animals wanting to recognise whether they are strong, weak, heavy, light, or of great or small breath, and following with that kind of conditions, which is an excellent way, even though we do not distinctly recognise the temperaments, since long-lasting custom generates such habit as shows us which factors signify strength and which weakness. Nevertheless usefulness arises from recognising the temperaments, for in any temperament is found variety in the limbs to some extent, and still in working they are conformed when of one temperament or with little discrepancy. In recognising by habit some are found to extend to a fitting perfection, though it is difficult to have perfect recognition of the strength, weakness, lightness, or heaviness of animals if we do not recognise their temperament, or know how to measure them everywhere. Hence we will find that a measure of the strong and temperate is the characteristic make up of choleric animals, or animals who in their composition assume much of the element of air. The sign of strength in any animal, as we say in other parts, is that it is long from the rump or haunches and in whatever way low, that is, that the buttocks should not be high or over the rump in the manner of a channel, except that the middle of the haunches should be higher than in any other part, and it should come in a level or sloping way, losing height, all the way to the bottom. And where the rump is long, the chest is always long, too, for the chest corresponds to the haunches, and where the haunches and the chest are long, the waist or midriff must be short or brief, and if it is short at the midriff and long at the chest and haunches, it follows that it is strong, and this kind are also temperate animals. Note, however, that there are also certain animals which are melancholic and assume much of the earth, which are short at the midriff, wide at the chest, and strong at the haunches for a single blow but they are distemperate, and these are short in whole character: haunches, chests, waists, and the same with the other

limbs. But choleric are short only at the waist with respect to the other limbs. But whenever the haunches are short, especially if it holds the bones of the pelvis high or much raised, it signifies weakness or lack of temper. It is very important to note on the other part which is especially principal, that is, that the chest of a warhorse and similar animals should be of that figure which is the chest of a bird, which is directed and sharpened in the front part, so as to have much of the back or spine through the middle of the shoulders going all the way to the spine of the chest and little in comparison from one side to the other. And nearly all choleric are of this make up. However, it should be known that some sanguinics or sanguinics-phlegmatics-melancholics have been allotted a chest which is raised much in front and concave shoulders, almost so that the spine of the other is placed towards the chest and they show the tops of the shoulders or beginning of the arms going backwards. Therefore similar men or other animals are also bent or saddled at the waist, that is, lowest at the loins leaning towards the part of the stomach, but none of them, taking in proportion with his size, is strong, and is not even of great breath or labour, since of great breath and great labour revolve around each other are or are the same. But the back or spine should not be concave, except almost level with the top or cartilage of the shoulders, and in this way there should be much distance from the back to the chest, not to be convex either. For all hunchbacks tend to a similarity with monsters, and they have a short neck and are little disposed about the person, even though they have sufficient strength. But we are not talking about such height of the back, but what goes straight and for a short while high compared to other men, not so much that it tends towards monstrosity, who though they may want to place themselves erect, seem to be fixed over the shoulders, and the neck will necessarily fall on the chest, and those whom we designate in this place, though by custom or will to do so, tend forwards with their whole self or just their shoulders, almost sickle-like whenever they want to raise themselves they remain straight with no swelling or want over the shoulders. They also have a sufficiently long neck in respect of their temperament. And that there is greater strength in him who has a longer distance from the back spine to the point of the chest than from one side to the other is demonstrated rationally; for all great strength which we use is by going straight towards the front or backwards, and there is no great strength on the side, thus that the form in length straight from the back to the chest goes to extend forwards and the strength of a person who is broad from side to side or from shoulder to shoulder goes crosswise; this generates by necessity such difference as when we throw straight with a lance or pole with the point, which suffers a great blow without being broken. But if we strike sideways it is quickly broken, in such a way that men who are long from back to chest apply force straight on, he who is broad

from shoulder to shoulder, sideways. Hence it necessarily follows that a form straight in length over the chest is better than from shoulder to shoulder. Nevertheless, when the force is to be applied sideways or on the side, it must be said that those who are broad from shoulder to shoulder are more appropriate. But this form which is long from the shoulders to the chest is more useful for men than for any other animal. For we apply almost all force over the chest, since we walk raised upwards, and other animals are stretched forward on four feet, so much so that their strength is as it were equal in all limbs. But in all animals this form is a sign of great strength. To measure easily who is long from the back to the point of the chest, and who from side to side, the man should be placed in a doorway between the two hinges or walls, though adhering to one of them with his shoulders and he should remain joined and straight as much as he can. From here one should take hold of one pole which comes from the chest to the other hinge or wall of the same doorway, the same measure can also be taken sideways. Therefore it is seen with ease and certainty who is long from back to chest and who from side to side. And the same measure can be taken of horses in a doorway, so that one pole or measure comes from one hinge of the door and another from the other to the horse's side, for perhaps one of the hinges refuses to reach; two poles or measures are to be taken hold of. And to measure the height or length of the cross over the shoulders to the chest one must put one pole on the shoulders or the cross which should come from the shoulders all the way to the side or towards the doorway, and below the chest one must measure with another pole all the way to the ground, though when one horse is longer in the legs than another, that greater or lesser length of the legs must also be measured, so that we may know how great the torso of either is.

LXVIII. ON AN OBSERVATION OF THE NATURAL PLACEMENT OF THE LIMBS OF ANIMALS, WHICH IS EXTREMELY USEFUL AND UNIVERSAL FOR RECOGNISING MANY THINGS ABOUT ANIMALS WITH LITTLE EFFORT.

Almost by the way described in the previous chapter, we can write down a certain extremely useful process for recognising in few words or with little difficulty the aptitude of animals. And so we first say that the width or dimension of every animal taken crosswise must not be understood to be not from the back part, but through the longest distance, in the way we have mentioned concerning measuring in a doorway how wide we are from the spine to the point of the chest or from shoulder to shoulder; in this way we can measure three things which should

result to be equal or almost equal in animals, that is, from the point of one big toe or second toe all the way to the point of the other big or second toe of the other foot; in the buttocks, of one buttock-bone to the other, and from one shoulder to the other assuming straight across from where it comes out, under the armpit. The arm extends the shoulder so that, even if the arms lower along the sides, anyone who is of good form comes by one hand or with little difference, from shoulder to shoulder, rather than from buttock to buttock or from one haunch-bone to the other². The measure from the point of one foot to another in anybody is to be taken at a time when he is walking in a relaxed way or without any art; therefore, in sensual animals this correct rule should always be observed: in them those three parts are almost equal in extent. And those who are closer to this gauge, bear greater strength and temperance in themselves, and by the same rule taken in the opposite way, the one who deviates more is indeed more distempered. One must note in this way that after the haunch the buttock bone should rise, tending towards the outer part, towards the middle of the thigh, and from the middle of the thigh all the way to the knee, it should hang, gently and with little stiffness or size towards the inner side, and from the knee down it should begin to tend outwards somewhat, all the way to the sole of the foot. But that should be little, and the points of the feet should go gently outwards a little, and not much. For those who have points which hang outwards much, walk deformedly and are distemperate, as they receive much phlegm, and they have big feet with respect to the size of the buttocks, or they are melancholic-sanguinic-phlegmatic. Nevertheless they hold little phlegm, have short feet and take small steps, or show that they will do so, almost like ducks, their joints are knotty or a little thick in comparison with the thickness of a dog's or a third, of legs, buttocks, thighs, forearms, arms, and *tirorum* or upper arms. Phlegmatics who turn the points of their feet outwards or, more properly, who twist or skew them, display great labour in lifting them from the ground. And the one who turns his haunches too much outwards, or throws them out, for the most part touches one knee with the other. Of those, some are strong animals, though not pretty to see, though they are more temperate than they appear to the sight. Some of them run well, though when they have slim legs and feet which are long and thin. But of similar animals, none has been allotted great strength, since the thickness of the legs does not suit the other limbs. Those who have, or appear to have, wide haunch bones and from there they become lost drawing themselves tight all the way to the sole of the foot, are hard and distemperate, and they are allotted a great interval or space from one knee to the other, or what we call bowed outwards through the knees as much as the points of the feet come inwards, and one around the other.

2 Varies by as little as one hand's length?

These particularly signify melancholics. No similar animal is temperate, but most of them are strong, for it often happens in them that they are measured by the size of their bodies, by which, together with hardness, if they were not for carrying out great work, they are at least held among the people to be extremely strong. There are many Frisian and German horses of this temperament and form, but none of those can be a great runner, though they jump a little better than they run. For jousting, even though they are stout with thick legs and big feet, they are in no way good, though jousts of old may have studied this kind of secret very little, and therefore it is reasonable to proceed in such a way. A horse, which by its own nature walks almost with the feet joined, or just a little open one from the other walks growing in width from the sole of its hind foot to the buttock-bone, and also from the soles of its forefeet all the way to the middle of the shoulders, in such a way that the width reaches the measure above, but is restricted below. Let us now take an example from a building, such as a wall: if it is constricted in the foundation and grows gradually in width upwards, any little inconvenience or blow which shakes it demolishes it. For it does not have a foundation below which supports in the sides to keep it from falling over them and so, when a wall threatens to fall, we throw up an arch or bar, which comes from the side covering a foundation space much larger than what the wall has, and in the same way, horses which walk with their feet tight or almost joined, even though they may be immensely strong, have nothing in a joust or conflict on which they can brace the side, and therefore they fall, and very easily. For they are also intemperate in themselves, or as we say hard. Therefore those horses are much better for jousting, which have legs and feet which lean outwards a little, even though they are not that strong, since they are braced in themselves, as on a point. Those are also mostly temperate in themselves, who are allotted this temperament. We cannot instruct horses or any other brute animal to move their feet more closely together or more opened than they have been given by nature; men, however, we can teach, and the best and most ready precept there is, is that when we work accidentally we imitate the natural order which is placed in well-composed bodies, as we have said above, since when we walk without thinking about the points of our big or second toes, one deviates as much from the other as the breadth of the man from one buttock to the other, and with the space of one shoulder to the other, as we have explained, though the points of the little toes may contain a space between them which is about one hand, or with little difference, larger than from one shoulder to the other. In the buttocks there is a little less space because of the thickness of the arms, as has already been said. If we wrestle, run, or throw, such as a stick, pole, rock (called *esquina* in Spanish), or a thick iron wheel-ring we shall keep in the same composition since we find it quick and ready to walk in front, behind,

and along the sides, and always composed with strength and opening the legs more, however they make a support for the body, so that it cannot lean to the sides, (or) allow it to more easily fall forwards or backwards. If the feet are joined or almost joined, they cannot in time be collected to place themselves underneath and to support him. Especially if one point of a foot is facing towards the other, any little stratagem, such as the *tornus*, easily throws down one who is walking like that, though by his own nature he may have calves which lean outwards, and therefore, when wrestling, one must see that, when the other takes a step walking around, if he joins the feet at the same point he is strengthened on that side on which the body remains broader than or outside the foot. So if this natural order is observed, the result is the greatest knowledge concerning strength, weakness, temperance and distemperance of animals, any such skill it also helps greatly. Some are slender of feet and haunches and thick about the chest or shoulders, and are light. But to be sufficiently temperate and light it is necessary that they have legs and feet (turned) slightly outwards, as has already been written, since when trees have a wider trunk around the base and from there reduce gradually, and also in buildings the same rule must be observed to make them stronger, so we should also accidentally³ arrange the feet in such a way that their points cover a somewhat larger space than the shoulders and buttocks, since, though nature has given some hollow or space between one leg and the other, so that we can walk, in order to remain strong we should adjust ourselves a little wider or more spacious below than elsewhere, so that, with the correct measure, every upper limb may rest above that space which the feet take, and though one must not deviate from the distance between one and the other, except in the way in which those who are naturally are well composed walk. For when we would adjoin or threaten we would become distempered in greater quantity. When riding we shall observe this order in our limbs, as appears in its proper place.

LXIX. WHY IT BEFITS ALL ANIMALS, FLYING AS WELL AS FOUR-LEGGED, TO BE FORTIFIED IN THE UPPER PARTS, BUT SLIM IN THE LOWER, SO THAT THEY CAN BE LIGHT.

When above we set out some signs of strength in animals, now, following in this chapter we shall deal almost exclusively with signs of lightness, though when describing temperaments in other places we have set out many things about lightness, heaviness, temperance, and rigidity, though we have used examples almost exclusively in men. But now we shall speak of all perfect animals, flying as well as four-legged, but always having observed the same sign in

3 unconsciously, naturally?

all, which we have set out elsewhere in men. And the sign is that the limbs in the upper parts should be strongly fortified, but slim in the lower parts, like the forearm and hand, that is, from the elbows down, are slim; but the upper arms, or from the elbows to the shoulders, the shoulder itself, and the chest, should be thick or fortified; the waist over the loins, where we wear a belt, slim, the hips thick from the knee to the abdomen, but the legs below the knee slim; these signs denote lightness in all animals. Therefore one must consider that no animal which is much fortified with flesh in the buttocks or rump, and diminished in the chest can be light, and so, it often happens in certain horses or mules, which have a long rump and in a saggy way, that is that they do not have high buttock-bones, but low. Both of these are excellent signs, but, since from the shoulders, or over the shoulderblades, to the chest they have little, though they possess a slim neck and a small head, such a horse always runs little, even though often those of that temperament are of a good nature, gentle, and can sufficiently bear labour, but they lack lightness; for it is appropriate for every animal to be light in the back or lower parts, that is around the buttocks, under buttocks composition, having a big chest, that is, from the shoulders to the chest. The chest itself in fact should not be flat or square, but should be like the prow of a ship or the chest of a bird. All birds, accordingly, which are light in flying or swift in crossing through the air and enduring in flight, have diminished buttocks around the hips or abdomen, thick chests, long wings, and feathers like the falcon and hawk, eagle, dove, swallow, and in Spain what is called the *auion* or *venceio*, and *rondonon* (a swift) in vernacular Italian, which is similar to a swallow, but is bigger and black, and so diminished or short in the legs and with so long wings that when it falls on level ground it cannot lift; against that difficulty of rising, nature has given it the instinct that it always would sit on a very steep or high place, because by allowing itself to fall, it could fly. No (other) bird which we know has such diminished legs in proportion to its body as this, which is called a swift, not even fortified by the wings or that it will only fly swiftly, at least as far as our sight is concerned, and always almost uniformly. Some other species of birds are sufficiently fortified in the chest, having short legs and sufficiently slim hips, and still, since they have short feathers in the tail and very big heads they fly with little speed and duration, such as the owl, the night-heron, and similar birds, which are wont to go hunting at night. Other birds with other characteristics are also found, which have so long lower legs and necks and beaks but are short of tail, that they are diminished in speed of flight, such as the crane, stork, and similar, and yet, when they are at height, they remain flying for a suitable length of time in the air, but not very long, since their legs are long, as are the heads, neck, and bill, and all these things are very heavy, and they lack enough feathers to fly in those limbs. Not a few

other birds are swift in flight but fall short in duration, such as ducks and partridges, though partridges fly with less speed, since they have quite small hips; ducks, however, even though they do not possess long wings, since they are slim in the back part around the rump or hips, they fly powerfully through that space which they go; geese, however, even wild ones, are, as it were, much fortified in the back part, they lack speed in flight; in running accordingly, all birds which have legs which are thick, short, or long, and long wings are diminished, such as the eagle, buzzard, swift, duck, goose; among the long indeed the stork, and the crane. All these and similar birds are deficient in the speed of running. Partridges, however, and pheasants, quails, and similar, which have slim legs below the knees and thick hips, run greatly. And among other birds which I have seen so far, the Indian hen (turkey) or so it is named, strongly prevails in running, and they also have slim lower legs. They run almost as fast as a man, or with little difference. The illustrious duke of Ferrara has many hens of this kind at the moment, and they fly with some little speed, but not much, and they do not even go far. And one must note that also these signs set out in the legs of birds are true of all other animals, and therefore no animal which in its species or its kind has legs which are very long and slim, or thick, or short, is found to be light in running, though the thighs should be thick with respect to the lower legs in any animal, so that it has the strength to run. Therefore no animal which is very fortified at the lower legs compared to the thighs prevails in lightness.

LXX. THE DIFFERENCE BETWEEN BIG AND SMALL MEN IN EXERCISES OF THE LIMBS, AND ABOUT THE TEMPERATE, OR LOOSE, AND THE STIFF, AND THAT THOSE WHO ARE LARGER AND LOOSE PREVAIL.

In this book, for the sake of brevity, we describe only a few ways of working in labour of the limbs. But concerning proof that it is so or not so, you should understand that we put forward little or nothing in the way of argumentation. But we only fit the descriptions to make them be heard by the ears or fit with reason.

In many places, when we deal with extreme labours of the limbs, we say that big and temperate, or loose, bodies, which are usually said to be *disciolta* in the vernacular, are superior to the small and stiff; this is often held to be otherwise among the people. But in similar matters the people are not to be paid attention to. But since it can happen that someone of learning and experience will read in this book, and will argue against the big and loose whom we prefer, some fundamental facts about them must be set out. For one can argue

against it that we often or mostly see men of middle stature surpassing the big in works of the limbs, and experience is held to be the mother of things, that is, it is taken to be the ultimate proof, and therefore one must say that small or middle-sized men are more powerful than big men. Moreover, unified strength is more powerful than divided strength. In small men, strength is more unified than in the big, and more unified in the stiff than in the loose or *disciolti*; it follows that the small and hard are the better. Besides, if we take two pieces of wood of equal thickness, one of which is long and the other short, the longer one folds more easily than the short one. Therefore it must be conceded that big men are more easily folded or bent than small. But against these and similar counterarguments we can bring many truly manifest things, though we set down only a few here. However having taken this way anyone can by himself continue to find out many other things. And firstly responding to the experience that there are found more powerful men of middle than of big stature: that is conceded. But we say that when someone big is well proportioned, he has greater strength than a small man. And this is confirmed in every species of animal, since the bigger, when composed to the same degree the better, as far as the greatest strength is concerned, for in agility and lightness the middle-sized animals are always more powerful, as for running, vaulting, jumping, and similar. But for removing some great weight, or for this animal to throw another away, or the other the first, a big one is for sure the strongest in many ways. First, because it has the greater weight, and therefore cannot be removed by a small one, and the small one is easily removed, in case he has the greatest strength, all the more since in a very big body, if correctly composed, there is greater strength than in a small one. To respond to the claim about united strength, we say that in a small body it is not truly united, but in many small ones it is multiplied or divided. But in a big body, it can correctly be called united, since the strength which is given to many small ones, is contained in one big only. Therefore in big persons who are correctly built, the strength can be truly said to be united. In the small ones, however, it is divided. For in case it is available since small ones cannot properly be called united, as it is, as it were, a little part, and not whole strength. For this reason for the most part it is usually said against some who are small and courageous, 'if all of him were venom or iron, who then can do such great deeds.' Never, however, are such things said about the big, if they are well proportioned. We concede that in fighting with weapons, especially when they have few and light offensive arms and no defensive ones. For 'defensive', are to be understood as arms which are worn, for offensive arms defend, too. But back to the point: when each one takes weapons in his own way, the big are superior to the small, when they are of equal degree in the goodness or disproportion of the limbs. But we

leave the arms aside and discuss only strength, for in arms a difference of this kind cannot be seen as manifestly, except in wrestling, or in throwing an iron pole or large stone, or in lifting a very heavy weight; in this the magnitude of the strength is openly recognised. And this, how much better indeed in equal proportion of the goodness of their organisation. And this, apart from the fact that there is by reason greater strength in large than in small limbs, just as is accepted in thick pieces of wood, stones, and other bodies, there is another, extremely important difference, since whenever a big man wants to *armare*, or attack the other's feet with his foot, he can reach at pleasure; this however a small man cannot do against a big man. For after they have come to grips, the small man cannot turn away so much that he is not very easily joined in two steps by the big man. But the small man only reaches the big man's feet with difficulty. In the same way, the longer arms can seize where they wish, but short arms cannot. Similarly, if a small and a big man take hold of a sword, and the swords of both are equal, and each of them enters with one step and stretches forth his arm with the sword as far as he can and leans his body forward, the big man reaches a cubit and perhaps more than the small man, and it happens this way in a stratagem of wrestling. Further, if in grips of the arms, such as if they are at a distance, the large man grips, as it were, from below upwards, and can lift the small man. The small man, however, grips from above and cannot lift the big man, and by leaning down only it is difficult for either to be defeated. For it is fitting to lift and give a turn. To come to close grips, if the big man is thrown down or bends down over his own feet in a straight line, he can bend as much as the small man, and when he rises afterwards he takes the small man with him. Therefore it is necessary that the small man, having lost contact with the ground, remains altogether in the air, and he can never lift the big man, even though both of them would understand nothing, when they come to close grips or the loins seized by the belt, the small man should be better where they are equally strong, even when the big man be bent down on his own feet. Similarly in this place a hard body is appropriate. But if both know much, big and loose is better, though here many are deluded, asserting that hardness does not yield or fold, so it is more fitting and better for wrestling than loose limbs. And they do not look at how one can throw any man with one's little finger, if he wants to remain stiff, that is, if he does not want to lose his position. Thus it is done that movement of the feet is always under the whole body, walking or resisting in wrestling, but they should not be stiff or fixed. And just as moderate movement without stiffness is a superior remedy in wrestling and other various combats, it is also very efficient for the body to bend when it is convenient, for it does not follow that what does not bend does not fall. For a stiff wrestler, by leaning to any side, falls altogether and completely, but a moderate one, though he may bend, will not be

thrown down or fall to the ground, since the hard are like dry wood, and the temperate, or loose, like green wood. Therefore, even though the big bend more easily than the small, they do not fall more easily because of that. For in hardness no foundation or resistance can be taken at all, except in moderate movement, and a moderate movement is not possible without any folding or yielding of the limbs. Moreover, loose and long limbs can strike a much more powerful blow than short and stiff ones, since, if we want to strike someone with our fist and bend the arm slightly away from him or make a small turn, we can strike a small blow or strike. For the longer distance the arm is allotted, the more power does it bring along with itself, and in this way long weapons make a bigger transition than small ones, such as a lance, a cannon, and similar. Small men, however, having short or brief limbs, cannot emit great power against the adversary, even though when close in grips or very closely united and in tight places, light arms and weapons are usually efficient. But for the most part long weapons against short ones are better than short against long, and similarly for the arms, and that moderateness is much stronger than stiffness in operations aimed outwards can be seen from many experiments, such as by taking one piece of holm-oak and one of yew. The yew is softer and folds more easily than the oakwood, and still, in discharging an arrow, a bow of yew is much superior to one of oak. And even though the oakwood is harder, when it begins to fold it breaks much more easily than the yew, and such an example we place between loose and stiff men. A long lance, given that it is slender, since it is brandished for the sake of length, when making a blow, executes a very great strike, and a short one, since it cannot launch so far or claim a long course, it covers a shorter distance. Therefore long and moderate arms, since they launch very strongly, discharge very great power.

LXXI. WHY, WHEN DEALING WITH TEMPERAMENT, ONE MUST GO TO THE THIRD BOOK OF *DE COGNITIONE HOMINUM*.

To have sufficient knowledge of the temperaments in the way which we have said previously, one must look in the third book of *De Cognitione Hominum*. For there it is treated more broadly and distinctly, and in it we describe forty-one temperaments distinguished from each other.

LXXII. TO WHAT EXTENT, IN THE WAY OF RECOGNISING, ONE MUST OBSERVE THE DIFFERENCE BETWEEN SHORT AND LONG LIMBS, THOUGH THEY BELONG TO THE SAME TEMPERAMENT.

After dealing with the four main temperaments how they have their origin on these and many other compositions or revolutions we can recognise, for the sake of seeing how much any body is primarily shaped to any of those, even given that two men are of the same temperament, short or small limbs are more hard and quick than extended ones. Therefore they seem to be allotted more of sanguine and melancholy. If however limbs are long, they are found to be slower and slightly more temperate. And these rather seem to contain choler and phlegm, since in any way phlegm has a similarity to choler, and melancholy with sanguine.

LXXIII. ON A CERTAIN GENERAL POINT OF ATTENTION ON THE TEMPERAMENTS.

Finally, dealing with the temperaments, a certain universal point of attention is to be observed, namely that we should always commit to memory how sanguinics are quick in everything, words and movement as well as running and jumping and certain other things, and they skip quickly from one plan to another, and they also wear out quickly.

Cholerics are somewhat impeded at every beginning, and have almost a veil before their eyes, but they are temperate and have breath which is very good for lasting in labour.

Melancholics are constantly recalled into hardness, they are neither prompt nor late. For though they are heavy, their hardness incites them to a will to move.

Phlegmatics are always soft and slow and last long enough, but they always proceed with a slow step.

Sanguinics are composed of small bones and sinews and are found to be sufficiently fleshy. Their colour is drawn towards ruddiness, the voice is rough, the pronunciation excellent. And their persons are smaller than those of another temperament.

All cholerics are thin or lean with big bones and sinews. Their joints are excellently connected and remain unimpeded. Their voices are sweet and are heard also at a distance. The delivery of speech is tired and humble, and does not sufficiently explain that which is going to say, but does not stutter. For those who stutter commonly receive very much melancholy, but

afterwards equally from all temperaments. Phlegmatics are full of flesh and even show more than they have because of their enlarged limbs. They have soft flesh and large stature. Their delivery of speech is good and abundant, but the voice is thick and scattered. Melancholics are always hard, knotty, and are found to have a wide person. Few of them are great in length. But universally they come out very broad and stiff, even though they seem more whole altogether, because their limbs are recollected.

LXXIV. ON THE FOUR EQUAL TEMPERAMENTS AND THE DIFFERENCE WHICH IS FOUND IN THIS COMPOSITION.

In another volume, when treating the temperament of men, we have described one body of four equal temperaments, that is, when an animal receives slightly more of one element than of another, though there we have not related any order between those four almost equal temperaments, that one is first and another follows afterwards, placing such an example, it may be seen if choler and phlegm are together, the body is made better when the choler comes first, and worse if the phlegm precedes; in the same way one must understand when the body is graded from four temperaments as if equally. But if melancholy and phlegm would precede, the body of the animal will be very disproportionate. And where choler and sanguine precede, and one of them follows the other, a better body is usually born, especially if the choler is first, since it always tempers our bodies. Therefore, most are graded of four temperaments which are almost equal. When principally allotted choler, they are delightful to look at and sweet in conversation. For they are calm men and equally reach a suitable intellect. Therefore they can be difficult to recognise, for they show that they have a good composition, however sometimes they are equally of four and yet in whatever way seem to be choleric-phlegmatic. Nevertheless they are hard and lean, and rougher than that which belongs to choler and phlegm, and from this ambiguity sometimes emanates, whether we should place them in the third or fourth temperament. In this one must discern which is the first temperament and which the second, following through the third and the fourth. And if all are almost equal, or two or three in the same measure and another small, one will have to make a judgement about the body in like manner.

LXXV. HOW WE CAN, THROUGH THEIR MAKE-UP, GET A COMPETENT RECOGNITION OF NEWBORN CHILDREN.

In the other book, when dealing with the recognition of men, we stated that when we are children or just born, because our limbs are at that time still indistinct, we can have little recognition of our temperament. Nonetheless, since it happens frequently that parents want to recognise the condition of their children as soon as they have been born, we will place here a certain rule, by which we can have at least a mediocre recognition of all children, even if we look at them around their birth; this recognition consists only of the make-up of the legs, arms, and head; in the torso, however, we can comprehend almost nothing. This process of recognising is such that first of all we look at the thinness or thickness in the legs below the knees, and in some way at the largeness and smallness of the feet, and in the same way the forearms from elbow to hand, and the hands themselves are to be considered. And if the legs below the knees and the forearms below the elbows are thin with respect to the thickness of the thighs and the upper arms, this signifies that the children are sanguinic, or have much of the fiery element, or melancholic; and if the legs below the knees and the forearms below the elbows are thick with respect to the thighs and upper arms, this signifies choler or phlegm, since the make-up of sanguinics and melancholics conform in some aspects, and likewise, in another likeness, choleric and phlegmatics conform, that is, in make-up, in touch, and in voice they differ greatly, but in condition, as we have said, they conform sufficiently; and yet one must see that melancholics at any time show larger bone through all limbs than sanguinics do, and they have knobbly joints, sanguinics however have thin or small; furthermore, sanguinics have greater distinction in the calves, and melancholics have shins which are convex outwards, called *steuante* in Spanish, that is when the feet come almost to join each other and the shins, by the knees and thereabouts, deviate much, in such a way that one seems to flee from the other; even though all newborns have legs which are bent or made in this way, yet melancholics are more convex than others. In the heads, too, we can recognise much, since sanguinics and melancholics have faces which are round and short, but there is a difference, since melancholics are higher through the temples and also have bigger foreheads, that is they are burdened more to the front over the eyes, not that the eyes are too lowered but they have big foreheads; sanguinics however have flat foreheads, though their heads are sufficiently round. Choleric and phlegmatics, on the other hand, have long faces, but phlegmatics show a greater and rather soft quantity of flesh from the frontal part to back of the head, or from forehead to crown, while choleric are longer than phlegmatics and more

wide through the temples. And these signs appear in children, and through them we are able to judge about the temperaments of these children, if we want to look correctly; also in crying everyone shows his temperament, that is in the voice which he emits: it is clear to see sanguinics or those who take much from the fiery element have thin and sharp voices, melancholics accordingly hard, horrible, and from the head, choleric emit temperate but tender voices, and phlegmatics have spare and thick voices, and this is kept in any of our ages. However, one thing always remains unknown in little children, that is that we cannot recognise how temperate or distemperate each temperament is in itself, how perfect or imperfect, and when through age, the limbs become perfectly distinguished, these differences are easily recognised, as has been widely shown in *De Cognitione Hominum*.

LXXVI. DESCRIPTION OF THE OUTER LIMBS, TO MAKE IT EASIER TO UNDERSTAND BY THE LIMBS IN WHICH WE SHOULD SEIZE, DEFEND, OR HARM, AND FOR THE REASON OF RECOGNISING THE TEMPERAMENTS.

In the following description of the limbs, I shall mostly follow the Spanish language, though all set words of the limbs are found in Latin, and yet for the reason that this chapter be conformed with the others which contain some names from the Spanish language. Among the Spanish, the outer limbs of the man are divided into three parts: the lower part accordingly, up to the groin or the top of the legs is called *perna* (leg) or *tibia* (leg), and from there to the neck, *corpus* (body) or *bustum* in the vernacular, and some call it *thorax* in Greek. But from the shoulders and above they say *collum* (neck) and *caput* (head). Beginning the set and particular names from the feet, the front parts are called *digiti* (toes), their tips *puncte* (points), and the biggest toe *pollex*. The following is the *index*, and the longest toe is called *digitus medius* (middle toe) or *medium continens*, the following *annularis* (ring) or *cordialis* (heart). The last one is called *minimus digitus* (smallest toe). The names of the digits are indeed the same for the feet as for the hands. The knobs of the toes and other limbs are called *iuncture* (joints), and from one connection to another is commonly called *tertium* ('third'), and this is applied for the whole person. And the whole lower part of the foot is called *planta* (sole), and in the middle, where the hollow is, *vola*. The back part is called *calcar* (heel, actually 'spur') and over the foot is the *enpeine* in the vernacular, or *dorsum* (back) of the foot, which can be called the *summitas* (top) or *facies* (face) of the foot. The place where the foot comes out of the leg is called *garganta* (throat) in Spanish and *collum* (neck) in Italian, and in the same way

can be called *guttur* (throat), and the knobs on the sides of that place are called *malliola* (anklebones). From the foot to the knee we say *tibia*, and the thin part between the *malliola* and the *sura* (calf) we call *ciarrecta*, but some say *garro*, which is the thinnest and lowest part of the *tibia*. But a *garro* is particularly in brute animals. The thick part of the *tibia* is called *sura* (calf), and the whole front part *spina* or *spinella*, and at the front between the *crus* (thigh) and the *tibia* is the *genu* (knee). That is a thick bone, and in it is a *rotagia* or *rotuscula* (kneecap), and the back part is called *poples*, or *curua* (curved) from its characteristic. The first part of the *crus* (leg) through the inner part of the *musculi* (muscles, the thick part of the limb) and from the knee to the *inguines* (groin) or *thorax* is the *cosssa*, though above the knee on the outside one can also say *musculi*, when the flesh is raised. The *femora* (thighs, sing. *femur*) or *femoralia* are understood to be around the top of the *cosssa*. From that it is found that the sword is girded on the *femur* and this part of the *femur* must be directly unimpeded. For when the *cosse* are not packed around in the *naticae* (buttocks) and *inguina* (groin) it is always a sign of heaviness, and when they are packed, it is a sign of lightness and looseness. From the *inguines* (groin) or the joint of the *clunis* (buttock), where the *cosssa* reaches, and all the way to the footsole, are called *crura* (legs, sing. *crus*), and in particular the part from the knee to the foot, the *tibiae*, and in this the Latin conforms with the vernacular, since *perna* in the vernacular is applied to the whole together, from the footsole to the top of the *cosssa*; then, above the knees to the groin, we say *cosssa* or *musculus*, and from the knee to the foot, *perna*, and in this way Latin applies *crura* to *cosssa* and *tibia* together, and uses *tibia* only for the lower part, that is, from the foot to the knee, and *cosssa* from the knee to the *thorax* or *bustum* (torso). *Pes* (foot) is commonly used for the part below the *malliolas* (anklebones) to the tips of the toes. But often, at least in dead animals, everything below the knee is called *pes*. When we begin to describe the *bustum* (torso) or *thorax* through the part of the *pudibunda* (genitals) there are the *inguina* (groin), and on that, towards the *clunes* (buttocks) we say *ilia* (flanks), and in the middle over the *virilia* (male parts) is the *pendiculum* (pubic hair), and from there to the navel is the *aluus* (belly). The place for girding we call *cinctura* (waist, though literally belt) around the body. Between that and the *pectus* (chest) lies the *stomachus*, from there to the neck, the *pectus*, and the bones which surround the *pectus* are normally called *coste* or *costelle* (ribs), and the soft part of the bone which comes near the *stomachus* is *chartilago*, and between the *chartilago* and the bone of the *ancha* (haunch) or the *clunis* (buttock) is the *ilia* (flanks), in the vernacular *igiata* or *fiancho*, on which vicious pains tend to happen, and the *ilia* or *igiata* should be small in some animals: it should be small from the bone of the *ancha* to the ribs, since when there is a long distance there the animal is always long from the

bone or place of the saddle and short from the shoulders and *groppa* (rump), and therefore it can be neither strong nor temperate. But through the back part of the *thorax*, going upwards, are the *nalice* (buttocks) and the division in the middle is called *canale*, and the bones on the sides or above the *crura* we call the *clunes* (hips) or, in the vernacular, *gallones*, though some say the *clunes* go from the *nalice* to the waist; this part is usually called *lumbus* (loin), that from the *nalice* and all the way to the head is the *dorsum* (back) or *spina* (spine), and next to it through the waist are the *lumbi* (loins), and from here to the *nalice* and bones of the *clunes* (hip-bones) the *renes* (kidneys) are positioned, and above the canal between the *clunes* is the *groppa* (lower back) or, in our language, *rabadiglia* (Sp. *rabadilla*, ‘rump’), and over the *lumbi* all the way to the neck are the *scapule* (lit. shoulder blades), though the *scapule* are the foundations of the arms. The first part of the arms is called *digiti* (fingers), with the other individual names which we have given concerning the toes. In the lower part of the hand is the *Palma* (palm) and its hollow is called *iris* or *vola*, and in the upper part the *dorsum* (back), and around the hollow are *palmuscule* (lit. little palms), especially that thick part which adjoins the thumb. The first part of the hand all the way to the elbow, which is the thinner part, is usually called *lacertus* (usually upper arm, but Monte obviously means forearm here), and *muniaca* in Spanish, and the thickness near the elbow is the *tabula*. Then above the elbow is the *molledo*, and the thick part around the shoulders are *musculi* or *tori*, and the whole arm or that which we can span with both arms is called *ulna* (equal to a fathom). Below the arm near its beginning is the *ascella* (armpit). Going downwards along the *thorax* there is the *latus* (side) and above the whole arm, up to the neck, is called the *humerus* (shoulder), and the bone connecting the shoulder and the chest is the *furcula* (collarbone). The hollow between that and the neck is, at least in the vernacular, called the *olla*. From the shoulders upwards the first part of the neck in front is the *guttur* (throat), and the knob inside it is called *nux gutturaria* (lit. ‘throat-nut’) or apple, and towards the sides of the neck are the *cervices* (normally simply means neck). But dealing with the head, the *mandiuole* (jaws) are positioned in front, and at the end of it is the *barba* (beard) or *mentum* (chin) and then the *os* (mouth), and on the sides the *buche* (cheeks), that is, the parts which swell when we blow, which in Spanish are usually called *carilly*, and when this part is high or fleshy, it denotes ineptness of the body. The closure of the mouth we call lips, and inside the mouth at the front are the *dentes* (teeth), and surrounding them are the *genuini dentes* (inborn/innate teeth), then come the *molaes dentes* (molars), and the member with which we speak is called the *lingua* (tongue), and going upwards there are the *nares* (nostrils) and *nasus* (nose). His, in truth, window-openings are called *oculi* (eyes), through which we see, and their cover *palpebre* (eyelids), above which on

the forehead are the *cilium* (eyelashes) and the *supercilium* (eyebrow) and the hairs positioned there the Spanish call *pistagni*. From here to the beginning of the hair is the *capitis frons* (forehead), and from above the forehead and to the chin is the *visus* or *faciei* (face) and on the side *facies* or *fauces* (fauces generally means the inside of the throat), and in the middle or at that height we say *maxillas* (jawbones), and the hollow over the *maxillas* we call *tempora* (temples), then on the side come the *aures* (ears), by which we hear, and on top of the head we call it *vertex* (crown). The high part at the back is the *cerebrum* or *occiput* (back of head), and the hollow between the neck and the *cerebrum* is called *coculum* or *colodrillum* in the vernacular, and between the forehead and the crown is the *sinciput* or *caluaria* (usually 'skull').

LXXVII. WHY IT IS USEFUL FOR WRITERS TO RECOGNISE THE TEMPERAMENTS OF MEN, SO THAT, WHEN NEEDED, THEY KNOW HOW TO DESCRIBE THE CHARACTER OF ANYONE.

For the reason that those who write histories or send letters and want to describe some people's character in those, it is fitting that they recognise the temperaments of men in the way which we have described in more detail in another book. For according to the way of the past, we can describe little about the characteristics of men, except by speaking vulgarly, such as big and small, thick or thin, pale, ruddy, or black. But beyond that they hold no specific or distinct rule, and so, they go foretelling and thinking, saying, a beautiful person has red or black hair, the magnanimous one is good and a preacher, and they do not show this with any reasoning, except that they follow their imagination. It is usually said that whoever they see laughing and playing are sanguinics, and that those who get angry are choleric. Melancholics are those who talk little, while phlegmatics are slow, and such works in men often come from from habit, either because we do them gladly or accidentally. For temperament is natural or fundamental. Therefore, as long as we follow it we can have a true rule for understanding the character of all limbs.

LXXVIII. ON CERTAIN COMMON OPINIONS ABOUT THE DISPOSITION OF MEN.

Many usually say that temperaments change every day. For we see the limbs changing, or becoming healthier or more ill, stronger or weaker. But in truth they do not by this change their fundamental temperament because these alterations are there. Also, when they see an

astute man they call him *calidus* (*calidus* = hot, similar to *callidus* = cunning) imagining that he has hot limbs; but we say that astuteness comes from the airy temperament, since it is temperate and upon itself. Similarly it is said that a man becomes angry through a superabundance of heat, which is obviously otherwise, since anger normally emanates from changes of the limbs beyond due measure, which is seen in winds and waters, which always change with vehemence. Nevertheless they then receive great coldness.

LXXIX. HOW WE SHOULD FEAR WHEN WE ARE ABOUT TO WORK SOMETHING.

All works are to be feared before we begin them. For he who does not heed this rule, can give others little fear, though on two occasions fear itself results: either before we approach the work or when we are already busy in it; and those who fear first decide take precautions about future events, since they arrange their limbs and avoid unfamiliar things of limbs and words, and at an appropriate time they are found in such a way that they can fulfil all promises.

LXXX. HOW VERBOSE MEN USUALLY FEAR.

Those who at the beginning use very many words, think little or not at all about that which they are going to do afterwards. Therefore, when they approach the work, they are found to be feeble and weak, having said much which they cannot bring into effect, and therefore they are necessarily afraid. For then fear brings very great impediment and damage. For no one can work correctly when he is frightened at the time when there would be need for contest, though under the colour of bravery the enemy is not to be despised, nor must one attack impetuously, since, just as the courage is good in him who clears and arranges his limbs, it is bad who directs them in fear. We say that fear is a quality which produces change, which is suddenly generated in the limbs when we feel that something adverse is near; under this appearance it causes to stumble and dis-coordinates all limbs. Courage is a delightful or vigorous quality which kindles and strengthens all limbs to pursue victory by putting all adversity aside.

LXXXI. HOW A SENSE OF HONOUR IS SOMETIMES THE CAUSE OF FEAR.

Sometimes a sense of shame brings on fear, even though we expect no danger from what we are about to do, since it often happens from past dangers, which we have already gone through, that we are honoured. But when we break or step over our sense of honour, we are always, in the hearts of men, reckoned as being base. Therefore, in many places where there is life-threatening danger, we are afraid of attacking, since according to the custom of men the greatest feeling of shame is in those who do not know how to be strong in such matters. Often the brave are more afraid than those of a base and fearful nature; since the brave or magnanimous always think that they are in some danger, if by chance it happens.

LXXXIV. AT WHAT AGE A MAN IS FOUND TO BE THE STRONGEST.

The vigour of our strength is, we say, flourishing at twenty years of age, until thirty. But some, because of some inconsistency or vice, are at their strongest until the age of twenty, and others until thirty-five.

LXXXV. AN INSTRUCTION FOR PURSUING BODILY AND INTELLECTUAL STRENGTH.

It is to be noted that in order to have bodily and spiritual strength, and be able to use them well, it will be necessary to escape vice. For a man full of vice is often found to be weak, sometimes too full and at other times empty or weak, so much so that he cannot master his soul and body well.

LXXXVI. WHAT KINDS OF FOODS ARE BEST SUITED TO OUR STRENGTH.

The food which best keeps and strengthens our strength are those which keep to the middle and are light and temperate. Our strength is more powerful and awake for any exercise of the limbs in the morning than in the evening.

LXXXVII. ON WHAT TENDS TO HAPPEN TO THOSE WHO BLASPHEME.

Those who use many words and blasphemies are not to be feared. For their works pass with the words, and if it happens that they defeat someone, the victory is close to the eve of its destruction, and this can be so even if they sometimes win against those who are base. Since if they are going to fight the strong, they will never be able to claim victory. Finally, if they defeat anyone today, even though he be of small valour, tomorrow they are defeated by other similar men, because where there is blasphemy there is no order, and where there is no order there is no continuous victory at all.

LXXXVIII. HOW MUCH VIGILANCE THOSE NEED, WHO WANT TO TEST THEIR PERSONS IN DIFFERENT REGIONS.

Anyone who wants to exercise his strength outside his own country will find himself faced with very many difficulties. For any province wants to test the temperaments of foreigners, and though foreign illnesses are not always apparent in similar cases, foreigners' bodies are altogether weakened; for this reason, indeed, no one can be healthy or live long if changing his home frequently through different regions, and besides, when we are going to do many works in different regions, the men living there watch our skill when we work with others, and we cannot see theirs. But if we would all stay continuously in one single country, that which others could understand about our affairs, we would also know about theirs. Therefore, in places of this kind one must be more than a little anxious, no less in one single lodging than in one single province. For when there is one who defeats all in one kingdom, then few are found in the world who could defeat him. But vigorous men can be found in one little province, just as in a large one. And so also in a house and in a state. For such vigorous men are few, though generally they will not be disposed in the same way in one province as in another, nor do they in one province make use of what we want to do in equal measure as in another.

LXXXIX. HOW, FOR SOMEONE TO RIGHTLY UNDERSTAND AN ART, HE MUST BE A MASTER IN IT.

Some say that they have seen much. But the authority which we should give them must be related to the habit he has for disclosing the truth. This is not enough, for he needs to be proven in the skill which he will be about to describe. For otherwise, even if he has seen others working, he cannot comprehend everything sufficiently, not can he afterwards exhibit proper certainty about it. That is apparent in this way: such as teaching a man for fifteen or twenty days, and then we command him again to put into action that which we have taught, and frequently he does the opposite of what has been shown to him. And when he errs in this, how much more can we not err in things which pass quickly and which we have not seen before, since they pass so quickly that they cannot discern the truth. But he who is a master in that ability comprehends when seeing the beginning, the greater part of the whole work.

LXC. ON THOSE WHO SOMETIMES WIN AND SOMETIMES ARE DEFEATED.

It is disgraceful to want to use a past victory to bring a remedy or cover against a present loss, even though this happens very frequently to those who have been defeated by their enemies, saying, 'now we have been defeated, on other occasions we have defeated many'. And in truth it would be a better excuse for them to have been the least of all men at another time, than the foremost. For the adversary thinks that he is adorned by our past victory, if we had never achieved it he would not rejoice over us, for surely an adversary obtains nothing else in a victory than that which we have lost. But if we would have nothing, they could never take anything from us. For often the remedy for the defeated is to say, 'I have not found in my whole lifetime a man who would not use against me that advantage by which I am now defeated'.

A SECTION ON SOME CHARACTERISTICS WHICH ARE COMMONLY FOUND IN MEN OF PROVINCES OF WHICH I HAVE FAMILIARITY WITH.

LXCI. ON SPAIN.

The Spanish are of average strength, between strong and weak, and among them there is little disparity in strength, and mostly they are found to have a temperament of sanguine and choler.

Many, however, are mainly composed of choler and melancholy, and in any person it is shown openly of which temperament he takes the greater part, for because of the dryness of the country, animals are born loose there. And in Spain men are more given to exercises than in any other nation we know. They often have lightness in running, jumping, and throwing with the arms, and are average in the rest. The size of their persons, though, lies between average and the shortest. They have sufficient industry in wrestling and are good in arms.

LXCII. On PORTUGAL OR LUSITANIA.

In Lusitania they practice wrestling exceedingly, but have unrefined strategems. Nevertheless with magnanimity, and this is peculiar to them, in accordance with their temperament. For most of them are melancholic-sanguinic or sanguinic-melancholic. Commonly among all, the Spanish seem to be willing to hurry to battle, but they often proceed in a disorderly way. For each one absolutely wants to go his own way. But to defend or protect strongholds, and likewise to fight them, they are better than other nations, since somehow they hardly want to withdraw, if they have not taken them with violence or because of lack of food; they also attack with great strength when scaling or exercising.

LXCIII. ON SICILY.

The men of Sicily are strong enough in strength and wrestling and they vault and jump sufficiently, and in temperament they are melancholic and choleric. They are also strong in arms.

LXCIV. ON THE DISPOSITION OF ITALIANS.

Italians do not observe an equal medium among themselves, since most of them are weak and some in particular extremely strong; in temperament they are sanguinic and phlegmatic, except in Apulia and Calabria, where they are found to be melancholic-sanguinic or melancholic-choleric, and sanguine follows in the third place in them. In Lombardy we find mostly phlegmatic-melancholics. But generally in Italy they are sanguinic-phlegmatic or phlegmatic-sanguinic, and in these temperaments they are quite famous, and that is the origin

or their being imitators rather than inventors. Many of them are quite light and industrious in wrestling. On the height of their persons, though, they tend to the greater size rather than average, and they are not very enlarged or fortified, except in some areas where there are marshes, as in Lombardy, where large men are born. In arms they normally go with discernment and obedience. However, they rarely go to dangerous places, and they are not troublesome towards enemies, as they are little attentive to rush against the enemies.

LXCV. WHICH TEMPERAMENT THE FRENCH ARE.

Most men of France are born choleric and phlegmatic, they grow to average stature and there is great disparity between them. For some of them are strong, though not sufficiently agile, commonly however almost all the French are weak and of little dexterity; but to engage in battle they go tightly grouped and massed together, and they have a habit of killing the enemies they capture. At the first attack they seem vigorous and they know how to attain victory. But when they find any resistance, they decline quickly, and when they want to attack others they always command the common people to go first. Therefore they are very good at assaulting strongholds, but much less so at defending them.

LXCVI. ON BRITTANY.

Almost all men of Brittany are melancholics and of ample stature, but do not reach a great height. They are strong and powerfully exercise wrestling very much, though they use it roughly, and do not say that they have been defeated even though they fall on their face, but when they are thrown down on their back.

LXCVII. ON ENGLAND.

The English are of more than average stature and in temperament they are melancholic-choleric or choleric-melancholic, they are robust and strong and exercise wrestling. But they are experts at launching an arrow with a bow, and they are good in conflicts, and they are quite similar to Bohemians.

LXCVIII. ON GERMANY AND FLANDERS.

Almost all men of Germany and Flanders are phlegmatics, and then for the most part, choler follows. They are also of large stature, few, though, are strong, much less light, and they don't know how to throw, except for some big thing, like a rock and similar things; they also continuously pursue mechanical arts. They are a truly proud people, and powerful in battle.

LXCIX. ON HUNGARY.

In Hungary men of good stature are born, sufficiently well proportioned or shaped or understood as choleric-melancholic of strong temperament, little given to exercise, apart from wrestling, which they approach somehow on four feet, that is, on hands and feet, and when they can, they seize by the lower legs, just as in their neighbouring provinces. In battle they are powerful, and with little sensation they resist cold and heat. They are neither fast nor industrious, but firmly wait for others.

C. ON BOHEMIANS.

Bohemians are mostly allotted choler and phlegm, and in them the choler flourishes more than in Hungarians. And they are extremely strong and of great height, and their bones and sinews. They exercise wrestling very frequently. They also, when wrestling, crawl on hands and feet on the ground when approaching. In arms, in truth, they appear to conform with Hungarians, but not so much exercised in our times. But the Bohemians and afterwards the Bretons are commonly stronger than I have seen so far.

CI. ON POLAND, TARTARY, AND RUSSIA.

In Poland, Tartary, Russia, and other provinces surrounding, the people are melancholic-choleric in temperament. They have sufficient strength and exercise their bodily dispositions little, except in wrestling and throwing a thick stone, and they act in the same way in all those regions. To engage in battle, though, they proceed with energy.

CII. On GREECE.

The Greek are of average stature and somewhat more compact than the Spanish, though they conform in strength and temperament; but since they have perfect choler in both these provinces many are found to be inventors, though the choler is usually followed by sanguine in the Spanish, but in the Greek melancholy is second. They draw the bow and exercise wrestling a little, they also seize with their hands by the lower legs, just as in Hungary and Germany; which in many other kingdoms is prohibited.

CIII. ON ASIA.

In the regions of Asia which are situated in the north, they are strong, but those living in the southern part hold less strength.

CIV. ON AFRICA.

In Africa near the coast of the Mediterranean Sea, they are seasoned in cleverness and prompt in battle, especially in light conflict, or sallies and attacks. But the Africans, like the Italians and the Spanish, show little cruelty towards their enemies after capturing them. And in the part of Africa which is above the west, there are some marshy provinces, in which big and badly connected men are nourished.

CV. ON FRANCE, ENGLAND, GERMANY, AND HUNGARY.

In France, England, Germany, and Hungary, and some other northern parts, there abide cruel men. Therefore they rarely spare the life of enemies as long as they are able to kill them, and therefore it is said that most of them get drunk when they want to meet in battle, in order to feel death or pain in dying and killing less.

CVI. OF WHAT DISPOSITION MEN IN COLD REGIONS ARE.

Men who are born in cold countries are usually strong, but little given to teaching, since they can very easily eat without impediment or sickness. There also the temperament lies between choler and melancholy, and they strive little after enjoying health.

CVII. ON THE DISPOSITION OF MEN WHO LIVE IN HOT PROVINCES.

In hot provinces weak men are brought up and they are of sanguinic temperament, and very many of them are wise, but they cannot be very strong. For they cannot take or digest much food, since because of the heat one cannot take much food and keep one's health. Therefore, though they live in hot places, they have no needs, except for the reason of avoiding diseases, which is enough for them to seek out teaching.

CVIII. IN WHICH PROVINCE MEN THRIVE, ACCORDING TO THE CHARACTERISTICS OF THEIR TEMPERAMENTS.

To let us know better how to prepare health which accords with our bodies, nature teaches us to place all things in others which are similar to them, so that they can last longer. Therefore it is appropriate for us to live in places which conform with our temperaments.

Sanguinics should live in a hot, dry, and barren country, which tends to be flat rather than high.

Cholerics require a high place to live, in which thin air is invigorating.

Melancholics (require) a land which is large and dry, a region between low and mountainous.

Phlegmatics require staying in a low country, which is somewhat damp or marshy, and in Piedmont. But in hilly places men are found to be stronger than elsewhere.

CIX. HOW MEN SHOULD BE GOVERNED IN FOOD AND EXERCISE.

That we might more easily avoid shame and loss, we should first of all temper our persons before we show our acts to the public; though there be a difference between the fast and the

slow. Nevertheless we all need and are forced to employ our skills for some days before we give perfect knowledge of them, and wanting to work before the public, if we have not understood them correctly first, is, we say, manifest madness. But in material or gross things, such as lifting a weight, there is not much temperance needed, and those who labour in similar things can take much food. But in wrestling and throwing, in which also strength is very strongly required, one must note that we should remain temperate, though to acquire great strength a great quantity of food, and of good food, is desired. But for some days before one comes to trial, especially in wrestling, one must observe the greatest sobriety, and the less we drink, the greater usefulness arises, especially in the five principal areas, that is in health, strength, breath, lightness, and endurance. Full lightness requires little and dry food, and any exercise demands that we put our persons in places so harsh that afterwards, when coming to the main point, it seems small labour to us. Therefore, when we must run a hundred paces on the level and in a shirt, we are to run for several days before in mountains or sloping places, and we should wear robes or other heavy things, and to jump two or three leaps, as is usual before we come to the test, it is appropriate that we be used to leaping ten or twelve times without pause in very rough places. And jumping upwards gives lightness, and downwards teaches us to stretch our persons and stay on our legs. In the way of vaulting, after we know the vaults, we should place ourselves on a horse or some other place which is high. For when we eventually come to an average height, the ascent will be easier so that we are free to vault, since, to carry out the greatest vaults, the horse, on which we are going to jump, should be of average height, or tend towards smallness. For otherwise it would be difficult to learn much more. Nevertheless, we should frequently, when learning, train on a big horse and wear many clothes since, by taking them off and coming to a low horse, it seems that the limbs can almost fly. The arms must be exercised, which means that the bodies should be loaded down over the arms, walking with these arms themselves on some bench as much as we can, and thus then they can resist the body, when it goes through the vault. Especially when we want to do a vault and a half at the same time, we need to support ourselves well on hands and arms, so that we can add new power in the middle of the rotation. For otherwise, no one is so light that he can pass through one whole vault in one single action. Weapons are indeed to be swung or used continuously, different and far heavier than those we should use in a fight. And this is understood to be no different for offensive than defensive arms, on foot and on horseback. And to wrestle, one must first try with extremely strong men, setting out ahead that they grasp us by all parts, because one should be able to be lifted from the ground, and pulled

away from anywhere, so that we can produce a better means in necessities. Similarly we should look for the adversaries' weaker parts, and join ours with them.

{47}

THE SECOND BOOK OF PIETRO MONTE'S COLLECTANEA.

PROLOGUE.

Until now we have been discussing the universal rule suitable for exercises, and likewise a small part of the recognition of the temperaments, and the rule of drawing out the secret of one exercise to remedy and recognise others. Once again, in this second part, we shall make another brief recapitulation, in which we shall especially discuss each weapon and many other exercises, though it would be appropriate that, if someone would want to study this little book, he should have at least at least some beginning of the way, about which we have elsewhere written more. Otherwise it is indeed extremely difficult for anyone to understand, since everything here is brief.

I. A DOCUMENT OR METHOD FOR GOVERNING OURSELVES

As it is not enough only to exercise the limbs, when we want approval among others, if we do not gain it by the art to be worked, it is appropriate to continually apply oneself to those arts which concern strengthening or ability of the body. The first thing, indeed, which we ask, is observation of oneself. Thereafter one should go to assisting or offending others, since, if we must do clear or unencumbered exercises, it is necessary that our limbs, while they are working, remain unhindered, though regarding the way for adapting the limbs to work, I disagree with both the ancients and the moderns. Others commit themselves to stiff attempts, when they want to achieve a certain deed, bending their bodies and twisting them in every way. I, however, say fighting should be carried out in an upright position with lightness and without stiffness. For if we want to discharge any great force, it is fitting to remain above ourselves and with light and free feet and hands, for otherwise we are sure to lose the strength and lightness without which we can hardly work. For all men who are strong in deeds have, in accordance with the size of their persons, bodies which are built loose, extended and without stiffness. And he who bends his body opens his legs too much and twists back all his limbs; he can in some way be called monstrous, which is indeed a manifest error. For no man born with

limbs, can be strong in this way, where these are applied in exercises of the body. Therefore, we should walk in a smooth and relaxed way, gathering strength in our chest; and one foot should only go a little away from the other, so that we can easily go and return, wherever we want. The body will always go above the feet, however, never bending. Therefore it is necessary that the feet continuously follow the body into the place to which they are equally lowering since otherwise the slightest adversity would drag us to our ruin. And this is to be understood in all exercises of the limbs. Painters, both ancient and modern, very often stick to this common mistake: they think that they are painting an excellent figure, but the way is varied and monstrous. But if they could proceed to acquire their strength with reason, they would paint differently.

In another place we have said that it is fitting for a master to surpass his deeds, so that he is not surpassed by them, that is what we are in some way working on should seem to those watching that we feel no labour when doing what we want to. And he is shown to be stiff or very nervous in working should not yet be called a master, since he is subjected by the art itself, and that which overcomes is by nature more worthy than he who is overcome. To repeat again from the beginning: limbs which are stiff, twisted, too muscled, are in some way monstrous, and are found to be enemies to understanding, and where there is no agreeableness of understanding, no great and praiseworthy work will ever be the result, since the limbs have to be unimpeded and yet agreeable, not knotty or bumpy, yet which seems almost to be innate as if from nature without effort in stretching or distribution, and these are true bodies, though, in the common error, the painters who paint muscular bodies are commended. But yet they do not know what to do or say. I concede that animals shaped in this bumpy way are very strong in one assault or at least, they may seem so, since they are hard and immoderate. Nevertheless, only a small effect can arise from their strength, as for the greatest effect, one must have the greatest ability in working in an extended method of working. And the strength of the limbs, which we chiefly discuss in this little book, are not to be used entirely frequently, as if they were functions which give us life, except that we should, at times, exercise and test them, so that we may know that they are not forgotten.

II. HOW EXCELLENT WRESTLING IS AMONG OTHER EXERCISES.

When I discussed exercises of the body I placed wrestling before the others, for, though in itself it would not attain any other excellence, except that it renders our bodies more powerful

and gives them more might, and in each act moderation and ability of the limbs is fittingly established, I have decided first of all to explain the way of wrestling, so that we can keep this art as a teacher. For no other practice of throwing with lightness or play with weapons, or horsemanship, teaches how to place the limbs, in moderation and upon themselves, as in wrestling, and to always know how to respond when a necessity occurs.

III. HOW TO ENTER AND WALK TO WRESTLE.

At the beginning of wrestling one should enter with a slow and short step, and the points of the feet should tend slightly outwards, that is, the left to the left and the right to the right, and the whole person should proceed above himself, that is, walking constantly above the feet in a straight line. For when the torso leans slightly in any direction, if the feet remained fixed, the entire person will fall on the ground. Therefore it is necessary that the feet continually run to place themselves in a straight line under the torso. But sometimes, in advancing, the legs should precede the head, since at that time there is danger of an *incontrum* ('encounter') or *obuiatio* ('meeting', clash) And here one should place a *tornus* ('winch') or *saccaligna* (bind) or *desuium*, for these are safe stratagems and can be done with few grips. For the *mediana* or *circundata* and *disclunata*, *tollens pernam*, *onerata*, and similar are risky and demand very joined grips. If, however, they want to lift us from the ground, we should bring him forwards and make it so that he is lifted by us, and we can be more safe, if we put our hands in front of his stomach or navel; likewise the head is to be supported with the hands, and whenever we strike or parry, we should be loose and fast and work with courage, discharging all force to the greatest destruction. But we must avoid the place into which the other wants to place a stratagem or *armatura*, and follow the turn to which the other diverts his body, and we must make light grips and walk calmly. And when we want to attack or quickly guard, our bodies should be rejoined. Frequently, however, moving grips is found very useful when seeking for where others possess weak limbs and little learning. In devastation of any *tornus* we should place another, or a *saccaligna*, and against a *deuiatio* take hold of the other's side. And if it is a *cargum* or *oneratio*, then one must step back, and if we place this, we should lift the adversary's leg with ours and roll out on the shoulder blades or the other side as much as we can. And also this *lata* or *tollens tibiam* (carrying or lifting the leg), is excellent when we take the other's back, when we lift him from the ground. This can be done when the other applies his haunch through the outer parts after raising up ours. For then he quickly falls on his face

on the ground, and this kind of lifting from the ground is taken with very great force. And if they want to lift us, we should pursue them and discharge a *saccaligna*, and sometimes a *tornus*. The *tollens pernam* should be done quickly in whatever way, since if the adversary's foot begins to be lifted high, there is no opportunity to turn away that stratagem. For this reason, when it is placed to his devastation with the point of our foot, he who remains free is to be caught by the front part of the other foot, which is placed on the ground, and in this way the enemy cannot apply his power. However, against a *tollens pernam*, it is always beneficial to quickly lower our bodies, drawing him back, and putting our hands on his loins, so the adversary goes forwards; and one should act in almost the same way when we are in *brachium bipartitum* or *diuisum*, likewise it is very good against a *disclunata* or *britona* that we step back when they are placed on us. And this *disclunata* or *britona* from that grip is usually very helpful against a *retrocuruata* ('backwards curve').

IV. ON THAT WHICH LASTLY IS TO BE OBSERVED IN WRESTLING.

The last thing, or that which is to be firmly kept in wrestling is, we say, that, taking by *agathe diploidis* (collar of the doublet) and placing a *tornus*, *saccaligna*, and *deuiatio*. And in the play of *brachium diuisum* (divided arms) we should place a *tornus* or *obuiatio* in the front, and a *saccaligna* at the same foot. And in single arms (*singula brachia*) an *obuiatio* should be applied to the furthest foot, and a *saccaligna*, though, to the nearest. But if our side is seized, it is fitting to discharge a *circundata*, *disclunata*, and *saccaligna*. And when we are seized by the back, the attacker's arms are to be caught and drawn forward, while placing a *saccaligna* in either foot, or a *dislumbata*⁴ And against those who seize by the legs we shall *armare* (any foot technique) with that leg by which they seize us. And if we remain far away, an *obuiatio* is useful. But when we are very closely joined we should do a *mediana*, or a *disclunata* or *saccaligna*, and in the play of equally divided or common arm (*brachii equaliter diuisi siue comunis*) a *saccaligna* is appropriate. Then, we say, it is also very useful that at the same time as the other goes towards our legs, we seize his legs with our hands and evade with an *obuiatio*, since in this way they cannot lift us from the ground. And when our leg is seized a *saccaligna* is good, and better in this is to grasp with our hands through the crotch or between the legs, for then we cannot be lifted.

4 = disclunata?

V. USEFUL CUNNING IN WRESTLING.

Whenever we find ourselves together with another who defends himself and is powerful at wrestling, if he happens to be weak, we must make it so that we put our arms under his, so that we can seize by his loins; this the Spanish call *tomar el cuerpo* (to take the body). And here an *obuiatio* or *saccaligna* is to be applied, or we should turn around to take hold of his side or back, and at the same time all power is to be put in the ultimate end or disruption, likewise one must note that when the other is defending himself, if he is weaker than we are, we should bring him back to some wall, because there we should join with him. A rule to be held as universal is that when the enemy begins to move to *armare* or ambush us, or that he throws some blow, we should at the same moment strike or go back a little, until his blow has passed or turned aside, and our blows are to be worked alongside the other's turning aside. For never is a man found to be as disordered as when he wants to begin, or goes to finish something, and therefore he who is wise should attack the adversary at one of those times. If a high *disclunata* is placed and makes a big circle on itself, it will be laborious for him at whom it is placed; however what is a good remedy for him is to move aside and bend down while going backwards. But the best thing is for him to stand upright and give himself over with all his might to lift the other from the ground, and this helps against *disclunata*, *mediana*, and *saccaligna*. On this grip, it is much better for him who will be large, that he gives his side or takes hold of the other's side, though it is fitting that he who remains with his arms on the other's shoulders bends himself downwards, pressing down the attacker, and that he who seizes below or by the side raises himself. To destroy a *disclunata*, an *antegenu* ('before the knee') is placed with our calf, that is, the foot which is free for us in front of the knee or the muscle of the other's foot which is standing firmly on the ground, almost in the way in which a *saccaligna* is thrown, remaining with equally shared arms, even though in this *antegenu*, the rearward foot goes forward. This stratagem is perhaps newly discovered. If one person vigorously discharges a *disclunata* and the other, in the same way, an *antegenu*, there is a great risk for him who places the *disclunata* to get his leg broken, he who has done this can in no way be bent underneath, pursue this also against a *mediana* and *saccaligna*, though its perfection is against the *disclunata*. Besides, since a *leueclunium* which has been placed in the hollow of the knee joint or around the knee is horrible, especially if he who has placed it is strong and big, we can resist by fleeing rather than by destroying this stratagem with our feet, and that it can be made safer, we should with the utmost diligence draw back our leg, in which the other wants to *armare* or attack, almost all the way around to our back, and the other hip

should go forwards, almost between the other's legs, and in this way no *leueclunium* or *disclunata* can be placed, and however much it is placed, it does nothing. Besides, when we are at divided arm, which in the Spanish language is called *ad brazum partitum*, if the other or he who wrestles with us is much turned away and flees with his feet, on many occasions it is good to lift him with our arms and hold him up, and at the same instant he should be taken quickly with our arm, which remains above the neck or shoulder blades, placing a *leueclunium* or *descaderata*, as it is called in the vernacular, but we should do the beginning, middle, and finish with determined spirit, and for this our head should lean forward very much, though with a great turn on the side with such an image that we throw down ourselves or the adversary, though the adversary should then be unable to work any harm against us in it. And this stratagem is excellent but demands a determined spirit, just as all practices do, which go above a *descaderata* with a turn from any side which the arm can catch, the Britons make very much use of similar things, and that these things may be done well, we should very much join our side to the back of the adversary. Protection or preparation against similar turns, are understood as the *nescia*, *discaderata*, *onerata* or burden, or *tolleperna*; our arms should always be quickly placed on the loins or sides of the other, in general in the part through which we are belted, and the arms should then remain on him, as hard and stretched out as possible, and the legs and the whole body, all at the same time, should withdraw, and in this way we offer the adversary no opportunity to work similar things, though this way of placing the arms is very powerful against all practices in wrestling, especially against the British and Portuguese custom.

And it must be noted that a *tolleperna* can be applied in many places, as well in avoiding others, as in preparing against *magnas* or stratagems by the adversary, since the *tolleperna* does not only keep us safe from adversity brought by the competitor, but indeed serves to throw him to the ground. Just as whenever the other applies a *nescia*, however much turns of the body are very much loaded, or places a *transcoruata*, which is done by the outer part of our leg, driving us away to make us fall backwards, from whence at the same instant, quickly and with determined spirit, we must roll back our back as much as we can, towards the other's chest, and lifting our leg against the other, according to our strength, that leg which has been seized by the adversary, so that, with a turn, we come in such a way that the other comes to fall on his back. However he who places a *nescia*, should himself turn aside and turn around on his part, and in this way he could save himself. When it comes to gripping by equally divided, or common, arm and we place a *saccaligna*, to make the other fall on his back, and

he too drives us towards our rear, as much as he can, we must immediately, or without delay, revert to a *tolleperna*, lowering the body as much as we can, with a great rotation forwards, and in this way the adversary will easily fall, and if he applies a similar *tolleperna* against us, we should immediately, with all our might, turn aside on our knees, placing our hands on the other's loins or buttocks driving him away, so that he falls forward on his face; this practice alone keeps us safe from a *tolleperna* above all others, though there can be some other remedy, to leap above with that of our legs which is seized, though it cannot be of much benefit, for rarely could an *antepes* be done with our same foot, which was lifted against the *tolleperna*, it is very powerful if it is done at the due time; due time in this place is that, when beginning to lift or wanting to lift our leg, at the same time we place our leg before the shin of his leg, and in this way he falls on his face, or at least we cannot by any means fall, when we apply our foot in that place; this practice or remedy is done in the same way as we usually act against a *disclunata* so that it is correctly destroyed, though then the foot or leg is applied above the other's knee or in front of it, and in remedying against a *tolleperna*, we do not apply our foot that high up, but only on the shin. While a *saccaligna*, which, when we remain at the common arm, which the Spanish call *abrazo partido* (shared arms), is done at the foot which remains on that side where the other is facing, must also be remedied or loosened in this way which we have already explained about the *tolleperna*, or *anca* as it is named in the vernacular, that is, first immediately letting go of the grip we have made, with our hand remaining on the other's side, in which we place a *saccaligna* (namely if they apply it in the left foot, the grip with the right hand is to be let go and so conversely), and at the same instant one should draw back that side which is where we release our grip, and that both our hands should be put on the other's loins or buttocks, that is on the buttock in the side, driving him away so that he goes on his face and we place an *antepes* with that foot on which the adversary places his *saccaligna*. The way of placing our hands on the other's buttock and lowering our whole person on the knees as much as we can in defence against the *tolleperna*, is done in the same way as we do when we want to avoid an *onerata*. And note that a *tolleperna* demands extreme courage to be done correctly, and in the end, having been placed as it should, it is usually very powerful and defends us against very many attacks. Against what is called *rodellola* in the Spanish language and *genochola* in Italian, a *tolleperna* is also excellent. The *rodellola* or *genochola* is done in such a way that our knee is placed around the hollow of the other's haunch not completely behind but to the side our foot remaining on the ground, weighing down with our whole person as much as we can, so that the other falls on that side. And if this *rodellola* is applied against us, we must quickly enter into a *tolleperna*

with a very great rotation on our other side, lowering our head down as much as we can, lifting our haunch together with that of the other, and this is done with whichever haunch when they place a *genulola* against us. A *tolleperna* is also powerful against a *retropes*, since, when that is applied on us, if we lift the haunch, gathering up the other's foot with the conditions already described, we bring him to the ground. Finally, when we just want to protect ourselves, walking upright, so that we do not appear to fear the adversary, it is enough against all stratagems to use our arms as weavers use their feet, that is, when one foot presses, the other yields. And our arms should act when they have been seized before the chest or belly of the other or around the collar, though this cannot happen correctly if wrestling naked, since then they easily escape grips, but when wrestlers are led in, one wants to always walk upright on the legs, that is, so that the head or the chest never goes ahead towards the front, nor do the knees precede the points of the feet or the toes, and so that the knees themselves and the buttocks are lowered in a straight line a little, if they want to strongly lower, having arms constantly on hardness, always meeting the other on that part where he is weighed down or wants to be strengthened, driving him away, so that he goes to the rear, and to do this, one must be attentive, sometimes with one arm, sometimes with the other, but so that our arm goes where the adversary wants to lead us, and the other arm drives our competitor away. In attack and defence against a *transbucata*, it is excellent that our leg will be withdrawn, lifting it as much as we can, so that the foot goes upwards, weighing down our person on the other's chest as much as possible, so that he is overthrown backwards, or, if we wish, we can then turn back the leg which has already been raised against him into a *tolleperna*, turning our body around.

Further, since some have the utmost affection for this *tolleperna*, and where affection is greatest, there the work is multiplied, some universal and safe defence is to be disclosed. First, indeed, those who apply this stratagem with sufficiency, in accordance with their strength, effect to seize, with their right hand on our chest, the doublet, in such a way that their hand reaches around the beginning of the other's right arm, and with their left hand they take hold around the elbow of the adversary's right arm. And they also discharge their right leg, placing themselves in front on the side, and then they apply a *tolleperna* or *anchia*, as high as they can, all the way to the groin, they bend their head as much as they can, rolling themselves on the left side. Against this, no defense is safer than when, in the beginning, if the other places his right arm beside our right arm, we also similarly put the right arm on his right arm, and our left hand, fixed and stiff, on the other's right side around his waist, and that we go back

with our left foot, which he wants to harm, but we have to walk upright, and when he applies this action, we should lower our whole person and drive him away forwards, which is easy if we want to keep our arms firm, since in this, he can come close with his foot to our leg, and we can easily release the leg, place it forwards, discharging a *tornus* at the other's foot, which remains fixed on the ground. And when the other seizes with the left arm, we should also seize with our left arm, according to the conditions already laid out concerning the right arm. You must also note, since, when fighting against those stratagems, it is good to imitate the Britons and almost all men who exercise wrestling in hardness, but only with the arms, not with the chest, much less with the feet, for they hardly dare lift their feet from the ground, and as much as they can, they fix their feet to the ground, but we assert that one must act otherwise. For in that way of walking, they have little looseness or capacity of limbs. Therefore, since when fighting with weapons it is of little or no benefit to them to be wrestlers, at least if the weapons are light or they carry few defensive weapons, if they are excellently and heavily armoured in the belly they can altogether, especially by not falling, prevail in this method of wrestling, however it is better that we can be strong in wrestling everywhere, with and without weapons, that we walk lightly and loosely with our feet. Furthermore, as has been explained above, a *tolleperna* offers a means against many stratagems, especially against the *transbucata* and *genucola*, since, however much we reach almost to the ground when bending, if we lower and turn ourselves very much the same way, then, entering into a *tolleperna*, we very easily remedy against a *genucola*. And when it is applied to the foot at which a *tornus* was to be discharged, it is good to escape with our foot, and with the other ^{though} to enter into a *saccaligna* at the adversary's foot, which he sends far away, or in which a *tornus* is placed. This *genucola* we often use at a divided or common arm, especially if the men are armoured.

VI. WHERE TO SEIZE IN WRESTLING AND THAT WE MUST NOT TURN OUR BACKS TO THE ADVERSARY, THAT WE DO NOT, AS MUCH AS POSSIBLE, LET OURSELVES BE THROWN TO THE GROUND.

Concerning the number of throws with which one should wrestle and under which condition or where grips should not be permitted, we have already discussed at length in another volume, *De Cognitione Hominum*, stating that, since an accidental fall can come upon us quickly, one must wrestle in two ways and receive from the upper forking, for he who

thereafter seizes downwards lowers very much, which would be the beginning of great damage when fighting with weapons in itself, although this it not so great a loss as is the wrestling of the Bretons, and others who are in the habit of imitating them. For when they want to *armare* (do a technique with the foot) they frequently turn their backs to the adversary and *armare* upwards in a way that they often fall by themselves. And even if they do not fall, he who seizes them by the shoulders or the side can injure them easily. And therefore, similar to fighting with weapons, a man should always walk with his face towards the enemy. Therefore the eyes should be attentive on the hand in which the other carries his weapon. And if we can throw down the enemy, we must be careful not to turn around and fall with him, since in ^{Brittany} they turn around and fall like that, almost so that one can be helped as much by the weapon as the other, but neither of them in a good way, in this Breton wrestling cannot properly be called wrestling, but ‘broken revolving’, all the more so since it puts no teaching in the limbs to do other different exercises. This is very different in the wrestling where one goes above oneself and commonly face to face.

VII. HOW TO WRESTLE WITH SADDLE LEATHER OR THONG.

Besides, one must diligently note when one is wrestling with *stafilibus* (saddle leather) or *corrigiis* (thong), that there is great disparity between big and small men, and between fat and thin, for those who are strongly fortified about the loins have great power in that place, and so more easily bear labour than others who are slim at the waist or loins, and since, when wrestling in this way, one lets the other make his grips before he applies force, and in these grips they are equal in height; when the tallest of them stands upright afterward, he lifts the shorter man without much labour from the ground, as much as he is taller. And here, big men who are experienced usually use a certain practice, which practice is like this: they spread their legs very much, and by doing so they are lowered by one hand or more, if they wish, and yet they seem to remain straight. But when they afterwards draw their feet closer together, they grow and lift a small man. Therefore for this reason, by no means are grips to be made in this way, given that there is an agreement to wrestle with belts, but after the straps have been girded each should take hold of it if he can, since also in seizing, a big man comes so much taller, as he is taller then the other, and he who wants to escape, in order not to be lifted by the other, should place his hands before the other’s belly, on his strap or doublet. The legs are to be spread, placing them forcefully at a distance from rear, so the body walks upright, that is,

not leaning, above the knees and the buttocks, and when the other wants to lift, we should draw him violently and swiftly towards our direction and sometimes with the arms then drive him away backwards in that direction which he wants to come out of and if he relies on lifting or uses great force, one must immediately approach him with looseness and determined spirit, placing against him a *saccaligna* or *tornus*, or fix your head on his stomach, and thus he has no way of lifting, at which time they can easily fall, as they remain uncoordinated, especially since all who are in the habit of fighting in a similar way know little about wrestling, and it is only used in Lombardy; you should understand that I have no knowledge of any country where they wrestle in a similar way. And they have a certain law among themselves, namely that they cannot *armare* through the outside part of the legs or do footwork, not even enter a *circundata* or true *saccaligna*, unless they lift the haunch with this leg or that, and sometimes a *disclunata*, which they call *de galloni* (by the hips), and others call *de coxa* (by the hip), and they can also give turns or rotations around, by their agreement. Then, when a man wants to use stratagems of the feet, it is easy to throw down those who work similar things, especially when each of them grips, as he can grip; you should understand, not by saying by agreement, 'let me seize as I wish, and afterwards I shall allow you the same', but this last grip may not be possible, and so each is obliged to grasp, so much better is he able at his pleasure or against the adversary's pleasure. And here one thing especially should be given attention against those very strong with great skill, that for a lesser evil, at least, he who is weak or has had little teaching, always to be attentive on defence or on protecting oneself. And for this defence, one should always keep one's feet level with medium distance between one foot and the other, although a little further apart than when a man wants to attack, and the arms should go before the other's chest or stomach, and if the other wants to enter to join belly with belly, one must diligently walk back, even placing the head before the chest of him who wants to enter, and to make this happen better, one must seek a spacious place to wrestle, for when restricted one cannot escape in this way, but when restricted, he who wants to defend himself should walk around, not backwards. And above all other defences one must take care that the other's arms do not enter under ours, for if the adversary is strong and puts his arms under the other's arms, taking hold of him by the loins, he does not give him any further opportunity for defence. And so that the other's arms do not enter under ours, we must always, when the other wants to put one arm under ours, quickly remove that one of our arms, and that it comes by the upper part by the other's chest, coming below, discharging the adversary's arm to the outside, our body escaping backwards. And in this way our arms easily enter under the other's arms, and always doing this rapidly when the other wants to enter through the lower part; and however, if we

want to defend ourselves completely, though the other lifts his arms, offering an opportunity to take hold of him by the waist from the front, or by the sides, we must not enter, but always hold our arms before the chest or waist of the adversary, and we should always walk upright before his face, not to the sides, and this is the ultimate method of defence which can be found. And however, when the other wants to enter with vehemence and in disorder, we must enter with determined spirit and all limbs loose, with a *tornus*, allowing the adversary to come with a great turn and evasion on that part at which he is pressing, and he will fall easily; and if you cannot defeat him, return at once to the defence as you were before, and this craft or stratagem should frequently be employed against attackers who want to enter.

VIII. HOW, IN ALL GRIPS, WHEN WRESTLING, OUR STRENGTH IS TO BE DIRECTED AT THE TIME STRATAGEMS ARE MADE.

In competing in wrestling, the *tornus* or *trauersa* is the chief stratagem among them all, since we can apply it about all grips, and always in a safe way in comparison with other practices. It is however difficult to make it perfectly, though it is quickly understood, it is taken up in a confused way, the perfection of it, however, has existed in few wrestlers so far. And to do correctly, only two things are required: first, that of the hands, however they may have gripped on the competitor, one should lift the adversary and the other turn him downwards and, to let you understand better, the hand which is on that side where we want to throw down the competitor, must strongly turn the adversary towards the lower part, while at the same time drawing him towards itself. And our other hand should, at the same time, lift the adversary, driving his side away almost backwards, but with a turn, since the adversary would follow the other hand, in this practice is carried out in such a way that one of our hands appears to turn out over our other hand in the way of a gyration, and the hand which draws towards the lower part goes in such a way as if it would want to enter under the other hand. The other way is such that we raise our whole person upwards in the same instant of time, keeping all the limbs stiff however, while diverting the entire person backwards on our rear side, so that we can lift the other from the ground, for when we lift him a little, then more easily with the upper parts return him to the ground, but the hands and our whole self should follow in the way of a rotation, as has already been said. The *mediana* or *circundata*, accordingly, conforms with the practice of the *tornus* in the order of lifting the other, since one has to lift the adversary with a hip, and in the same instant, lower our person down very

much on the rear side, though with a rotation, driving him away so that he comes to the ground, lifting with one hand and bending down with the other, as we have explained concerning the *tornus*. For the *desuium*, however, both hands want to be drawn towards the lower part, but with a turn, though, both directing themselves towards the ground, for if they would go completely around, they would not be able to throw the other down. All *saccalignas* require that all our limbs except for the leg which makes the *saccaligna*, to lower the adversary downwards, so that he goes on his back. In the *desclunata* or *clunis leuium* the other is to be lifted with our leg or hip, but our arms and torso should come out with a turn, directing the adversary towards the ground as much as they can. The *nescia* and *tolleperna* also require a great rotation, our leg is to be lifted bending down all other limbs, drawing along the other with a rotation, so that he comes to the ground with his back. In the *retropes*, though, which is called *traspie* in Spanish, only draw the other's foot forwards, and our arms drive him away backwards, so that he goes to the ground. The *trambocata* cannot be called a practice, and so only those who lack skill apply it, however when it is done, one should load one's entire person, as far as one has the strength, onto the other's person, folding him and lowering him backwards. Turns or gyrations which are done after lifting the adversary from the ground, at the end one should lower him, as far as one has the strength, though somewhat following these rotations, so that he comes to the ground, for by throwing him around he would not equally fall, therefore one should, at the same time as the rotation, lower him to the ground, placing one of our legs or hips in front of his, so that his feet are unable to stand on the ground. In the others, certainly, where no practice of the feet is required, but of the arms and other limbs, we must strive as much as we can to lower the adversary, so that he comes to the ground, as in a *deslumbata*, which is done when the other takes hold of our side or back, since we make firm our shoulders or arm on the neck or shoulders of the other, leaping forwards, weighing on him, so that he comes to fall with his belly, though if he seizes us by the back, his arms are to be held fast by ours and our shoulders should be made firm above the competitor's beard in the same time as we leap towards the foremost part. A *precipitata* or *retirata* is done when we seize with our hands the other's collar or some part around the neck and quickly draw him forwards, though lowering his head as much as we can so he comes with his head to the ground while withdrawing ourselves a few steps to give the other a place to fall. A *furata* ('stealing') or *deuiata*, which is done when we are remaining at equally divided arm and a *tornus* is placed by the other, is demonstrating the will to lift the other and at the same time, or quickly, on that side where the *tornus* was to be applied, bend him down with all our might, so that he falls on his face, but our body is to be bent down as much as we

can, just as is done when we act *de agathe* or by the collar and apply a *desuium*. Lastly, whenever there is in wrestling a practice where the feet do not touch the other's feet, a great *vault* or *deuiatio* is to be done with our body. Furthermore, one thing is to be noted as being extremely powerful in wrestling, that a foot which *armat* or attacks the other's foot should, as much as possible, extend itself, that is not to remain below the knee, not below the buttocks, not below the shoulders, not below the head, but instead, as much as possible, be sent away, as a hand is sent away, or should be sent away, from the shoulders, from the head, when we are throwing and when one is fighting with weapons. On the contrary when we *armamus* (i.e. make an armare, a technique with the foot), the whole body should remain rigid and not more bent over one limb than above another; this is especially fitting in doing *torni* (plural of *tornus*) and in order that we always do those *torni* correctly, such a guide is to be observed: that, as much as we can, we stretch our foot towards the front, lifting it upwards, for it is impossible to correctly bend the body on the back while remaining rigid, if we do not lift our foot through the front with all our might. Therefore, if this is observed, the *tornus* is always done correctly. Also since the *deuiatio* requires that our leg, which is put before the other (the opponent), remains rigid, and that the heel is not placed on the ground, but only the tips of the toes of that foot, and in this way we direct the other towards the ground, which would not happen if we put the heel firmly on the ground.

{55}

IX. HOW WE SHOULD WALK IN ARMS.

In arms is it fitting for us to apply high strength and light feet, and one not far from the other, because we should be able to jump and walk back and forth, or indeed circle on the sides. And we must have this kind of intention, that the weapon always goes between ourselves and the adversary. For when turning it to either side, we would be in great danger above or below, and to have a defensive weapon, or when we would want to parry with that which we use to attack, it will always be safer to flee with the limb in which the other wants to strike us, not that in this we lose ground, but so that he does not touch us or so that the adversary's blow goes past in vain. And very often we should draw back by taking one step to the side, and then our blows are to be directed at the attacker's uncovered places, by threatening at one side and feinting⁵ a half a blow with the body, though at the time without movement of the weapon; thereafter we should turn back quickly to strike a long blow from the other side, and we

5 lit. 'showing'

should always move legs and arms from place to place with blows and short steps, in the way of deception.

X. ON PLAY WITH THE POLEAXE OR *TRICUSPIS*.

With any hafted weapon weapon or stick we play more safely than otherwise by observing the way of the *tricuspis* (triple point). But the weapon should go stretched forward, like a *tricuspis* or poleaxe, when we take hold of it by the lower spike and extended forward; and the blows of the poleaxe lie in the *levata*, (lit. 'rising' – the fundamental teaching) that is the beginning teachings, and the principal blows with the *calx* ('heel' - butt-spite) or the *contus* (butt spike) are made below; often, however, it is better to feint at once, covering our parts, and direct the blow forward towards the lower parts. Not otherwise, a blow is to be made from the foot towards the head by extending the poleaxe to strike with the hammer or the blunt point through the upper part. Our arms should be held close to us. For the other goes to cover himself, and at the same time there is an opportunity to harm with the point to the stomach, and returning again to cover us quickly. Then the general rule is to quickly throw a thrust with the *calx*. For whenever he wants to parry our blow, remaining firm or to join himself to us, we can strike him with the pole, striking two or three blows without making the hands stiff; and we should withdraw a little. The feet are to be continuously instructed and regulated and the head guarded, and the hands should move down fast and change position quickly, lest they be touched by the adversary. The *tricuspis* should be held loosely, for by holding it firmly, we strike short or limited blows. Finally, as has been said earlier, it is above all appropriate for a footsoldier to always remain courageous, and not only when a rider is far away from him, but also when coming into contact and mixing with them, that is, if a horse joins with a man who remains on foot, in such a case the mind should always be held fast. And if the man falls on the ground under the horse's stomach, neck, or hooves, the hand of the man falling in the ground should do its job right and left, and especially upwards. In case he falls on his face, the weapons are always to be directed upwards to injure the horse, which is easy since the horse is unarmed in its lower parts, such as the stomach, and is thus easy to kill, and even if it places its hooves on a limb of the man who is falling to the ground, it cannot cause him much harm if he is armoured. And in case the man is unarmoured, he cannot be so much harmed by the horse's hooves, or its teeth, in case it wants to bite, that the man is unable use his weapons and kill the horse; and then the rider cannot do much harm to the one lying on the ground,

especially if he only has short weapons. But because of lack of courage or careless intellect, nearly all footsoldiers standing against a rider lose their courage when they come together, especially if they fall under the hooves of the horse; therefore they do not seek to help themselves by their weapons, and so they remain miserably, as though bound hands and feet, though at that time they have an extremely convenient opportunity to kill the horse which is coming on top of them, though to do this, a man should be loose or nimble and very strong, for if he is weak and has brought some defensive arms, he can hardly move to harm the adversary with offensive weapons. Furthermore, a small encounter either conquers the horse's hooves or torments the man himself, but when he is strong he can, whenever he is armed, do much against the rider. Finally, he who has courage will always avoid a clash with a horse, at least when he does not fully receive it; therefore they are gradually united and so the impact is small, and from a small clash small damage arises. And when we remain on foot and are joined with riders deliberately, it is excellent at that time to lower ourselves in the way of wolves, so that we get under the stomach of the horse, because then we can easily kill it; at that time we should not deliver one blow only but many, with speed.

XI. ON SOME PRINCIPAL BLOWS OF THE *TRIPUNCTA* OR POLEAXE.

Some people usually carry a poleaxe which is as long as the hand can reach in the air. But in truth it is much better to have one which is slightly longer. It is good to threaten with the *calx* and return with an *ascendens* (rising blow) from the lower part to the higher, just as is usual with a sword for two hands. And this blow with the hammer of the poleaxe is to be directed to strike the other's hand and is to be repeated, though finally it should be drawn back through the other side, in the same way as is done with with the point. Now and then one should throw at the other's foot with the *calx*, at the same time bending our body with the poleaxe, so at the same time the point, without a moment of time, rises to touch the other's head, and then our body and arms are to be raised. And it is a good devastation to walk on the side which goes in front, moving the poleaxe with the pole around, almost like a wheel, and so it often meets the other's blow, but also throws out or evades, sometimes densely and sometimes long, now and then even short, in all places we always have an opportunity to touch the other, even though he brings his poleaxe in a circle in this way to parry our blows, for those who are wont to parry are instead deceived when they think that their weapon is held fast with the adversary's weapon. It is easy to go back or to direct our weapon below, to strike the adversary. It is best to always to proceed here and there, calmly or without rage, lest we fail or show what we are going to do. But it must be quickly and with great impetus and force when needed.

XII. HOW LONG THE POLEAXE MUST BE.

The length of the poleaxe or *tripuncta* to the hammer should be in measure one hand longer than the man carrying it, so that it can reach everywhere, without being lowered to strike the other's foot, for a distance on the ground as long as our self. For in leaning down great danger threatens, especially if we are wearing heavy armour, since the weight of the armour weighs forward, and no one can recover quickly. And in combat one should walk as far from the other as he is tall, for when they are fighting and come closer, they can be seized with the hands. Here, however, once we approach, it is more beneficial to work a dagger or *mucro* than a poleaxe, taking the other's *tricuspis* with our left hand or seizing in another place which is safe, so that he cannot flee; or we should make a grip by which we can throw him down.

XIII. TO WHAT EXTENT THEY PLAY WITH THE *TRIPUNCTA* OR POLEAXE IN FRANCE AND GERMANY.

The French especially, and very many Germans, play with the poleaxe and *mucro* almost like they fight with their hands only, and in fact children, women, and peasants have this kind of habit, when one of them holds a stick or weapon in the hand and the other grabs it at the other end to break it. Therefore they walk, rotating their arms, now higher, now lower. But an expert never ends up in such a test of rotating arms, except in order to wound or throw down the other. And he that is a good wrestler is suited enough for this. Therefore, one who does not know how to wrestle should learn to carry the poleaxe at a distance or turned aside, and extend it to touch the adversary at a suitable time. For if it comes to close grips, the good wrestler prevails. But the right hand should hold the dagger or the shaft of the poleaxe, and the left should be intent on seizing or capturing the other's weapon, or on throwing down the enemy himself. And here one is not concerned about throwing our poleaxe into the neck or legs, or between the arms, of the enemy. And if we are in armour, we must use shrewdness, to strike the parts which are the least covered, such as the visor and armpit or under the arm, and the navel and the groin and the feet. But against those who want to come to the half-axe to fight and turn ours aside, we should walk at a distance, throwing our blows, withdrawing with maximum speed, or directing our body sideways, or returning on the enemy, when an opportunity presents itself there. When he himself comes with half the shaft or poleaxe in

front, we extend our weapon and turn aside our body, he himself comes to enter on the point of our weapon. Nevertheless, note that it is to be understood that one should fight in this way only when unarmed with defensive weapons, for if we are in white armour ^(plate armour) we should continuously go forward, or at least around, so that we by no means allow ourselves be driven back by the adversary, and for this the poleaxe must be caught at the middle. It is good to make with the poleaxe two *manudexters*, the first short, the second long, and so that it is turned into a thrust. And similarly by our left hand two other blows, and the last comes in a thrust.

XIV. HOW TO FIGHT ON FOOT WITH SHORT AND HEAVY WEAPONS WHEN IN WHITE ARMOUR.

When one happens to be fighting on foot in white armour (plate armour) and with an axe or *tricuspis*, a few things should be done here. Firstly, for instance, one should walk around on the side which goes in front of the other, in some way. It is never fitting to walk back though, unless sometimes one step only, to let the other's blow pass in vain, or entering on the adversary, so that we have a suitable time to strike our blow against him, but similar steps in a lateral way or to the side are better. The axe is to be held at the middle with both hands at a small distance one from the other, and the hands should be held close to the chest. And if it is a right-handed man, that is, one who uses the right hand, he should always hold it (the right hand) in front, and also the right foot, but only a little in front, since the feet are to be kept almost level with each other; and if he is left-handed, he should go ahead with his left hand and foot, for in this way he has greater power. And if he is correctly armed in white defensive armour, even though the other moves hands and feet, that is, sometimes the right hand in front, sometimes the left, by no means should any change be done out of it, apart from what we have already said here in a few words. Therefore, in this position, the *maza* (mace) or *tricuspis* is to be carried towards the lower and rear side. And from this position, in whatever way the other comes, we can parry his blow and strike our own blow against him. If he throws forth, we should parry towards the head with the *tricuspis* or the upper part of the axe, and at the same time the blow should be extended in the way of a forward strike or *stocchata* (thrust) towards his throat, so that the cross of his axe goes sideways for the reason that if the point does not take him, the crosspiece of the axe sticks in his neck. Therefore, if we brace correctly, it is easy to throw the other onto his back. We should, however, always walk with

our feet below our body in a straight line, so that we do not, when pressing against the other, fall on our face. And if the other strikes a blow from below, whatever way it comes it is to be collected with the pole of our axe, and we should enter with one step and, through the lower part, throw a great blow with our mace at the other's hands, and we can also do the same when he comes from above, collecting his blow with the pole, and so that we may better be able to parry and perform our blows, always, in parrying and deflecting, enter with the foot, namely with that (foot) which is on the side where we renew in parrying or (we should enter) with that (foot) which remains when we enter to strike a blow. Finally, in this way of fighting on foot and with heavy armour, what we always want, in one, two, or with more than three blows, we can join with the arms, and, reaching down into that position, the lowest grips should always be made, especially by the legs because of what the adversary is carrying in front. And yet it must be noted that when seizing, our head must not be inclined, but the legs should bend and always walk under the torso. If the other comes at the neck, as many are in the habit of doing, we should cast his arms forwards and take him by the back, which is easy. And he who seizes the other by the legs can rarely fall completely under him, since he always goes turning with some limbs over the adversary, and when falling he should not let go of that leg. And it is to be noted that when heavily armed, almost all men, when coming to arms, use big strategems with the feet, such as the *mediana* or *circumdata*, or the *disclunata* or *chunesleuium*, but those two strategems are easily destroyed, both in one and the same way in similar time. Those who know less, place a *nestia* or *transuocata* or *transcoruata*, and against those tricks we should quickly and with the greatest violence, lift our leg, at which they attack, as much as we can backwards, withdrawing it on the side, powerfully rotating the other, so he falls on his back, which is very easy acting in this way. It is necessary, however, that our feet go almost equally and with sufficient distance between one and the other.

XV. ON THE *LANCE* WHICH IS CALLED *GINETTA* IN THE VERNACULAR, AND THE LONG LANCE.

The *ginetta*, which is called a medium lance, the long lance, as well as other spears similar to those, are to be held low and extended, and if our right hand goes first, the right foot should go first, too. And we should not understand anything different at all about the left side. That we may strike more quickly, the foot which was in front must be drawn back, meanwhile engaging in a way of threatening with a staff which is called *palus* or *bastonata* in the

vernacular. But we must enter in or defend with the point of the lance. And when a javelin is thrown against us, we should parry with our haft, and turn the body sideways, and then we shall make repeated blows against the enemy, some long and some short. But as far as we have gone forward, we should withdraw the same measure, without pausing, as long as the other does not go as if defeated, because then he is to be quickly followed; otherwise it is suitable to withdraw arms and feet. Otherwise it is indeed have to be feared that the other would enter below us. But if we want to go before (the opponent), or lay an ambush elsewhere, it is fitting that we move to that side on which our hands and feet are forwards.

XVI. THE PRINCIPAL DEFENCE OR GUARD WITH A LONG LANCE AND OTHERS OF MEDIUM LENGTH.

The principal defence of the long lance and others of medium length, is, we say, holding our arms raised almost as much as we can, so the point of the lance is directed into the other's chest; and as soon as he wants to do anything, we should make a step on the side with the foot which goes in front and cast our blow into his chest. A secure defence, also, is to hold our hands downwards or lowered, and so that the point of the lance goes in the other's face. Sometimes the weapon is brought sideways to parry the adversary's blow and cover our person. But to strike the blow, it is to be directed at the adversary's person. He who has the play with the poleaxe can go to whichever direction he wishes, since the poleaxe teaches to always go back and forth and sideways. The principal deception against any hafted or long weapon is, we say, that when the adversary comes to strike our weapon, we turn aside with a sideways step, and at the same time we strike him, or at least his weapon, with ours, and our weapon is to be turned aside with a circle or circular movement to strike those who stretch forth a lance, and turn its point to the ground. Meanwhile, though, by discharging ours above his, we can join ourselves with him. Having, however, seized the spear by the point, in this way, any weapon they throw against us can be turned aside or the blows they strike, holding in the hand, so that the weapon goes in one direction and the body in another. With whatever kind of weapon, long or short, in attack or defence, the other's weapon must not be permitted to strike ours, instantly with another full blow, together with the right foot, we must enter to strike the other with the point of the weapon, and this should be easier with a sword than with other weapons, and perhaps more useful than other ways to fight. Sometimes a long lance is caught with only one hand by the shaft, the point, actually in the ground, and then, with some

weight, the point is thrown in the way of a *stocchata*, sometimes in the way of a *manudexter* and sometimes a *manusinister*, though it is always the point that the lance goes. But in fact, sometimes the hand is directed from our right side and sometimes from the left. And as far as the lance goes forwards, the right foot should follow. And in making a blow, we should in the same moment withdraw, and when the adversary makes a rush in on us we should follow him and go with the other hand to support the lance. In fact it is always better since that vigorously placing the lance in this way we hold it by the shaft with both hands, for the reason that we may raise it in an easier way. But when it goes in the air to strike, raise the left hand, for one only obtains much more when they both want to go together. Nevertheless in recovering the lance, it is always safe to oppose with both hands, so that if the adversary throws with one hand, one should enter with a step on the side to throw with both hands. Then we hold the maximum superiority when we are armed, since with one hand there is little capability in fighting. For no one can disconcert himself in the way of taking a course as if building a wall against the other, especially as he who does this restrains greatly exposing his actions. So that it is easy for turning away our person or the enemy's blow and to enter against him to strike it is appropriate to have the custom of moving the lance from one hand to the other, so that we are able to hold it in one hand and guard ourselves with a short weapon with the other. And this is good to know with all weapons, that, if they hinder one of our hands, we can take hold of the weapon in the other and aid ourselves with it.

XVII. ON PLAY WITH THE *LANCE* OR *PICHA*, WHICH IS A LARGE LANCE WHICH STANDS BETWEEN THE LONGEST AND THE MEDIUM.

In the play with lance, *picha*, or *ginetta*, it is not usual practice to place the points in the ground, but always to raise them in the air, and also with the long lance this way is better if someone may bear it for a long time, especially if there is to be single combat. But if someone would wish to join with another, it is fitting that his lance immediately passes to his left hand, and the hand should hasten along it towards the point, and simultaneously or at the same moment, he should take the dagger with his right hand. But our lance is not to be discharged until we are together or we make a good grip. But if the other discharges his lance, we must go back and take our own in both hands. When though, they throw some blow against us on one side, it is a sufficient devastation to quickly cross our lance overhead to the same side from which the other's weapon comes, and the body should remain where the spear was at

first, changing our hands and at the same time making a blow against the adversary, so that we deflect his spear and he remains without cover. And if the other wishes to do the same against us, we should threaten or feint with one short blow to the uncovered side and hold back the blow, and at the same time let that another long blow extend towards the other side, on which it passes, quickly and strongly with the point, or indeed that we take a step sideways, directing a blow towards the side from which it departs. For then he can bring no detriment against us. Finally, the best blow possible by a long lance or other medium ones, is lengthening the step with the foot which goes first, so that the lance makes its way once again, entering at the same time by one long step with the foot which remained behind. And that the lance in only a single time should be extended as much as possible to strike the enemy. With the *ginetta* lance, one sometimes plays like with the long lance, sometimes like the poleaxe, sometimes threatening like a *baculata* (stick, staff) and casting out with the point towards various places, above as well as below.

XVIII. ON PLAY WITH THE STAFF WHICH IS CALLED A *BASTONE* IN THE VERNACULAR.

Play with the staff is experienced to be useful in knowing how to roll and change the arms, though it is not safe to use similar play, except play with the poleaxe, since weak blows are thrown, and we cannot carry out an attack or defence.

XIX. ON PLAY WITH A SWORD FOR TWO HANDS.

Weapons which are short correspond to the play with a sword for two hands. The principal blows are two *ascendentes* (rising blows) from whichever direction from our sides, and the last should finish with a *stocchata* or thrust, and that we immediately go back to cover ourselves or to strike some part with a double blow. Our arms should remain raised or extended in front, and we should withdraw with the same steps as we had advanced, and the sword must not be discharged sideways, for then our side remains uncovered. And therefore the side is to be avoided and the danger of lateness in covering is demonstrated to those who observe correctly. And here the sword for two hands teaches to evade with, preserve, and roll the hands, and frequently attack the other's hands with our blows. When he wants to do a very great turn or that he does not have straight arms, it is easy to strike him. And when he enters with two rising blows from whichever side he wishes, enter with the foot which remained

behind and direct the last rising blow into a *stocchata*, in the way we have said. But the arms should be quickly recovered on the other side, and our whole person is to be turned back, and also in this way it is good to throw a *stocchata* with a sword for one hand, especially if we have some defensive arms, and it is fitting besides to commit two rising blows from the right part. And this first step is to be made with the left foot and the second with the right at the same time as a thrust. But immediately both feet should go back, and this can almost be done on both sides.

XX. ON PLAY WITH A SWORD FOR ONE HAND.

The sword for one hand should keep the way of the sword for two hands, though it is more easily feinted towards one limb and turned back towards another, and two *reuersus* or *manusinistri* (left-handed blows) are powerful. With the first putting the right foot forward a little, the second should be done with the same foot. In the last blow, however, the step should be lengthened as much as possible by diverting the foot quickly backwards or sideways and directing the sword again at the enemy's hand, making a *guida* (a blow which lies between a *puncta* and a rising blow) or feint in the enemy's face, so that the sword comes to strike through the leg in no more than a single time, or indeed to first threaten and put forth through the lower part, so that it is extended long at his head. And similarly this can be done with the left hand just as with the right, but double blows, should not however be done in two times, but in single only, and so, when one cuts below, one must quickly withdraw to preserve the head with a feint or in the way of a circular turning.

XXI. ON SOME USEFUL BLOWS.

One should always maintain an extended arm, so that it is not bent double either in entering or in coming back. When we throw a blow forwards, the body must be extended as much as possible together with the arm, and all joints should be seen to be loose, bending the knees so that we reach better, and the sword is to be conducted in a circle, so that it goes faster and that it does not strike the ground, for by bringing the sword around itself, we can carry and bear a great weight. But if a weapon comes from above, in a rising blow or sideways, the point should always look for the other's hand, and the swordpoint should come higher than our fist, and so we shall hit the other before he reaches, and otherwise it would follow the other way

around. Two *stocchate* or thrusts, one high and the other low, just as we do with a long lance, are powerful. And this can be done with all weapons, so that the first thrust is deceptive, the last, though, is long. But both are to be made in a single time, or one must threaten with a *manudirectum* or *manusinistrum* with the point returning towards the face, and this is useful with a sword for two hands, so that by striking one *reuersum* or *manusinistrum*, or a *manudextrum*, through the lower parts, the point goes in a circle to strike the face, raising and extending the arms as much as possible. And likewise, if we do two *montantes*, or rising blows, it is excellent to convert the last into a *stocchata* with this sword. Furthermore, it is sometimes fitting that the hand runs along the handle all the way to the pommel of the sword, so that the sword is lengthened in a *stocchata*, with the sword for two hands you should understand, that it has a long handle. This can be done with whichever weapons we grip with two hands. Nevertheless, the hand is to be quickly redirected to the position in which it was before.

XXII. ON BLOWS COMING FROM BELOW.

Blows coming from below are good. Nevertheless, those which descend bring greater force. And therefore our body is to be turned away and we should not cut except with little of the sword when we want to resist blows coming from above and we are to gather ourself on the side, so that we can have an opportunity to protect the limbs. But when we hold a defensive weapon, we can enter and cover ourselves. Nevertheless, when someone comes to take hold of our arm or weapon, it is fitting for the arm to flee sideways so that it returns to wound the enemy.

XXIII. WHICH BLOW WE CAN USE WHEN WE WANT TO JOIN TOGETHER.

If someone wants to join with another, watch for when he strikes a determined blow, such as, if he brings a *manudextrum*, then one can go first with a transverse step, which in the vernacular is called *contrapassare*, so that our sword goes with a *guida* or rising blow to parry the other's sword. At any time a *reuersum* or *stocchata* can be done through the lower part. And if the other comes with a *manusinistrum* or *reuersum*, one may go across with a forward step. However, when on a transverse step with the left foot, our sword should ascend and go through the same left side, so that the weapon of the other can be held back, and striking with

a *manu sinistra* on his right arm, that we may send forth a blow through the legs a *stocchata* or *puncta* is to be parried like a *taglium* (right-hand blow) or *reuersum*.

XXIV. ON THE FIRST GUARD OF THE SWORD.

It happens that some, when fighting with a sword, are placed in the first guard, that is having the right arm high on the right side, and here they lie in wait until they see the other strike his blow, and in crossing they come back after him with some *findente* (cleaving blow) or descending blow.

XXV. A REMEDY AGAINST THE FIRST GUARD.

Against those who are placed in a similar guard, that is, in the first, there should be a feint that we want to bring a *reuersum* from above to below, and not let that it finishes completely, but that in mid-time, we divert it upwards, in the way of a *guida* or rising blow, to block the adversary's sword, and at the same time enter with both feet to join with the other, or we should cut through the lower part, or he should come to send his hand through the point of our sword.

XXVI. ON THE SECOND GUARD AND AN OBSTACLE OR REMEDY AGAINST IT.

Some others habitually place themselves in *secunda* (second guard), that is, with the sword on the left shoulder, especially if they hold a *pelta* in their left hand, and when the enemy strikes a blow, they withdraw the right foot backwards, and at the same time they enter forwards as far as they can with a long *reuersus*, and otherwise with the left foot with a sideways step, almost, to strike the side of the adversary. Against those however one must bring a short blow from the right hand, and the sword should go across quickly with a turn, and return with a *reuersus* to parry the other's sword, and then we should join ourselves with him. If however the enemy, for the reason of coming to us, wants to make the same blows, the body must always be turned backwards and the sword should go with a rising blow, such as a *stocchata* or thrust to strike, quickly removing the hand and foot to the other side, which is opposite to

that in which he comes. And in this way, though we would remain close, they cannot take hold of our weapons.

XXVII. ON PLAY WITH SWORD AND *PELTA*.

To play with sword and *pelta* at first it is good to teach ourselves to cover without sword, with only a *pelta*, as we do with the sword when we have no *pelta*, since otherwise a long time would pass before we would know correctly how to cover ourselves. And it is only needed to stretch out one arm so far, just like the other, and in such a way we can enter above or below as much as we want. And without a *pelta* there is no safe approach, because we have no opportunity to cover the head or other limbs.

XXVIII. ON PLAY OF SWORD WITH CAPE.

With sword and cape many deceptions are possible, but they must always remain of the sword from the cape, as though we were playing with the sword only, and the blows, likewise, must be done in the same way. And so we must go to parry or oppose with sword and cape at the same time, and then the cape is to be sent out there in opposition to the other's weapon, and our sword should go below to cut, or towards the other side. If we see an opportunity, our cape is to be thrown from below upwards, to be an impediment to the adversary's face and sword, it is sometimes useful that we go with a right handed blow to cut with the sword. And if he throws his cape against us with swiftness, we should quickly withdraw towards the rear, striking his cape with hands or weapons to keep him from covering over our sword or eyes. But if we remain with only the sword, if we know correctly how to play with it, we shall not find much disparity or need, even though the other has sword and cape.

XXIX. ON PLAY OF THE SWORD WITH A *PARMA*, WHICH IS A DEFENSIVE WEAPON OF LEATHER, IN USE AMONG THE SPANISH AND THE AFRICANS.

In playing with sword and *parma*, one side is to be left uncovered so that the enemy comes himself to strike, when he approaches, we must enter with our foot, which we keep extended, to cover our head and direct a blow through below. If, though, the other does the same, we

must move back, giving a *stoccata* or point in his belly through the place in which he is uncovered or if he comes with a right-handed blow (*manu directo*), which is called in the vernacular a *taglium*, we must similarly go with another right-handed blow through the lower parts and occupy his sword with our *parma* and at the same time not roll out on our right side. If, indeed, he come with a reverse or right-handed blow, we must receive this with another similar one, according to the same rule which has been said of the right-handed blow. But if the adversary wants to steadfastly wait with the *parma*, more blows are to be thrown against him which come in a right-handed turn or circle which cross through the legs or the lower parts and which roll out without pause with a *reverso* at the head. If, though, the other covers up and proceeds crosswise against us, we must make a step and a little backwards, sending forth a *stoccatta* or any other blow at the place which he has most left uncovered. And so a single sword can fight against him who has a sword and a *pelta*, *parma* or *rotella* or whatever, one may go back sufficiently at whatever time because of not having a weapon to cover himself and then one should make long blows and in various places, always walking away. Otherwise, so long as we have a great *parma*, dangerous blows are made if we follow the play of the *parma* of leather and sword just as the *pelta* is placed high and two reverse blows are thrown, with the right foot, and that the left follows the right and we are to enter on our right side. Finally, the right foot is to be diverted in a backwards step and our hand is to remain high to cover us above, and below with the sword. For commonly the other pursues us with such a thrust. for this reason at the same instant we must cover our head with the *pelta*, diverting the right foot with a big step and to throw a *stocchata* in the face or belly of the adversary or, indeed, to throw out a single *reuersum* and go back with foot and sword in the way which we have already said, which almost never can go wrong. And if, as well, there are strong blows if the man is positioned lower down on his knees and if the point of the sword is almost in the ground on our left side and the *pelta* is like a belt or comes in such a direction. And the enemy approaching, goes to discharge on our head or at another part, quickly cover our high parts, entering with a long step and a *stocchata* at the same time as the enemy comes forward. Other strong blows can be made such as when we ourselves want to throw a *manudextrum* or *reuersum* and we want to make another similar to clash with his sword so that in the same time our sword may run under in front that it may strike the enemy in the face or chest and that his own sword may be diverted that we may not be reached. A devastation of all these is to walk with a large step on the side so that it may come a little rearwards as well, that we throw out a rising *stocchata*, we extend to hold back the sword of the other. Next

immediately legs and blows are always doubled or should be doubled in a single time without pause.

XXX. ON PLAY OF A SWORD WITH *ROTELLA*, WHICH IS LIKE A *PELTA*, EXCEPT THAT IT IS LARGE AND WHOLLY MADE OF WOOD AND A HANDLE. BUT THE PLACE WHERE WE SHOULD HOLD IT IS DIFFERENT FROM THE *PELTA*, AS IT CONTAINS TWO HANDLES, LIKE A *PARMA*, AND THE ARM ENTERS THROUGH ONE, TO LET THE HAND TAKE HOLD OF THE OTHER. AND THE *ROTELLA* IS NAMED FROM ITS PROPERTY OF ROUNDNESS.

When holding a sword and a *rotella*, one should follow the same blows as if we play with a leather *parma*, in the way we have said above, and for this it should have handles, like a *parma* has, that is, one close to the other, by which we take hold of the *rotella*, since in the way in which it is used, the arm is placed very much inside in the handles. And then it is a great hindrance for us, when it cannot be moved fast and cover the whole person, and also the *rotella* remains so close to us that, although it passes a little forwards, the adversary's sword reaches our head or another limb.

XXXI. ON PLAY WITH *SCUTUM* OR *CLYPEUS*.

The *scutum* or *clypeus* we should keep firm on our shoulder, and the handles should not be too far from each other, since the man should be able to move it wherever he wishes. Blows are to be made like with the *rotella* or *parma*, frequently by *contrapassando* (a transverse step), that is, stepping to the sides and raising the sword where the adversary becomes less covered.

XXXII. ON THE DAGGER OR *MUCRO*, AND SOME OF ITS BLOWS.

It is more useful, we say, when we approach to play or fight with a dagger, that we place it through the lower part towards the enemy, to keep it from being snatched away from the hand, and so the grip and the method of the single sword is to be observed, though with greater swiftness and lightness of the limbs, since, when the fighters remain close and have short weapons, it is not so easy to parry. And when any blow is struck, it is fitting to walk on our

right side. If, however, the enemy sets a blow against us, we must step back a little, throwing a *stocchata* at his left side.

XXXIII. ON THE SAME PLAY WITH THE DAGGER.

Against those who come with a determined blow, many hindrances can be made with our *mucro*. Indeed sometimes by taking with our hands the arm with which the other carries the dagger, by parrying or defending through the lower parts and elsewhere so our hand comes behind the other's arm, so that we make him fall. But if the enemy wants to enter through the lower part in the way of a thrust, we must contact his dagger as is usually done with a sword only, and at the same time throw into his face. Finally, if someone has knowledge of wrestling, none of those blows can inflict any injury on him, not even if holding a *mucro*, since, if his hand is always circling otherwise than ours, his body moves aside, which is easy for him who knows how to wrestle.

XXXIV. ON THE WAY OF PLAYING WITH PARTISAN AND *ROTELLA*. A PARTISAN WE CALL A HAFTED WEAPON SOMEWHAT LONGER THAN A POLEAXE, WHICH HAS A BROAD IRON LIKE AN ANCIENT SWORD, THOUGH WIDER AND SHORTER.

In play of partisan and *rotella* we must walk above ourselves, until it is possible to see what the adversary wants. And at that time we should do the play of the poleaxe, entering and recovering moderately and often, threatening the face with a short blow. Then we should send forward a long blow to to the lower parts, the hand running along the shaft or, as we would say, rolling the *partisan* under the hand, throwing at the other's legs. And we should always parry whatever blows the others can deliver, turning aside head and legs, as we do with the poleaxe, and in parrying we must *contrapassare* or go on the side, throwing one blow above and the other below. He whoever knows how to cover himself with *rotella* and sword will be easily covered in an equal way if he has a partisan, especially if he knows the play with the poleaxe. And in this there is indeed not too much need of a *rotella*, except when the adversary would force the partisan outside the hand against us, remaining very close, and then there would perhaps not be time to parry it. Positioning ourselves around the adversary, if he has a high partisan and goes ahead of the *rotella* too much, we must meet the point of his partisan with our *rotella* to make him enter into the *rotella*. And when he sets about pulling it away,

some adversity can happen to him. Therefore we should take precautions, so that our point does not contact the other's *rotella* through the coming together.

XXXV. ON TWO PARTISANS WITH A *ROTELLA*.

When holding two partisans with a *rotella*, one should throw one of them, remaining at a medium distance from the adversary, and as soon as it reaches, we must arrive with the other held with both hands, to strike the adversary in another place, which he leaves uncovered, since he rolls around to turn aside our partisan, and in the meantime he remains impeded and uncovered, and even though he does not turn around, he is to some extent impeded, since he is holding the partisan by the middle and with only one hand, and we are holding ours with both hands by the *calx*. Therefore, before he can guard himself, he is running into the greatest danger. And this blow is principal in the partisan, or whenever we are holding one weapon for throwing and another for keeping in our hand. If the other throws his partisan against us, it is fitting to *contrapassare* to the side, turning his blow aside. And the *rotella* should reach under our right armpit and remain fixed there, and immediately we must carefully withdraw a little. For if it happens that the enemy holds his *partisan* with both hands, we have an opportunity to parry ourselves.

XXXVI. HOW IT IS EXPERIENCED AS USEFUL TO ENTER TO THE ADVERSARY'S RIGHT SIDE, AND HOW WE SHOULD HOLD OR USE OUR *ROTELLA* OR *DARGA*.

Commonly all tend to flee on their right side, to be able to contact our weapon and turn it aside, and from this it is useful to throw above that side and cover us. Therefore, when we are *contrapassing*, that is, walking on the side avoiding the other's weapon, we must place our *rotella* and *darga* always held tight, so it always touches our right elbow. Nor must we allow that the adversary's *weapon* comes to our *rotella* or *pelta*, but it must be impeded by contacting with our offensive weapon.

XXXVII. ON THE WAY OF STEPPING ON THE LEFT SIDE.

We say that it is safe to walk on the left side when the other throws a weapon at us. For commonly right-handed men, when throwing a weapon, unleash it on the other's right side. however he is left-handed, he turns the weapon which he casts to our left side. Therefore, against the left-handed, when they throw some weapon, we should flee to the right side, and with a left-handed man we should go to the left.

{65}

XXXVIII. ON THE STRATEGEM WHICH WE SHOULD USE WHEN WE WANT TO THROW OUR WEAPON AGAINST THE ADVERSARY.

The best way to deceive when we want to throw a weapon against the enemy seems to be by committing or threatening softly, and driving in when he imagines that he has already gone out of the way, and then we should lengthen our arm so that the javelin is committed, and it goes to the place from which the other is evading.

XXXIX. WHAT TO DO WHEN WE HAVE A PARTISAN, A CORSLET AND A *ROTELLA*.

If one has a corslet together with a *rotella*, our *rotella* can sometimes be thrown at the other's face, especially when we are fatigued in any way. And at that moment one must reach with the partisan, held in both hands, since, while he is engaged with this impediment, we can wound him, and even though he remains with the *rotella*, we shall always be stronger than he is, unless it happens that he casts his partisan at us. But this, as if devoid of all hope, he would do especially if he did not have a dagger. And when he wants to take it by the middle, to be able to throw it, if we are close, we should throw very many blows against him thickly, long and short, especially at the arm in which he has the weapon, and in this way we do not permit him to deliver his blow. And the same is to be done against those who want to throw stones, in such a way that when he begins to threaten, it is fitting that our weapon strikes his arm or face. And if we have stones or similar things, we must go quickly backwards, and then one should throw against him, and at the same time, join ourselves to the adversary, if we want to, but it is always dangerous. In the end to make certain the last means is to be carried out, since observations and points of offensive arms should always be of the poleaxe, and when we hold a dagger and remain close, we can throw the partisan at the enemy and join together with him. Of the partisan alone, the play of the poleaxe and of the sword for two hands is to be done.

Because now and then one must arrive with two rising blows, sometimes with *manudirectum*, sometimes with *manusinistrum*, and in a turn, like of the sword only.

XL. ON PLAY WITH *RONCHA* AND HALBERD, WHICH ARE OF ALMOST THE SAME UNIFORMITY AND LIKENESS.

The *roncha* and halberd are similar weapons, and one should play with them between the play with the partisan and the poleaxe, since sometimes one should come with a cut and at other times with a point, though for the most part we should act with a point, as with the poleaxe, and in the same way one should parry. The *roncha* has an iron for cutting, almost like a butcher's axe, a point also in front, and also another from side to side a small point, and the *roncha* has a longer iron, but not as broad.

XLI. ON THE *SPETUM*.

The *spetum* is commonly thrown with the point, though it has sharp ears rolled back in the way of a half bow at the front, which can tear by *reuersum* or cut; it is a powerful weapon. It has the opportunity to parry with the ears any weapon, long or short, now above and now below, and sometimes across. The *spetum* should remain in the hands so, that one ear faces up and the other down, so that when turning it, it goes somewhat to the side and gathers the other's weapon. It should have a sharp spike in the lower part, so that we can strike with it when two *speta* come to meet it with the ears, or to let the *spetum* knock or fix another weapon into the ground such as a long *lance*, and then the adversary would come to join, so we could strike him with the spike. The *spetum* can easily contend against any weapon. But however in opposing it, one should wear mail gloves for seizing, because the ears of the *spetum* cut. For the greatest remedy against this weapon, when someone is found with another weapon which is not of the same kind, we say, is taking one short lance with a point in the higher part and another in the lower, and similarly one partisan or *ginetta* to throw, and as soon as he throws what should reach to strike with the lance, and if there is only a lance, the hands are to be placed high and the point of the *lance* directed a little downwards towards the adversary, and there a blow is to be thrown. If though he who holds the *spetum* knows anything, he gathers the blow and places the point of the *lance* into the ground by weighing it down from above with the *spetum*. And as a remedy in the same moment, we must run

through the outer part, where the spike of our lance remains, to join together to the adversary or strike with the shaft. The ears of the *spetum* should be large, not straight but concave like a half circle, and in the place where they are at first in the beginning divided, they should be greatly turned away from the principal point, and afterwards a turn is to be given, they should cut sufficiently through everything, except in that beginning, because they should be able to run along the adversary's weapon to strike him in the hands or any other limb. In this way, just as can be done with the *spetum*, a light lance can be wielded on foot or on horseback, since the other's weapon can be easily turned away, and the enemy is always shaken or attacked by any blow with three points. Also against brute animals, a *spetum* made like this, and as far as it is firm, is a weapon safer than others. For within the way of striking, and so long as the blow does not fail, it keeps the animal from rushing at us, even if it is extremely ferocious. Then, to fight very easily against such weapons as the *spetum*, when each is to be armoured in his own way, the safest is to bring in white armour to put on, such as a corslet, called *corzeletum* in the vernacular, and of the offensive weapons, an axe, a weapon which the *spetus* cannot oppose, nevertheless in a similar way of doing battle the strong prevail very much over the weak. Further, one must note in play with this kind of weapon, that the *spetum* itself is always brought directly to the hands or chest of the adversary, not in a sideways way, like other long weapons which in the vernacular are called hafted, such as the axe, since those weapons do a parry going sideways, but the *spetum* opposes and turns away the other's blows only with the ears, and on top of that, which is the principal thing, since with the *spetum* we must be constantly intent on keeping the adversary's weapons out, that is, our *spetum* should go straight to the other's person, and his come sideways to us; therefore it is to be observed that we first take the other's *spetum* with ours before he takes ours with his. The blows should indeed always be struck straight to the hands, to the chest, or to the face, since in that way it is difficult to parry them. Of single blows, though, to harm the enemy and his weapons, there are few who have a great secret, since a principle with such weapons, or *spetum*, to speak in the vernacular, is to attend to parrying and turning away the other's weapons. Nevertheless, when we turn them away or fix them with our *spetum* we must, with the utmost speed and without delay, if it can be said, gather our arms back to us or backwards, and at the same moment that the point is thrown at the other's face, we must, at even be able at the same time together with the arms, take a step or leap back, and this should also be done with similar weapons if the other wants to join with us, if he happens to have stronger limbs than we have; and if the other wants to deliver similar blows at that time, we should take one step back, but on the side.

XLII: ON THE FIGHT WITH TWO PARTISANS.

When fighting with two partisans, it is suitable to hold one in the left hand, straight in front of our body so that its iron faces upwards, since, if the other casts at us, we can parry with one or the other of our partisans. But if we cast first, our weapon is to be aimed at the other's right shoulder, for either he cannot parry or we impose so much aversion on him that before he disengages, we shall find an opportunity to harm him with the other partisan held with both hands. But if we have an *imbrazatura*, that is a defensive weapon, such as a *pelta*, *rotella*, *darga*, *parma*, *scutum*, or *clypeus*, and the other grabs his weapon with both hands, we should likewise take ours with both hands, though we are on horseback or on foot.

XLIII. HOW TO PRESERVE OURSELVES IF WE SHOULD HAVE A LONG WEAPON AGAINST A SHORT ONE, OR THE OTHER WAY ROUND.

When holding a long weapon against a short one, it is good to keep going thickly with blows. Nevertheless, one must keep guard so that, if the adversary wants to join with us, the point of our weapon is always found in his chest, and therefore we should repeatedly keep taking some steps backwards. If however we are holding a short weapon against a long one, we must walk very much to rearwards, and it is fitting to parry the other, and then quickly approach the other, turning aside his weapon. But if he will be shrewd, we shall find a means for harm or devise an opportunity.

XLIX. WHAT KIND OF STRATEGEM WE CAN USE WHEN WE ARE ON FOOT AND WE WANT TO WAIT FOR ANOTHER, WHO IS ON HORSEBACK.

When someone is on foot and intends to wait for a man on horseback, he should take the weapon with both hands and extend it forward. But if the weapon is somewhat long, so that its point touches the ground, one should stand firm until the rider comes through a distance of forty or fifty steps, and then our lance is to be held with one hand only, and with the other we should throw at the rider some light weapon, stone, or the like. And when he reaches our area, we should return to take hold of the lance quickly with both hands and to turn away the other's weapon with ours, with a sideways step. And we should not proceed on the same side as we held before, and when the enemy passes, we should strike him or the horse, we should

hurry to pursue him, though we shall always remember to turn aside his weapon, whatever way he wishes to come. If however he wants to turn the horse, it is appropriate that we are present near him and do not allow him to turn, rolling around to wound him. And if the horse comes at us with maximum severity it is necessary to contact its head with our weapon, and we should jump sideways, always throwing two blows, as we usually do with the poleaxe: one to strike the man, the other to strike the horse. And in this way we can defend ourselves with just one sword against a rider, though a medium-length lance is better, and in this fight we should on no account flee, except in moving aside when it is time, yet not showing from where we want to move. And he who remains on horseback, can inflict little harm to the one on foot. But few footsoldiers are found who are brave enough to do battle against riders. In the end, if they would observe correctly, they are sufficiently able. For supposing that they fall, so that at last they lie on the ground, they can very easily kill the enemy's horse though the lower parts, especially if one has put on defensive arms and the rider has no lance, for with short weapons it is extremely difficult to reach the ground. He though who is the rider should strike one blow or make a short attack. The other, however, should be long, even though the man on foot can always stretch forth his weapon, and in this way he can wait against riders in any terrain, as long as there are four or five steps of width or space. It is fitting for he who is a rider, though, to bring a lance, so that it can be carried at the middle with just one hand, and when he reaches close to the man on foot he can pretend to throw only a single blow. And when the footman wants to turn it away, the arm with the weapon must be gathered back a little, and at the same moment another, long blow should be made, which can easily harm the adversary. And if we want to carry a lance with iron to the rear for the reason of striking the other, when our horse is passing, it likewise appears fitting to throw out another two blows, if the man on foot happens to turn the first blow aside, and the same can be done between two riders.

XLV. ON CERTAIN PRINCIPAL BLOWS IN ANY KIND OF WEAPON.

Finally we set out the greater part of the principal blows, in which the principal foundation should be done, and when we have a single sword, as when we hold a defensive weapon in the other hand, we should threaten in the first blow, or make a feint however, by briefly throwing short and withdrawing backwards once, and otherwise sideways. In the first blow it is useful to take one step to the right, extending our limbs as much as possible. And we should

throw at the other's arm or over his hand either a *manudextrum*, or a *stocchata* or thrust in the left side. But the *stocchata* is best, because it usually reaches better, and besides we are more able to lower ourselves on our back. And when we want to attack the other's hand, it is especially very useful to do a *manusinistrum*, and it should pass to our right, and at the same instant as the other comes, we must go with a right handed blow. When we want to go at the adversary's hand, it is useful at the beginning to carry out a *manureuersum*, and it should go across slightly, and at the same time as it comes, we should go at his hand with a *manudextrum*. No guard, or way of remaining to defend in arms, is absolutely safe, for if we want to shut ourselves up we veer towards ruin, and it usually happens, that repeatedly masters, swordsmen, or those who, in weapons, have the duty to teach, disturb others and receive a loss, as they put themselves into an uncovered guard. And in truth, just as in wrestling no grip is safe, there is no secure guard found in weapons. Accordingly it befits us to always go on the contrary to the enemy and carry the weapon with readiness, to let it always go before us, seeking uncovered parts, and when the adversary is threatened, we should unceasingly walk lightly, and in this way the enemy cannot move so fast that we do not sense him and he has no time to parry us. And with this way of governing ourselves, we can get a better example in that which we shall do when we begin to wrestle, than in another place; that rule is understood for all exercises when being a footsoldier or on horseback.

XLVI. HOW USEFUL IT IS TO *CONTRAPASSARE* OR DIRECT A STEP TO THE SIDES.

To feign with feet and hands is good. For if we remain fixed, they can very easily hit us, also because when we want to move we give notice about what we are going to do. But if we walk temperately to whichever places, they cannot tell at all which conclusion we are going to make. Two *guidas* or indeed *ascendentes* (rising blows), which come from the left, are useful, though we should withdraw from the right side with a thrust or *guida* at the adversary's arm. Whenever two blows come at once, the first of them should be long enough to frighten the adversary, and also so it is to be seen that we extend the arm sufficiently. But the last blow is to be done quickly, and we should lengthen all the limbs as much as we can. If though, we throw at the lower parts, our body should be lowered, and if we raise up at the higher parts a *reuersum* or *guida* at the head is safe, taking a step on our right foot, and then we should bring a thrust or *manudextrum* to the other's left side.

XLVII. HOW DANGEROUS ARE RIGHT-HANDED BLOWS.

When fighting with swords, right-handed blows are dangerous. For when we do those, we remain uncovered. Nevertheless, bringing two at once, similar to descending blows, and that they do not descend further down than the waist, they can be done safely against any person. But they must be directed towards the front and not lower, this means that our sword must be made firm, retaining it level with the belt or thereabouts, not coming lower. However it should return upwards in the way of a wheel.

XLVIII. ON CERTAIN *MANUDEXTRA* AND OTHER BLOWS.

Making one feigned blow, and sufficiently long, is a very much approved strategem, and the blow itself should go in a circle through the left side to strike in the face, or indeed it should be done through a prior *manureuersum* committed at the legs. Afterwards to a *guida* in the left part of the face. But if we want to wound the legs, a *manureuersus* should first be directed to the face, and the sword should go back with a turn to strike the legs, or we should first do a *guida* in the face through the left side, and it should be turned with a *reuersum* to strike through the lower part. We call *guida* a blow which lies between a *puncta* and a rising blow. And it is to be observed not to make these these double blows in two times, ^{but in} one only, and meanwhile we should shoot at the head with a blow which is half *stocchata*, half *guida*, or between the one and the other of these, and to turn towards the other side with the same blow in a single time. But beginning to the left side is altogether best.

XLIX. WHICH BLOWS WE SHOULD STRIKE AFTER WE DRAW THE SWORD.

In drawing, or unsheathing, the sword, we should first throw with the left foot and make a great show through the head, and at the same time lower the sword, and a thrust should be thrown, entering with the right foot to join ourselves, as we usually do with a poleaxe, and since striking a thrust to the chest at one single time is difficult to parry. Yet walking moderately in the same way as with a long lance we make two blows at once, namely the first short and the second extended. Similarly, with the sword two *stocchate* should be made, one of which short and through the upper part, the other long, though, and preferably should go below finally, without a moment of time, except that only the hand be turned a little.

L. WHICH BLOWS WE CAN MAKE WHEN WE WISH TO ENTER INTO A FIGHT.

He who wants to join with the adversary should make a right-handed blow, demonstrating utter fury, which extends low and does not pass too far to the left, and we should leave our upper parts uncovered, because, if the other comes to strike through the head, we should take one step forward with the left foot and take long steps, and our sword should go to parry the other's sword. But if we hold a *pelta* or similar defensive weapon, it should go to touch our head, and the sword to cut the enemy's arm.

LI. ON TWO *MANUDEXTRIS*

The adversary commonly responds against us throwing two *manudextros*, through the upper parts, and so at mid-time the last blow should not lower beyond the belt. But it should go from below to above with our sword to cover us.

LII. ON TWO *MANUREUERSI*.

If someone wants to approach the adversary with two left-handed blows, before the left-handed blow is finished our sword is to be diverted into a guard to resist his weapon, and at the same time we enter with both feet to join together.

LIII. HOW WE CAN MAKE A SWORD LIGHTER.

In order to find the sword with which we want to fight lighter, for a few days before another, much heavier is to be frequently used, likewise the day before the conflict, a heavy stick or iron is to be used, so that the arm is exerted in discharging these heavy things and is found to be light with the lighter weapon which we offer it afterwards.

LIV. THAT IT IS USEFUL TO HAVE A LONG SWORD-HANDLE.

It is discovered to be useful that we hold a long sword-handle, since it restores lightness in front, though many tend to err in this by placing a heavy pommel, thinking that this makes the sword lighter. And in truth it deflects more in the front part if we lengthen the *spica* (tang) of the handle by one inch than if we put one pound's weight on the pommel, and this would become obvious in the scales, since in little length a very great difference is experienced; furthermore for some others, it is good to have long handle on a sword or dagger. For even if the sword is short, if the battle lasts for a while we should take it with both hands, and then the point is to be placed towards the other and we should strike half blows, as if in the way of defending, and meanwhile extend our arm. But as soon as we want to join, a hand is to be sent out. Likewise, if the other is a little tired and we are holding a strong sword it is easy to throw his sword to the ground by striking at it with both hands. And this is useful with a *mucro* or *estoc* when we are on horseback, and therefore we should hold a long rein and let the other's attack pass by, after which we should take our *mucro* or heavy sword in both hands and strike three or four swift blows at the other's *estoc* or another uncovered part.

LV: HOW USEFUL IT IS TO CARRY A LONG WEAPON.

He who knows the reason of arms should handle fairly long ones, since at least he is so much better off over the adversary the longer his weapon is, and all the more so if we are without defensive weapons; and the offensive weapons should also be light, so that we can control and quickly manipulate them whenever we want.

LVI: CONCERNING THE HILTS OR CROSSES OF SWORDS.

The hilts, or crosses, of swords should be long, so that they cover almost the whole arm, but it is understood that a man may correctly know to direct sword and arm straight, and they should not be thick, in order not to add weight to the sword. But since a hilt cannot be split, unless it happens by accident, it should on no account become heavy. Nevertheless, we can temper them throughout, except for the *cassia* or the opening through which the tang of the sword enters, for it should remain soft and gradually thick, so that it is not accidentally

broken. For in another place there is no danger of breaking. Nevertheless, the whole of it should be in moderate slenderness.

LVII. HOW USEFUL IT IS FOR A MAN TO GROW ACCUSTOMED TO WORKING WITH HIS LEFT HAND.

We commend him who is used to his left hand when it comes to fighting between two, since at the beginning the sword should be taken in the left hand for many reasons: first, because the man remains rather more above, since he is less confident; second, because in transferring the sword to the right hand we find a hand which is calm or strong, and the companion is already a little tired and still fears the newness also, looking at another thing, since, when the left arm throws forth short blows, taking it with the right hand, the enemy does not remember so quickly to recover himself, and with those two blows, which we have mentioned above, that they go in the way of a rotation, and that it should not be done in two times, it is almost impossible not to strike the other, if he does not leap backwards.

LVIII. WHICH BLOWS THE LEFT HAND SHOULD STRIKE.

The left hand should always strike left-handed blows and right-handed blows which are half (blows) *findentes* or *descendentes*, and rising blows are always to be directed at the adversary's right side, since by passing to the other side we leave our left part uncovered. For this reason it is to be understood that we usually walk on our right foot in a similar conflict, when we hold the sword in our left hand, and if it is in the right hand, we would go the opposite way altogether.

LIX: WHY, IN DELIVERING TWO BLOWS, THREE SHOULD BE MADE.

Whenever we administer two blows at the same time, three should be made each time, for the first blow nods to or provokes to excite the enemy, and the second strikes. And the third, in fact, returns to prepare or cover us, and meanwhile we should strike two left-handed blows and immediately recover ourselves or go to join us together.

LX. HOW EACH SHOULD PROCEED ABOVE HIMSELF AT THE BEGINNING.

At the beginning of fighting, one must pay attention, for at that time almost everyone strives to harm the enemy with a determined spirit and indeed at that moment he can do much; for all his strength and lightness fails, if we let him tire a little.

LXI. THE REASON BLOWS SHOULD BE MADE WITH SWIFTNESS.

Blows should be made quickly, and if, before they begin or when two or three blows have been completed, one must always return to the first moderation, for when throwing ten or fifteen blows at once, even though we strike the enemy in some of them, we also commonly receive some blow, which does not befit him who wants to act with reason and usefulness.

LXII. At WHAT TIME SWIFTNESS AND FURY ARE GOOD.

Sometimes it is found extremely useful to make a great attack against enemies. But this is understood to be when many are together, especially when we begin to put them to flight. And at such time, the better it will be the more blows we throw. But for this it is appropriate that we are well armed and have some company, because if the enemies turn aside one of our blows, they cannot harm us. In the end we should rarely employ that fury, if we are not in necessity, because a man should get out of a tight place, or to take some necessary places or ways; but we always commend moderation. And if in all good moderation, this is best in the way of entering in on another, since often men who are cunning in the ways of fighting show one thing for the other and such things are rightly called ambushes, and he who runs without moderation into such deceitful things, frequently falls into the ambush. Since ambushes are found against the furious or immoderate, so moderation is to be followed, that we are not caught in the way of the furious. In arms, indeed, such as with sword, *pelta*, or *parma* of leather or wood, he who wants to deceive often shows one side uncovered to the enemy, to make him go intemperately to strike at the uncovered part, and then he who is preparing the ambush, hurriedly covering himself with the *parma* and passing on the other side, comes with a right-handed blow or thrust or a left-handed blow from the opposite side, that is, that on which he was earlier uncovered. And against those one must remain temperate, first committing in a feigned way at the uncovered side, and the blow should not finish unless we

move with a long step sideways through that side and throw a thrust at the other side on that part to which he turns, or a rising blow to take his hand, though even those who know a little leave some limbs uncovered, in which they are easily wounded. But when fighting against those whom we do not know, we must on no account be confident that without ambush they do not remain uncovered so, that moderation must frequently be used, and especially until the adversaries are known.

LXIII. HOW USEFUL IT IS TO USE A POLEAXE AND A TWO-HANDED SWORD.

Sometimes one must use a poleaxe or *tripuncta*, so that we know to cover legs and head and evade skillfully, and know to easily walk on the sides; when needed one should exercise with a two-handed sword, and this is helpful in all kinds of weapons.

LXIV. ON CERTAIN BLOWS WHICH ARE SUFFICIENTLY COVERED.

With any weapon it is useful, when parrying the other's blow, that we direct the point against the adversary and if it will be with a lance, its blow will be parried, or left so it passes in vain by the sides, and at the same time it is fitting to enter with one foot, making the greatest show with a short blow, and such a blow should be lengthened as much as possible with the other foot. The poleaxe safely parries from the outer towards the inner part, like from the left to the right hand, on condition that we immediately return with the *calx* of the poleaxe through the same place, just as the first blow will go with out parrying, though slightly more directed at the other's person, for if, in the first, it does not meet the enemy's weapon, it should turn it aside in the second, and the left side should flee sideways, and go entering with the right and in the same moment, throwing one point in the way of an ascending blow, and the same thing should be done from any part. If the other throws with a sword, we should parry, and at the same time go to strike with the point. If however we make two left-handed blows, in the last only a feint from the left hand should be made, and it should come with a thrust or *stocchata*, similarly a right-handed blow or any other blow should commonly be turned into a *stocchata*, at the same time turning aside our body from the adversary's weapon. And here we should always feign that we want to touch the other's weapon, so that we may begin at first to make a blow or so that the enemy may begin, and without splitting of time we should proceed forward somewhat with the right foot on the right side and with a point to his chest or face, so

that the hand is rolled a little, since the cross of the sword would come sideways to hold back the adversary's blow, if he happens to make one. And this is to be continued, since it is appropriate for the enemy to continuously retreat or be wounded many times. And this can be done through the left side, just as through the right, though not so appropriately. And with any weapons it is good to make the greatest show that we want to strike the other's weapon, and that blow should be directed with a thrust at the adversary and not touch his weapon. With a poleaxe or any short weapon, when the enemy comes with a right-handed blow through the upper part, it is appropriate to turn aside his blow with another, similar, almost through the upper part of his weapon, and that ours goes straight at his face. And if he strikes a left-handed blow, we should do the same with another like it. If tho' he wants to attack in below, our weapon should come through his lower part to parry and be directed at his legs. To do this, we should always take one or two steps somewhat forward and somewhat sideways. Some, however, who are in the habit to go back when defending and walking, use one very powerful blow to parry, that is, when the other throws against them when they are fleeing, or to let his blow cleave from high to low when they leap back. And in this way they frequently take the adversary's arm, or sometimes another limb. The devastation of this blow, though, is very easy and sufficient to make him flee or force him outside the field, and it is like this, it is such that, that is to say threatening with a right- or left-handed blow, and at the same moment our sword should return with the point to the attacker's arm or eyes, as has been said above. And if the enemy wants to come to strike, he himself enters through our sword, and our sword should be turned like a wheel so that its cross is directed sideways, not however so that one point of the hilt is facing upwards and the other downwards. And the cross or the hilt should be long, so that the whole arm is guarded, and the body should bend very much so that the hand remains higher than the arm, and in this way the other cannot touch anything but the cross of the sword. But for the last devastation of his blow which comes from a point, when he wants to touch our weapon it is necessary to walk to our right side, and our sword should immediately be rolled under the arm and go to regain the other's arm with a hew, either towards the side or the eyes with a point. And note that in all our works we should never lower ourselves. But it is always rise to search for the best. Thus in this way, we must place the best in the last, since in the end the ultimate praise or disgrace remains.

LXV. HOW THE RIGHT-HANDED SHOULD BEHAVE WITH THE LEFT-HANDED AND THE LEFT-HANDED WITH THE RIGHT-HANDED, WHICH IS THE SAME ORDER, SINCE THEY ARE

EQUALLY CONTRARY IN NATURE, THOUGH ON ACCOUNT OF GREATER OR LESSER COMMONNESS, THERE HAPPENS TO BE A CERTAIN DISPARITY BETWEEN THEM.

The way of doing battle between a right-handed and a left-handed man is usually like a new thing to both. For both remain uncovered, though in general it is worse for the right-handed, as it happens late that he becomes accustomed to go against the left-handed. The left-handed are few in respect to the right-handed, and so any left-hander has worked many times against right-handers, and he who uses the right hand rarely against the left-handed. Nevertheless the first purpose of the play, which suits both fighters, is to place the feet almost level and walk on one's left side. The arm and hand in front of one's own belly, so that the hand comes almost to the middle of the legs and the point of the sword is extended slightly downwards, looking at the side on which the enemy holds his sword. And if a left-handed man throws a *manudextrum*, which comes from that side on which a *reuersus* is usually struck with the right hand, we should turn aside on the left foot, counter-passing with our sword, taking the enemy's hand or arm. And if he strikes a *reuersus*, which is like a *manudextrum* by the right-handed, we should walk on the right side, taking the arm with the sword or parrying his weapon so it may not reach us. And while we are parrying or hitting the arm, it is better for us to join him than go back, for from the same blow which first reaches the arm, it can return to the legs and then with a *stocchata* in the same time. It is dangerous to strike a right-handed blow, if it would not be to provoke him by walking on our left side and striking with a guard or an *ascendente* at the arm. It is good to feign or conjure a left-handed blow through the legs and, without passing, direct that same left-handed blow with a *stocchata* at the face. Nevertheless, for this it would be good to have in the left arm some arm⁶ called defensive to place in front of the right shoulder. Finally, our sword should always look towards the other's hand, and it should come from sideways, and if a right-handed man were contending with a right-handed man, or a left-handed with a left-handed, frequently avoiding the side from which the enemy will throw taking their arm with our weapon. And the same rule as we give to the right-handed, is to be understood for the left-handed; they are equally contrary by nature.

6 'armam' i.e. weapon

LXVI. On the way of fighting **ON HORSEBACK.**

Thus far we have discussed the weapons which are suitable for us when on foot; in the following chapters we shall write something about the way to fight on horseback. When two riders come to fight, in the first encounter of the lance it is often useful to direct the lance at the other's horse, as long as we have some defensive weapons which can protect our person. And when we have lightly armoured horses and bear *parmas*, with which we can cover ourselves, when approaching it is good to threaten throwing the lance, so that the other covers, and to strike him in passing. But it is necessary that we then go to hold the lance by the middle, which in Spanish is called *amanteniente*, and that it is quickly rotated back on the adversary; or, for a safer way, the lance is to be seized by the middle, so we turn away the encounter of the other's lance, which can be done very easily since, even though we hold nothing but a sword, if we bring it on the horse's neck, we can, with little labour, devastate the other's *obviatio* through the lower part with an *ascendente*, or in the way of a right-handed blow. If however we have a *darga* or *parma*, we can give it to the other's lance, so deflect it on our right side, and then then we should cut through the face with a *manusiniestro*.

LXVII. **WHAT IS TO BE DONE WHEN THE RIDERS ARE ALREADY JOINED.**

When the riders are already close and in a clash, it is useful sometimes to seize the lance with both hands, sending it forwards running down above the hand which is holding the *parma*. If though, we hold it by the middle, we should always make two or three blows, which should be aimed at different places, and one blow should be short and the other long, and we should always be careful to turn the other's lance aside, so that harm does not threaten both. Coming to a sword, or an estoc, or what are called *mucrones*, we shall strike as much as possible the kind of blows which we normally use when on foot only using swords. But at the beginning one should enter with little impetus, and the right hand should, when there is time, rest on the foremost *arzo*, and the point on the sword should always face the adversary.

LXVIII. **ON CERTAIN OFFENSIVE BLOWS, AND OTHERS WHICH ARE DEFENSIVE.**

There are several common principal blows which are very safe in this way: if the adversary brings a low thrust at our legs, we should devastate it in every way with a rising blow, which

should catch the other's sword through the lower part. And if he throws a *stocchata*, which is somewhat high, we must parry with a half *stocchata* and a half right-handed blow, lowering our arm, and our weapon should be extended forward, so that it can deflect the adversary's *mucro* and go to strike in the chest or face, and this is common both on foot and on horseback against all blows which the other can strike. A left-handed blow when moving close to the adversary is good, and this is used continually by Africans, Trojans, and other Mauritanians. But in opposition or to do a devastation, we must help with another left-handed blow. Nevertheless, the point of our sword should face upwards and the hand descend, so that when we come crosswise, the other cannot parry the blow, or, indeed, we bear our sword low, so that, when the left-handed blow is descending, our weapon should rise in the way of catching his hand, and to block this blow better, we should stick on the left side and sometimes, especially if we hold a *parma* with our left hand, covering our head, and we should apply a *stocchata* to the other's face, though our hand should come as low as possible, so that the other's left-handed blow should be held back in our sword or crossguard⁷; this thrust is strong against blows coming from the left shoulder and to attack those who bear or hold their weapons on the left shoulder. But if the enemy wants to enter in with a right-handed blow, we should oppose with a similar blow or with a rising blow taking his hand from below. And one should always carry out such defences against any blow of the enemy.

LXIX. AGAINST THOSE WHO BRACE THEIR *MUCRO* ON THE *ARZO*.

Some are in the habit of bracing their *estoc* on the *arzo* and place their legs or heels to the horse and come ferociously with a clash, but this can do nothing against the wise. We can easily turn away his weapon and hit his face or any limb we wish with ours. For any weapon which is aimed in meeting through running can be lightly turned away, since it comes gradually and without deception.

LXX. HOW WE SHOULD ATTACK.

When we want to attack, we should commit or feint on one side and discharge a blow on the other. And always when the adversary is less strong, blows must be applied, and so we can take him more easily.

7 *elzo* - assumed to mean crossguard

LXXI. WHAT WE SHALL DO WHEN WE SEE THE OTHER WALKING CAUTIOUSLY.

If the other holds himself upright, the play which we have said about footsoldiers is to be done against him, since he should be disordered. Thereafter we must attack in where it seems good to us, and if he turns towards one side, one must always remain next to him, so that in these intervals of turning we can harm him. And when our horse is turning, the weapon must be constantly held aimed at the adversary, so that we can protect ourselves, until our horse is turned around straight.

LXXII. WHICH BLOWS WE CAN WORK WITH A MACE OR CLUB AND HOW LONG IT SHOULD BE, AND HOW IT SHOULD BE DONE.

Going to the clubs (*clauas*), or, in the vernacular, maces (*mazas*), first the enemy's blows are to be parried, thereafter we should unload against him with much noise. And when there is a short delay, the strap should be set on our arm, for which it is fitting that it is long, or that we should let go of it a little, as will be seen afterwards, taking the club with both hands, three or four blows are to be struck with the utmost force and velocity, since if we hit his weapon we often strike it out of his hand. Likewise, in whichever other place we strike, we do great work. For this, the club is required to be four palms in length and with a handle at the end, on which we can put two hands, and in front of the hands an iron wheel in the way of a small *pelta* to guard the hands, and in the heel of the whole thing a certain thickness, so that the mace does not slip from the hands; its iron should be like a poleaxe or *tripuncta*, one part of the hammer which is larger should be divided into three small points in the way of a diamond. The other part should be like a little lemon, and those points should be fixed in the haft with a knot at the middle, and above or in front a short point should be placed, so that two iron bars go through the wood to fasten the *rotella* where the hands are, and the handle should be fortified with excellent cord, since maces which are made otherwise produce a weak blow, though sometimes the club should split in one part. But the length of the split should be short and limited to the case of the hammer, and likewise the blunt part should be very firm since all the force of the blow is gathered there. And taking hold of this shaft or club with both hands is much more powerful than with only one alone, since one cannot sufficiently oppose two. Sometimes we should let go of the reins, so that we catch the adversary's weapon with the left hand. But we should have an iron hand cover or we should take or parry it with the arm. Though it is fitting to go back with discretion to take the reins again, and the reins are also to

be tied into the horse's mane with something slender and long, so they come to our arm, so that the reins on the horse's head do not fall to the ground. This club, or *acuscula* (little needle) in the vernacular, should, besides the three points, that is, one with a blunt point, another in the middle, and the third sharply pointed, also in the nail which joins the wood to the iron, should be a very strong hook or crook, and from this hook the mace is suspended, and when there is fighting it can take the adversary by the neck or other limb, and drawing strongly, especially by turning around, as should be done at the same time as the horse, and in this way it is easy to draw the adversary out of the saddle. And for us to remain safer, we should carry two clubs, so that if we lose one, the other remains, and even a footsoldier, when there is fighting with axes and white armour, can carry a hook in the axe to take the adversary by the neck, since it will be easy to throw him, and then he cannot work any great or dangerous blow against us.

LXXIII. WHAT TO DO WHEN SEEING THE ADVERSARY'S HORSE OVERLY OFFENDING US.

If the horses have been secured, that is, so that neither injures or kills the other's horse, and the enemy's horse is too eager to lean on us, we should give it a blow on the head with the pommel of our *mucro*, since in this way one cannot say that the horse has been injured; and it is very helpful to us.

LXXIV. HOW TO SOMETIMES USE ESTOCS IN THE WAY OF A CLASH, AND OF A MEANS AGAINST THIS.

Since, when bearers of weapons are armoured in white and heavy armour and fighting on horseback, they use, above all other weapons, what is called *stocchi* (estoc) in the vernacular, we should explain something about the estoc itself, at least when one can overcome the other, as when we have a horse which is stronger than the adversary's horse. Therefore he who leads a very strong horse, which can make the adversary's horse step back, can take a firm and safe estoc which may not be twisted nor broken. And then the point of the estoc is to be gradually placed in the throat, over the visor or under the armpits or arms of the other, so that our hand is immediately placed on our own chest, expelling the competitor in the way of a throw. For if our horse is strong enough to very easily make the other horse step back, we can also easily throw down the adversary out of the saddle, as long as our estoc is held in some upper part of

the other, such as in the throat or the visor. But when our horse does not drive away the other, this practice has little or no effect. Nevertheless if we sometimes happen to fight against someone who has such a horse and practice, it is to be observed that when they brace their estoc, we should immediately turn ourselves on one side, receiving the other's estoc with the arm, and thus we can seize it from the enemy's hand, and if we do not seize it, we shall be saved and bend back his estoc, and after it has been bent back, he can do little or nothing in a similar meeting against us. Finally, to make us more safe, one should always fight with such an agreement that we can kill the horses, at least when we believe that the adversary is leading a horse stronger than ours, and then, we should first and foremost direct our blows at the horse and the chief blow of all is to be given with an *acuscula* or club on the skull of the other's horse, and in this way, if the club is good and we strike with both hands, the horse will fall or at least will never again turn its face towards us, and this is the most powerful way of all to fight against those who have big and strong horses, for when we can kill the horse, it matters little that the other's horse is bigger than ours, so therefore it is easy, or nearly, to be able to kill him, even if a small bit weaker. But when such an agreement is made that the horses may not be killed, he who leads a strong and big horse has a very great advantage, as by sending the sword into the other's visor and striking him on the head, though this is less powerful in battle than in a duel, since each can kill the other's horse, and also then there is little room to place the weapons gradually where they want, and to kill horses with clash of lance is an easy thing, which happens in battle of many, or of two in individual meetings, and to do this they should pay attention to, as it were, the principle way to take the upper hand, though the unwise continually direct their blows at the man, but not at the horse; this should certainly be done the opposite way, at least at the beginning, since, in case the horses wear leather covers as usual, it is of little benefit to them in defence against a charge of a lance, and also, beyond this, for the most part they still have some parts uncovered, where we can wound them.

LXXV. WHAT TO DO WHEN WE WANT TO BE JOINED WITH *MUCRONES*.

When approaching with *mucrones* in the hands it is good to parry, so that our hand, together with the pommel of the estoc, goes to take hold of the adversary's right arm by the upper part, and turning his arm we should also turn our horse at the same moment, and in this way the enemy is easily drawn out of the saddle, and still sometimes, if we have the higher horse, we can seize the adversary's head and turn our horse around. If the other seizes our head, we

should follow him where he goes, holding our hand firm on the *arzo* of his saddle, forcefully pressing our legs, holding our body firm, straight above the saddle. But the best thing is to place the hand firmly on the other's neck, and so do not permit him to apply great force, as when we want to avoid a *tornus* in wrestling, since a hand put on his chest impedes all his strength; when the enemy comes to take hold of us, we should turn away our horse, as we have said, wanting to draw him away out of the saddle. And if he wants to take our sword outside his arm at the same time as he comes to parry, our right arm and side should go back, so that the thrust of the hand immediately returns through the lower part to the enemy's face; and this can often happen when on foot, when we strike a right-handed blow and he wants to take hold of our sword or arm with his left arm, if in this we then withdraw our arm and, as has been said, it is returned through the lower part with a thrust against the enemy, it is easy to harm him, or when he takes our arm through the same part we should place a *tornus* against him, so that he comes to fall on his back. And if he wants to apply a *disclunata* in accordance with the Breton custom, in equal way, any malice of the enemy is devastated with this *stocchata*. Once again it must be noted that, to more easily sieze the *mucro* out of the other's hand, how much better, or at least easier this is done with our right hand than with the left; in this way when the other wants to hit us with some blow, we should seize the arm with which he holds his weapon, turning ourselves and the horse on the left side, and if the other wants to take hold of our arm, we should likewise turn quickly on the left side together with the horse, as is usual with a small brawl when we remain on foot.

LXXVI. HOW OUR HORSE IS TO BE GOVERNED.

The best way to manage our horse appears to be that first of all we put the left hand on the horse's neck, especially when the horse is frightened, for when we touch it more with the reins it works less well, except in that which concerns its *precustodia* (fore-guards) on the sides, and we should now and then touch it with the spurs, but gently. And until the enemy turns and goes around with his horse, we should turn only the head and front hooves of our horse, always looking at the other, but we should not lose any ground or generally gain until we have seen him become disordered, and at the same time we can attack in obliquely, joining ourselves to him. But those on the other hand who proceed dancing with horses are continously misgoverned or go astray.

LXXVII. IN WHAT CONDITION THE HORSE SHOULD BE IN AN EXERCISE OF THIS KIND.

To carry out this fighting exercise, the horse should first of all have firm head, so that it is not raised upwards with its front hooves and does not flee backwards. But if the horse is frightened, we cannot reach or strike the adversary where we want with any deliberate blow, even if we would see him uncoordinated, since our horse does not, when we want it, offer an opportunity to go to strike the enemy. It is appropriate that we manage our horse when we approach the other, to keep it from going far, unless it is turned on itself level with the rump or tail of the other, and so its back can easily be taken by us with safety.

LXXVIII. HOW USEFUL IT IS TO HAVE THE VISOR RAISED.

If someone knows how to parry and the enemy is strongly armed, it is often useful to have a visor which goes upwards, because our breathing endures more and it is also easier to see what must be done, and almost no danger threatens, or will rarely happen, especially if we have iron gauntlets to turn away the other's weapon. But those who go *grosso modo* (roughly) lack that all places are well covered, and then they act no differently from blacksmiths beating each other. Finally, long breath is very powerful in fighting on foot or horseback; therefore we should train ourselves in breathing powerfully, in case this would have been denied us by nature.

LXXIX. WHY FIGHTING IN WHITE OR HEAVY ARMOUR DIFFERS MUCH FROM WITH LITTLE ARMOUR; AND ON SOME BLOWS WHICH ARE APPROPRIATE WHEN THE SOLDIERS ARE HEAVILY ARMED, WHETHER THEY REMAIN ON FOOT OR ON HORSEBACK.

In this place, namely when we are dealing with fighting with heavy armour, it must be noted that there is much difference between the methods of fighting with light and heavy armour, for with light armour, when we strike a blow against the adversary or want to avoid his, we can move various of our limbs, going forward as well as back, now walking on one side, now on the other, bending our bodies backwards as well as forward, or to whatever we please; but we cannot work all that in heavy armour, for if we incline our body, the armour weighs on that part only, so that we would easily fall or receive some loss. For of two things one is always to be chosen, or both at once: this is, that when we are heavily armoured, we should always, on

horseback and on foot, stand straight and walk without any inclining of the body, the other is to always walk forwards, or at least around, but never backwards. And here, to understand more easily the importance, we should take an example from fighting with heavy armour. If it happens that we want to engage on foot with such armour, the example is such: if there is fighting on horseback with heavy armour, it is appropriate at least that the head of our horse is directed towards the adversary, if we could by chance take hold of him by the sides or back, or to make sure that he does not take hold of us. And further and principally, one must remain fixed or rush in on the enemy, especially when the other urges his horse on us, since, if we would then gather the reins or not be as braced as possible at the front part, it would be easy for our horse to fall backwards or we would gradually lose the whole wall⁸ and various other scandals would happen to us. It is therefore appropriate that, whenever the other urges his horse towards us, we urge ours against him, and if he throws any blow with a sword, *estoch*, club, or similar, we should receive it with our sword or arm, and if the other pushes us back, we should, with speed and robustness, push him back, so that he falls backwards. And in accordance with this example concerning riders, one must fight with the same armour when on foot. This armour is, in some other styles of language, called 'white armour'. Then, in this fighting, one should enter here and there and remain perpendicular over the feet with the intention never to walk backwards, for this is to be avoided as being the ultimate evil; sometimes, however, one can go back, to avoid the other's blows or adjust the armour. Finally, we must walk forward constantly or remain firmly, if we want to breathe or rest. But if in this time or another, the adversary wants to drive us away or strike us with the point or pommel of the sword, we should always run to meet him with strength and speed. It is appropriate that we turn away his weapon with our arm and strike him on his head or chest or elsewhere with much force. In this situation, especially against the weak, it is often an excellent practice, on foot and on horseback, to push over, with our left hand or fist, the other's chest, and, in the same moment, strike him on the head with the pommel of our sword, for if the sword pommel is good and overwhelms with fury and with a great blow causes harm and the fighting is on foot, he will often fall, and if he wants to make similar blows against us, we should join with the adversary in the same moment to drive him back, for when we have been joined, we cannot strike a great blow. But here it is to be carefully noted that one should be as strong as the adversary, or stronger, if possible. For even though we strike him with a club, axe, and points, this inflicts little or no harm, especially if he is somewhat wise, for against similar we can never apply great blows when he always turns aside or enters in where

we can make a small blow on him; which he who is entirely in white armour cares nothing for. Therefore, if we give way backwards we will sooner or later be caught; if the adversary is strong and wants to go forward, then it will come to wrestling and we should, if we can, take the adversary's leg; it is, however, fitting that we lower ourselves directly over our feet, for if we bend uncoordinatedly, we must fall. And here, note one thing above all, namely that before fighting you must resolve to make yourself as strong as the adversary, and if it is in fact not so, you must firmly believe that it is, and if this is not so, do not fight. For with this armour the weaker always lose, or those who are weaker in working, for when the courage fails or one is very frightened of the other's strength, the strength of the limbs declines overly, and so one must not do battle with white armour unless we are as strong as the adversary, or think that we are, since, if the other drives us away by one step, we think that he drives us two or more steps. And if he happens to be stronger than we are, we should walk around with clear and calm mind, as if we are equal or superior, and to do this, or to resist expulsions by strong men, we must expel them by art, as we have shown in this book when dealing with jousting, and by this way those of medium strength can stand against the very strong, if the strong are not adapted. Some use axes crossways with two hands when they are armoured and this on the enemy's chest crossways, so that they can drive him away; in this case we should turn a little on our side, so that we push the other's body aside and take hold of him by the back, or we should even make our hands firm in his axe or chest, to drive him back. And we must be careful never to let our head lean down over the back, for if it lowers and the adversary pursues us, the danger is greatest. And in this way of fighting, at least when on foot, one must note that men of large stature have a great advantage over small men. For in a large body there can be large strength, therefore they strike great blows, and because of the weight or size of their body, we cannot drive away fat men, and even if many blows can be applied on them, what good will that be if they are in white armour? For the reason is the same: two naked men want to fight with the fists, two men in white armour with axes, for he who strikes the strongest blows on the adversary prevails. But when we are lightly armoured, any little strength is enough to kill the enemy. When soldiers on horseback are in white armour, or when they are covered all over with defensive armour, each should rush in on the adversary, as we have seen above, especially when the other throws a blow. For example, when the adversary brings a right- or left-handed point, we must at the same moment see that we urge our horse forward, so that, with our right or left arm, we join the other's arm, so that we can take hold of his weapon, and if we take hold of the adversary's right arm with our left one, our horse must be turned speedily and powerfully on the right side, and in this way we seize the

other's right arm with our right one, also; then we should turn our horse to the left side as quickly and strongly as we can, and in this way it is necessary that the other loses his weapons and that, if he wants to retain it in his hand for a little while, he falls, and for this effect it is appropriate that we enter greatly with our horse, since it is not only the other's weapon which are to be taken hold of, but also his arm, and one must also note that, if the adversary wants to work the same against us, we should quickly withdraw the arm upwards, and we should come with a *stocchata* with a turn under the arm; or though, when the adversary extends his arm to seize ours, we should obstruct him with our left arm, and, also with the left arm, the other's weapons are to be turned aside; but our reins should be long, as has been seen above, since they should be sent in the left arm. If the other wants to take our head with his right arm, we should, at that instant, seize with our left arm the same of his, withdrawing our neck towards the shoulders, and we should immediately turn the horse on the right side, and then we can put the adversary in extreme danger; and if we want to take hold of the other's arm with our right arm, the horse should turn around on the left side, and this is best if one fights from front to front, when the other wants to take hold of the head. If the other's horse turns its back to us, we must diligently and immediately hit the adversary on the skull or the back of his head with the pommel of our sword, for if we strike forcefully there, we quickly throw him over the horse's neck; or if we do not want to do this, or cannot, he is to be taken hold of by a hammer or any other cudgel placed by our hand in the neck, so that we make the soldier fall over the horse's back; or indeed in any other way crossing over the other's side, going to the same side as he does, we should put our left arm on the other's left arm above the elbow by the rear part, so that we push him away forwards, and then we should also take hold with our right hand of the other's neck or shoulder by the right side, drawing him to us, so that he falls on his left side; and if the other seizes us in the same way, our left arm should be diligently drawn back, and so take hold through the other's loins. And it is appropriate that also the whole body is revolved in the same way on the saddle or on the buttocks, and to do this or similar, it is appropriate always to have by the palms of the hands some strips of mail, and the visor of the helmet or *galea*, through which we see, should be safe, so that no slender point can enter through it.

Since when a single combat is fought, we have much time and opportunity to look at the parts in which we are unarmed and we can consider them, for when many come together in battle at the same time, with the severity of combat, and since everyone helps his companions, assaulting the enemies on all sides, there is no opportunity to look at all uncovered limbs, and

so, in single combat, one should provide a strong and large horse: strong, so it can drive away the other, large, so it is above the adversary, for who is highest one can deliver more powerful blows, and with the sword point, if it is slender, not extended in a circular way but levelly, flat, a soldier, if he is clever, can often hit the adversary through the visor. However, in similar fights, everyone, if he knows the offensive and the defensive, can be provided, and so should check *estoc* (*estoch*) or sword to see if they can enter through the visor, and if they enter, the visor is to be narrowed; or provide in some other way, if that would be appropriate, such as making small windows (*fenestellas*) or openings through which we can see and breathe, as is clear in their proper places. Nevertheless, as we deal with elsewhere, under no circumstances should anyone who is an able man meet for a duel, unless under such a condition that each can kill the other's horse, as in that way which is used in common battle, and with this condition there is no need to armour oneself so much, for a much smaller amount of armour than on foot is enough; for if they do not reach to the arms, at least in the back section no armour is needed, certainly not as when we are joined with many, for when we have grasped each other we can strike small blows and direct them through few places.

LXXX. HOW, IN ANY CAPACITY PERTAINING TO HANDS OR WORDS, AFTER DELIBERATING, WE SHOULD, ACT WITHOUT HESITATION, SO WE CAN QUICKLY ARRIVE AT A PERFECT RESULT.

When dealing with practice, one thing especially is always to be observed, namely that after making a determination, we should act with deliberate mind without fear until the end, for when it is bad to approach work without consideration, it is just as bad to be afraid after we are in the work, adding new doubts; even though one should always act prudently, we should however pursue the goal we have set out for without pause, for those who, after beginning on the way, offer their ears and hearts to all doubts which meet them, rarely or never complete a great and commendable work. Therefore, before we begin, we must wisely settle what we shall do, but after we have made a promise in words or set out to work with our hands, we must act without hesitation and with deliberate mind; but while this is the ultimate perfection in all men, afterwards pursuing the good resolve taken without hesitation is found only in a few, since the difficult tends to be rare. And so, nobody is great in devotion or holiness, in learning, or in war, who, when having begun, is hesitant in the way he has taken, for it is appropriate always to walk with prudence together with a deliberate mind, for in the same

way as we should be untroubled when judging what we shall do, equally, when we are already at work, those things which have earlier been arranged, are to be carried out without disturbance, so that the end is conformed with the beginning, for arranging the job is the beginning, and carrying it out is the end. Therefore, if an end which is troubled or without attention, it is not conformed with its beginning, which was an arrangement without fear or obscurity. And here it is truly very astonishing, though it happens to almost everyone that we know one thing and arrange it in our mind to do in the future, and that after we have entered the job we do something different, and however, it happens to almost everyone, especially in fighting with weapons, in which situation in which, above all others, we must be clear and expert, since we are then paying attention to dealing with the ultimate end. Therefore one must ask honestly why we then do more of what we were earlier ignorant, rather than what we did know, since one should no doubt do the opposite, for it is better to say what we know and then do it, in whatever way, than what we are ignorant of, but since few are chosen by nature and by art, it is also few who, when approaching some great work, do with calm and deliberate mind that which has first been deliberated. And here too one must note that we are not only reproaching those who fear after they have come to manual work, but just as much, and with little difference, those who begin dealings and flee the conclusions. Finally, what is worse, many willingly to stick to the dealings and however always flee the conclusions, and some do the same in weapons, since they seek continuous reports with this and with that. And however they always flee the ultimate fight with weapons. Indeed there are other men who rarely go to dealings, and with tranquil mind and similarly rarely go to battle. And finally they act when their mind is deliberate, so that they can reach the ultimate goal, and those men only are commendable above others in whichever art or office in which they are placed. And to work with deliberation after beginning is commended not only in men but also in all animals.

LXXXI. HOW THE ARMOUR SHOULD BE FOR FIGHTING BETWEEN TWO SOLDIERS.

Defensive armour for fighting should be almost altogether even in thickness, and yet light, especially in the back parts and the legs, except in the rib which is extended forwards, one should also carry some very strong armour to the first clash, and attached in such a way, so that, as soon as the encounter or clash has passed, we can afterwards release it at a single moment, and it is good to bear a very strong *prepectus* (fore-chest), which goes over the stomach and is fixed on the saddle, made with two haunches, so that it can be adapted to the

saddle, and also covers our legs as far as the middle, and above this, that is from the stomach to the eyes, we should put a *barbaro* (bevoir), which in the vernacular is called *bauera*, and another *bauera*, or *barbutium*, can come below, and all those three pieces of armour above should fall by pulling at one cord which has a loose buckle by which it should be held, since in drawing it away those pieces of armour are thrown on the ground. Likewise, on the *capside* or helmet, a *calveria* (brow reinforce) can be carried for the first blow, and the helmet should not be short, since afterwards it should be possible to fight with it. One must observe that, if the horse goes to fall, it does not get our legs under itself. For if a man is found on his feet, as we have already said above, he will always be to resist against a rider. Some are in the habit of tying themselves with a cord, so that the tie goes from the chest to the saddle, with an iron crook or hook made in such a way that it can be torn away when they wish, while the first clash is occurring. That is nevertheless dangerous if the horse falls or if the man is left ^{senseless}.

LXXXII. HOW TO AVOID A FIGHT ON HORSEBACK.

In my judgement, indeed, no man with strong limbs should fight with another rider, in coming together of one on one, since they are put at the favour of horses or brute animals. But when the clash of lances is past, they remain safe enough as long as they are well armoured, and then it is easy for the weak one to be protected against the strong one, especially since various misfortunes usually happen because of the horses; this can be beneficial to the weak one, but on foot anyone can more manifestly demonstrate his strength.

LXXXIII. WHAT TO DO WHEN WE ARE ALREADY NEAR THE ENEMY.

If sometimes we come at the adversary hand to hand, grips are to be made from a distance, so that we not fall at the same time but remain unhindered; it is however very useful to seize by the visor, bending him down, and we should walk back turning away our body as much as we can. But if the other takes us in that way, our head is to be directed on a straight path above the feet, and should not hang forward or backwards, or to the right or left, enabling us to join with the enemy. But when we are without defensive arms, we must come as close as we can, to keep the enemy from being able to make a blow with his weapon. As soon as two fighters are joined together and come to hand to hand, wrestling is of no small benefit. But at such a time it is very powerful to know how to seize by the legs and bevoir and to help oneself when

the enemy takes one in this way. If we seize by the bevoir, it is necessary that we join with the adversary on the same conditions as we have described above. When however we are seized by the legs, one must *armare* (any wrestling technique involving the feet) with the same ^(leg) as that by which he seized, or we should take hold of him by his (legs), or indeed by the groin, for then he cannot lift us from the ground. At the time of the throwing down, whether we go above or below, we should always place the hands, or either of the two, below our body, if we fall upon the adversary we should restrain or touch him with hands and arms but not with torso or *corslet*. For when it comes to a union, if he who remains underneath knows anything, it will be easy for him, or it often happens, to roll him who remains on top and to put him underneath. Before all one must note that a man should learn not to fall on his back, or at least, if he falls, to bring some hand under himself, for on these it helps him to turn and rise. One must be extremely careful not to fall extended but gathered, so that he can seize the enemy by the legs and help himself with his own (legs). And to gain this knowledge more quickly, it is above all advantageous to wrestle frequently, with both knees on the ground, as well as with one, raising one and placing the other as the need occurs, though sometimes, using this way frequently, that is putting both knees on the ground, or at least one, can protect himself against good wrestlers, and often be able to throw them to the ground. If he wants to take hold of them by the haunches, he will no doubt defeat them. But if he himself falls, only place one hand, since we would want to bring it forward or turn it back, in such a way that anyone who is an expert in this kneeling wrestling can prevent any falls which happen when the fighters have come to join and fallen on the ground. And on top of that, one should often fight differently, so that now one is put below on the ground and then the other, so that when fighting both of them has more power to restrain the other under himself and to escape from him when he falls underneath, and so that one may experience any way to be able to fall and rise up.

LXXXIV. ON THE METHODS OF FIGHTING ON FOOT AND IN LIGHT BATTLE OR CONFLICT, WHICH IN THE VERNACULAR WE CALL SKIRMISHING, AND WHICH IS OFTEN DONE TO PROVOKE EACH OTHER.

In provocation or skirmishes on foot, there is little danger when crossbows, arquebuses, or cannons are not used, since anyone can easily bend away from or cover himself against other missiles, as long as we keep a *parma* or other, similar defensive arm. But in such a place a

man should not be still, so that he is not wounded by any kind of cannon or crossbow, and one must go on the sides as lightly and with as good cover as possible.

LXXXV. HOW TO GO TO A SKIRMISH OR LIGHT COMBAT WHEN WE REMAIN ON HORSEBACK.

When skirmishing, every attacker should turn this way and that with agility or looseness. And when the enemy wants to throw his lance against us, we should turn aside on the same hand as he is using for the throw when we are not too close, since when the lance goes a little from afar, if it leaves from the right hand it turns towards the left, and when it is thrown with the left hand, it turns to the right. He who is a footsoldier, however, turning and covered well, if he is discerning and shrewd, he does in a similar way on a horse, as long as he knows a little about horsemanship, and then he can easily work on a horse whatever he used to do on foot. But when we turn to the left hand, the right leg should come on the saddle, returning after the left, for otherwise he cannot turn much. Likewise, the *darga* or *parma* should be turned as low as can be, and it should go by the sides and not over the head or shoulders, since when the *parma* is so low we can see whatever the other wants to do and to cover ourselves at the appropriate time. When a man is heavily armoured he cannot turn much, since he is in danger of falling over. The *parma* should always be turned to the part where the other wants to harm us. A leather *parma* should not be placed too close to our person. For then any weapon would penetrate it and do us harm, if we do not carry other defence underneath, and one should not keep it far away, but at a medium distance and in a neutral place to respond to all parts.

LXXXVI. WHICH STRATEGEM WE SHOULD USE IF WE WANT NEITHER TO CHARGE NOR THAT OTHERS CHARGE US WHEN WE ARE ON HORSEBACK.

He who does not want to charge or that the other charges him with a lance it will be as safe as can be to keep the horse on the left hand until the enemy passes, and at that time our horse is to be turned on the other, and in this way, though the other would want to meet, he should restrain himself and walk gradually to seek us. Therefore, even though he charges, equal harm can be prevented, all the more if a man knows how to handle his horse, in no way whatever can the other charge him, and the handling is to be understood as we have already said.

LXXXVII. HOW LONG THE WEAPON SHOULD BE, AND THAT ONE SHOULD NOT GIVE A SET MEASURE, UNLESS IT IS TAKEN TO CONFORM WITH OUR DISPOSITION AND OPPOSE THE ADVERSARY.

The measure of the weapons which we carry is to suit our strength and the way in which we draw and use them, in such an example: we carry a belted sword and it itself is kept far from the enemy. But because of the properties of the sword or our custom it is carried girded and covered, to keep it from injuring ourselves and another which would not be of our will, it should be of such a length that, without being unbelted, it can be drawn out of the sheath and replaced in it. Therefore long or short swords should be used in accordance with the size of the men or the length of the limbs. Other weapons which we use now from the end and now the middle, even a man of small stature can, if he is very strong, draw and exercise those weapons if they are long, in such a way that anyone else who is of large stature can, or with little difference. The *mucro* or *gladius*, which we could sometimes use in a dispute with enemies, is built to cut bread, meat, and that kind of food and equally to harm or strike when we remain together, and so should be small. A dagger, from beginning, middle, and end, has almost been invented for when fighters come to the arms, and there by necessity it has to be short, so that we can work it well. And here is not put a measure of two or three fingers, more or less, in length, unless it can be fittingly worked about the situation in which we find ourselves. And that there is no precise rule about the length of weapons is fittingly shown, since he who bears those a little longer has an advantage on the enemy, were in not for when they are very closely joined, where one cannot move the arm freely to bring a blow. Therefore, in such a case, the shorter the dagger is, the better. A two-handed sword should be about as long that it reaches the nose or eyes of its bearer, so that it does not touch the ground with rising or descending blows, though he who knows how to turn it in circles can work it widely without it touching the ground. A poleaxe should be as long as the man who bears it can stretch his hand upwards. And yet, he who knows how to use it with sense should always draw it with the point above or below, or little or never with the *maza* (hammer), except in the way of threatening he can swing the poleaxe long and then better. Nevertheless this is understood when one comes to single combat. For among many fighting at the same time, the weapons we have are frequently thrown, and moreover weapons are taken hold of sometimes by the butt spike and sometimes by the middle. A partisan is taken now with one hand, now with both, and if with both, it should be taken hold of by the butt spike, even though the partisan is appropriate to be carried with a *rotella* or similar *imbrazatura* ^(something arm-borne) or

shield. For then it is carried with one hand and by the middle, when the fighters are found almost joined, and many blows can be struck which we could not do with a long weapon. The *ginetta* or lance of the unencumbered or lightly armoured rider, if we want it for charging, should be as long and firm as a sword, in so much that we can wield it well with one hand from whichever part we have taken it, but when we want to strike various blows in the way of a light fight separating the conflict from the adversary, not letting him approach us, with a sword, estoc, scimitar or any other similar close or short weapon; in such a case the lance should be the length of thirteen or fourteen palms (2.9-3.1m, approx.) and quite delicate, but the lance of a soldier with heavy armour should be long and firm, since they only use it to clash or to encounter in conflict because it can easily be raised above the upper arm, placed in the rest and removed. The longer it is, the more useful, since we can clash or encounter before the adversary, whereby he loses his encounter. On foot we can use long lances. A *maza* (warhammer) should be of such weight and length that we can wield it with one hand when on horseback, but he who knows how to use it with two hands can bear a longer one, and greater benefit to him results. A *mucro* or estoc is to be almost shaped like the sword, though it can be a little longer, for it always strikes with the point. Other weapons such as the dart (*dardum*) or javelin (*iaculandum*) according to teaching or against adversaries should be a little more or less of our length, although for close combats they should be longer. A *roncha* is a bit longer than a poleaxe and somewhat lighter, and still more important, for many thrusts are thrown, but never with the calx, and is nearly always taken hold of by the shaft or thereabouts, and we shall work in similar way in any other weapon, or in conformity with its design and the way in which we shall take hold of it.

When a fight occurs one to one or few on few, he who is strong and has little skill should choose a short and heavy weapon, because with a short one we cannot use as much skill as if it is somewhat long. For art is easily placed in light and hardly in heavy, and he who desires to join himself to the other should choose a heavy and long one. For by turning it away a little to the sides it goes to the ground, or the weapon is directed far away before we can recover it, and then the opportunity is had to join together. Light ones are recollected at any part and continuously placed in front; if both fighters know little, a weapon-length (difference) of three or four fingers more or less is of little concern, for they always enter to strike with the middle of the sword, and with a deliberate blow. But those who embrace great art have a great advantage or security by one finger's weapon-length. And if they throw a point without the arms being abandoned, they go back to recollect the weapon to themselves and to strike many

other blows. If one person is skilled and holds a weapon which is slightly longer, while the other has had little teaching and has a weapon shorter than the enemy's, the advantage to him who knows is great, and having art, even though a shorter weapon is taken hold of, a man can defend himself competently, especially against those who have little knowledge.

LXXXVIII. HOW A SADDLE SHOULD BE FOR FIGHTING.

A saddle for fighting should be level on the horse, not tilted forward or back, so that we can support ourselves on any side when turning. Though some may want the saddle to tilt forward, especially for what is called 'jousting' in the vernacular, or for collision with thick lances. Others who are, perhaps, better teachers feel differently by far, and they say, that the shield hangs forward with the other weapons, if the saddle would follow the same way everyone would be tired out quickly. And further, in this way (that is, if the saddle tilts forward) a large lance cannot be carried. And also, however much one repositions oneself directly upon the rear *arzone* (arch) in an impact (*obviatio*), one quickly becomes unsteady and falls to the side, which does not happen when the saddle is tilted backwards and has a good place for sitting, and in this way they can safely carry arms or a burden, and with little labour. For if the arms themselves are heavy, they lead the man forward sufficiently. But at the point of impact, we should lean forward. For fighting in battle the saddle should, a little at least, tilt backward, and it should be broad or spacious from arch to arch, because we can escape blows and support ourselves, which cannot be when the saddle is narrow and tilts forward. And it is appropriate that the saddle matches the sides of the horse extremely well, and that it is well adjusted and strapped at each end (*vndique succincta*)⁹, to make sure that it remains firm on the horse.

LXXXIX. ON SADDLES USED BY SOLDIERS WITH HEAVY ARMOUR.

The saddle of heavily armoured men should have so much space that the man comes to sit in the middle of the two *arzones* (arches or ears) which are fixed in the back part, and the *arzones* should come with a curve almost like a *ginetta*-saddle, which the Spanish and the Africans now use on light horses, since it accommodates the entire person equally; and it

9 The phrase "vndique succincta" refers to a practice of preventing movement back or forward by running a strap around the horse's chest (*pectoral* / *peytral* / breast-strap) and rump (crupper / rumpstrap).

should likewise be so long and wide that we can turn safely, and between the point of the *arzo*, which comes forth from the back part to the front, through the sides to which our knees go (which in the vernacular is called *urtus*), there should be enough distance to let us be able to ride and dismount easily. For danger of falling does not occur from this, since the man is placed very much between the back (*arzones*), and the *arzones* should be high, and the foremost points should be level with the middle part; this middle is that which is aimed at our back, and the foremost *arzo* should lean somewhat towards the horse's neck, to let it protect us from the points of swords and from the impacts of lances which can come towards our stomach. The *urti*, that is, the parts which cover our knees by the front part, and that the lower *urti* should be long and hollow and curved so that our knees can enter beneath the arches themselves and be covered, and stretch out and enclose the legs; similarly the back *arzo* should be broad and covered in the part where we are wont (to sit) since the enemy cannot injure us in the buttocks or legs through the back part with a thrust, and the sitting place should be as it is in a *ginetta* or Spanish saddle, though it should not want to have such a curve, and the seat could come higher, joining and fortifying our loins. And in this way, the strong saddle is safe, and if it were a *ginetta*-saddle or a saddle for light armour, it requires that also the back *arzones* are long, so that the man can stand within them. A saddle for light armour should not want to tilt neither back nor forward to fight, but should have a sitting place in the middle of the back *arzo*.

XC. ON THE SADDLE FOR JOUSTING OR CHARGING.

The saddle for charging, which in our native language we call the joust (*de iustra*), should lean a little towards the back part, in the way we have said above, so that a heavy lance can be raised and carried, and the weight of the armour felt less. In the same way, this saddle should have a seat in the middle of the *arzo*, and the sitting-place should begin almost equal to where the points of the *arzo* reach, so that when a man has been seated he comes upwards and the *arzones* go in a circle so that they receive our person equally and the saddle touches us equally from everywhere, though a little more behind, and then blows are felt less. And when the *arzones* are that long, there is no danger of falling; when the man is not on a course for meeting, he can place himself in the lowest part of the saddle, but when he is raised to meet with a lance, the buttocks as a result go in the height of the middle of the arch, in which they find their hollow place, and at that moment of meeting, one should lean forward a little.

XCI. HOW A *GINETTA*-SADDLE, WHICH THE SPANISH AND AFRICANS BRING, SHOULD BE.

Ginetta-saddles or saddles for riding lightly, especially in the Spanish way, have a great defect, since the points of the *arzones* are very low, and for that reason, when a small collision occurs, or any other inconvenience or misfortune, they are thrown to the ground. Therefore the points should be almost equally high as the middle of the back part, or so it sufficiently accommodates our legs, since we normally fall to the sides and not backwards through the middle arch, hence sides of the height of the arches should be provided, and both arches should be high (the front and back ones, that is) so that the man can be safely raised as much as he wants and likewise kept from blows; the front arch should lean a little towards the neck. Also in this saddle there is not enough of an *urtus* in which the knee can be braced to keep them from falling through an impact or other adversity, but rather in the forward part of the *urtus* they ought to overhang, so that we may securely place the legs. Nevertheless it is necessary that the sitting-place in the saddle and the arches, where we can touch, be altogether soft, for the reason that when touching we should find them agreeable, and still the impact is less felt, for if it is hard, danger threatens at any blow. But this saddle should have one strap cut from the outermost parts of the belt-hide, and it should be whole in the middle, so that one part comes to connect itself under the foremost arch and the other under the rear arch. To make firm our person and our lance, it is fitting that the back *arzo* is hollowed well in the middle, where our spine projects, because when we make contact in that part with any vigour, it makes us stagger. Therefore one must pay diligent attention that we make the back arches in a round shape, even though from the outer side they appear to be flat or not so round.

XCII. HOW MUCH ATTENTION WE SHOULD HAVE CONCERNING THE HORSE.

The horse should be well shod, and on the shoes it should have some hooks or tempered or strong points, to make sure that the hooves do not scatter or fall, but grip everywhere, and it is fitting that the horse is strong and brave, all the more so when the horse is going to approach a horse, and we should use similar diligence in any other parts which occur. Riding in the way of ^{running} (*curro*) is commonly found useful. For greater strength is found in the legs and through the whole person, we can carry bigger lances, though some say that it is beautiful to ride long

or with stretched legs. But in fact it has not so much firmness. The way of fighting or running (*currendi*), that is, that of a soldier against a soldier with *lances*, can only with merit be called jousting (*iustum*), since for things which are equal or without separation, we have the word *iustus* (just), from which one says *iustus*, *iusta*, *iustum* (fair, justice, equitable), and furthermore for one thing remaining close to another, we say as an adverb *iuxta*, that is, 'near'. And since a soldier, at least in the play of charging with lances, where there is no other offensive weapon, only pays attention to *iustandum* or directing his lance straight at the other soldier. Therefore, from this exercise of *iustandum*, that is nearing, he is rightly called *iustator* (jousting), and the operation itself *iusta* or *iustra* (jousting).

XCIII. ON THE WAY TO MEET WITH *LANCES*.

The best way to meet appears when we begin to learn, we place a direct thrust of our lance at the other charger, and it should always go fixed or firm in the same way, and we shall keep such a measure according as the other comes and passes near or far away from us. And so, those who think that the measure is determined at the beginning, to receive a transverse lance or carry a straight one, err for the most part. Therefore we should continuously direct our lance at the attacker and not at the place through which we judge he will come. And this rule was given when dealing with swords, when asserting that, even though the other counterpasses or takes a step on the sides, escaping our blow, we should always throw where he will go, and there must be no circle made with the *lance*, nor an arc, high, low, or across, unless it always goes firmly in the same way, though the other has already passed by. For otherwise, a certain custom is assumed, which commonly happens, one high and one low, which in the vernacular is normally called *basso* and *alto*. And in that time the enemy passes, or we shake him with a shaft and not a point, though in the way of warding (*archeti*), as it is called in my native language) the lance is easily broken; however, it brings little harm to the enemy, since to perform a great blow it is necessary to come in a straight path.

XCIV. IN WHAT WAY WE SHOULD TRAIN OUR HORSE TO ADAPT IT TO THIS EXERCISE.

That we may be stronger in the course of meeting, the horses should run sideways a little, namely so that its head always faces the weapon and its rump towards the barrier or towards the outer part, and in this way of running, the clash is taken over the back legs of the horse,

and the man goes through the middle of the back *arzon*, and therefore it would be difficult to throw down the soldier or the horse. And when guiding the horse so that it runs like this, we are required to take hold of the left rein a little shorter than the right one, and in this way we make the head turn towards the weapon or the place of meeting. But if the horse runs straight, the impact touches in the side in such a way that the horse cannot control its legs, nor the soldier the *arzones*. And to carry the lance the arm has to go firmly and rigid, so long as the hand does not squeeze the lance; for then it vibrates too much.

XCV. WHAT THE CORSLET SHOULD BE LIKE FOR THIS EXERCISE OF RUNNING TOGETHER OR JOUSTING.

A corslet (*thorax* - body armour) for meeting or jousting should be spacious, because it should be able to endure a blow in itself; when it is tight any blow upsets us greatly, just as when we are wearing new and tight shoes on our feet, for if we stumble we feel great pain. And if the shoe is wide, the foot is better protected, but in jousting it is fitting that the doublet is fortified enough to fill the corslet on all sides. For a soft doublet endures the greater part of the clash in itself. And one must note that the doublet should be of the same design as the corslet, so that it fills it equally everywhere. Some wear a short corslet, since they gain greater breath. But it is worse at the moment of clashing, since they take the blow on the stomach or in the place up to which the corslet reaches; therefore it should be long enough, and should roll outwards in the edges to some extent, but should always remain full with the doublet or other garment, and over the stomach it should come high or raised, and in that place it should be not filled with clothing, so that the breath is protected, and it should begin below the stomach to take on a curve gradually to the outside. But in this way it is not rendered tight or beautiful at the waist, but more useful, and here a corslet only is understood in the way of jousting. For that which is made for waging battle should not shatter so many, nor so thick, lances, and it should be strong at the front. However, at the back, since it faces little danger occurring, is made thin, and similarly in the point or the helmet when they have been well worked, that is, the front parts should be thicker.

XCVI. ON HEAD ARMOUR FOR MEETING OR JOUSTING.

The helm or helmet for jousting, which in our native language we call *elmum*, should be thick and wide at the front, and should touch the crown of the head lightly, nevertheless, it should have some facing or lining inside, to keep the iron from touching the head, and in this way it can remain firm, and similarly it should have two crossed cords or in a cross, so that it remains more safely, so that the iron cannot sit on the top of the head, and for those who are rendered unconscious in the striking of a blow, it is good to tie a thin band, which has been moistened in egg-white and vinegar, to the forehead, or tie two bands on the head, of which one ties at the back, the other at the front; these indeed make the head remain straight, to the degree that it cannot touch in any place of the shell of the helmet, even though we receive a great blow, and above all one should put wax through the whole helmet from the front part, so the noise or sound which results from the blow cannot hinder the head, and for this cloth heavily covered with wax is excellent, and in the front part of the helmet in the middle of the thickness some of the wax should be contained. Some close their eyes when they see the adversary's lance coming, for which is sufficiently useful to have the custom for a few days to be struck with a lance on the visor, and he should keep the eyes open, and seeing that no damage can be done by the iron of the lance through the visor of the helm, he will take courage, and it is also good to open the mouth, so that also the eyes are opened. However we should continually look at the other's head or where we want to place the lance, and the hand should follow the eye and not the eye the hand. Some hold that the point of the *lance* is always to be watched and we should not care about the other's point. This cannot hinder what will pierce the shield or helmet. In the end, it is always better to look at the enemy rather than the point of our lance which we are carrying.

XCVII. ON CERTAIN TIES TO HELP US BE STRONGER IN THE SADDLE.

Some ties are usually made in different ways, so that the men may remain stronger in the saddle, like placing one or two belts in the likeness of a baldric (*armacolli*), as it is called in the vernacular, that is when we gird on a sword and its cord comes over the shoulder and the sword under the other arm, and these belts are gathered with other belts or cords which are in the legs, and still this tie is better by two cords which are tied into the corslet by the front part and behind they should tie by the shoulders and other ties crosswise or at the side.

XCVIII. ON REINFORCEMENT FOR JOUSTING OR MEETING.

Belts or cords which go from the corslet to the legs should be strengthened by the outer side, where the harness or leg-armour comes, and there with cords, iron rings or nails, which are put through the inner part of the corslet, and so that they stand outwards, so that fibres are put to tie in them cords or bands, and two or three broad cords should come which should be tied around the legs, and they should be received by iron hooks, or *rampini*, which the cords are placed in, and to make this happen more quickly, there should be two hooks in each thigh, so that one cord goes from them to tie directly, almost so that it does not let the body go back, and the other cord towards the side, so that you do not let the body go sideways, and this should be done on either side, and it should go crosswise to tie itself towards the sides somewhat between the shoulders.

XCIX. ON THE WAY TO DIRECT A HEAVY LANCE

To direct a heavy or thick lance, it is good to use a kind of iron ladder, which can be folded on knots or joints, and it should be assembled on the right side and folded under the arm from the armpit to the elbow, and afterwards when placing the lance it cannot raise up our arm or indeed tire us. This instrument, though, is brought and covered under a garment. This contrivance can be done in the same way with leather or a belt, which will be the same, and it should be tied to the corslet, and thereafter come under the armpit, as has been said.

C. ON THE WAY OF DRAWING THE LANCE OUT OF THE *BURSA* EASILY

To draw more easily from the *bursa* (literally, 'purse'), to send it to the rest, it should first be lifted up, and the thumb is to be placed firmly on the thickness on the handle of the lance, by which the hand grips it, and there an opportunity to make the fingers firm, and likewise crosswise some firmness can be achieved through all the other fingers; for one should not touch the iron hooks, which go in the *rocecto*, that is, in the iron which is braced in the rest, and rest (*resta*) is the word for the iron which remains at the left¹⁰ side to carry lances at the same time as the arm, and they are braced there so that they can deliver great power. And so, when returning to the handle, the whole hand should remain on the *rocectum*. And to lift a great weight out of the *bursa*, it should be very low. We can move a greater weight when we

¹⁰ he says 'in sinistro latere', 'on the left side', here. Perhaps an error.

make a low grip than a high one. The Germans, in fact, use a big iron tied in the corslet, which extends behind, and there supports the *calx* (heel) of the *lance*, which cannot rise further. But this contrivance can be seen openly.

CI. ON ANOTHER LIGHTER WAY OF CARRYING A THICK LANCE.

To carry a thick lance, a double belt should be fitted, which comes to receive itself in a single nail, which should be placed in the side of the corslet, and the thong itself should be received with a strong soft leather piece, and it should be connected to our person under the arm, and reach to the elbow, and where the lance should be braced there should be a broad and thick hide, which should take hold of the entire lower part of the arm, and two or three pieces of felt should be placed under the hide, to keep the lance from hurting the arm; likewise, to carry heavy lances a high rest should be fitted, and its seat should be well arranged where the lance is inserted, so that it is easy to extend it and draw it close, and the spike (*spiculum*), or forward parts of the seat of the rest should be high, and the back part lower. It is useful to tie on stirrup leathers (*staffilia*), or thongs (*corrigias*), in which the stirrups go, three or four fingers above the stirrups, and they should come to hold themselves in the horse's chest strap (*pectoralis*) or the foremost saddle-girth, and in this way they do not let the leg go back, in such a way that is very helpful to lower a heavy lance; similarly, for this effect, the saddle should hang backwards a little, and the sitting-place which should be in the middle of the back *arzon*, and made in such a way that the man comes like a footsoldier or straight, touching throughout the whole saddle. But so that the thickness of the buttocks sits high almost in the middle of the *arzo*, not to say correctly that we are to sit, but rather gripping with strength, and this is understood as gripping semi-upright in any saddle, when we want to go to clash with the other. However, one should not go very high above the saddle. For the lowest receives a lesser blow, and the horse likewise. Therefore the saddle should remain very low or next to the horse's back, as long as it is not in the way, since otherwise a small clash brings great damage. The saddle for jousting or charging should be strongly supported or fortified by *perannis* and other soft things where we shall sit, especially in the rear part, since that softness yields or gives way, and from this blows are not felt as strongly, and the back *arzon* should be well hollowed, so that it does not touch the loins, and so a calm lance is lowered, since, when it touches at the back, the jouster is very disordered. Between the seat and the front *arzo*, one should have some sort of cushion, like a pillow, or indeed a leather bag, so that it can easily be

placed and removed with the leathers, and it should begin through the sitting place in the saddle and, growing gradually, should come higher next to our belly and reach above the stomach, to give firmness, so a heavy lance does not force us to lean forward, and it should be long enough to reach from one buttock to the other, and in this way it does not let the man fall out of the saddle by any clash, even though he falls asleep. The cushions which accompany the legs want to go almost near to them, and the *urti*, which are made in such a way, that is, the wood remaining in front of the knees, and the cushions in the lower and upper parts are broader to the extent that they cover the hip.

CII. HOW A LANCE CAN BE EXTENDED FOR CHARGING.

A lance can be lengthened so long as the corslet is high or raised on the left side, and the rest which is placed there is thick, and its origin comes forward as much as possible, and the pin with which the shield (*scutum*) is fastened should be short. For the shield weighs less and is set aside more towards that which it should meet. But we must pay great attention to not turning across our lance only, but it should always be in its place and the body should turn with it, since in this way the lance reaches better since it is discharged forward and the left side goes back with the shield (*clypeus*). When, however, turning the side with the lance when we want to lift it out of the rest, the arm should be strongly drawn back. When we return to the rear, a large lance is recovered, but if we turn the lance crosswise without uniting it with the right side, it can thereafter hardly be lifted into the rest, and then it will be very restricted, and at the time when it is placed, the man should compress the body over the right leg, and the left side should hang forward a little and the right (side) back, since it goes with the rest to recover the lance when it goes to the rest. Then it is often appropriate to be weighted a little on the left side, so that one can lift a big lance, and from this the left part of the back *arzon* and the front *urtus* on the same side should contain more space than those on the right side. Therefore touching now and then under the shield, the corslet comes with the lower fringe to fasten itself through our waist, and therefore it is good to place before the *arzon*, near its middle, a timber or iron, or a cushion. For as the man lowers himself to be able to charge, the *clypeus* comes to touch that wood, and in that way the blow is little felt, and in this it is useful that the saddle is somewhat long, so the shield comes over the front *arzon* to brace itself. And especially the lance should remain in the same way as it was before when it is placed on the rest, and it should go upwards, not down or across, and the body should be moved where we

want to direct the lance to charge. And in this way, even though the lance is thick, we can direct it when rising or descending. For it always faces upwards when remaining on the rest, and when the body is leaning down at the same time as the lance, it can easily be lifted together with it and cast it out of the rest or recover it over the legs.

CIII TO WHAT EXTENT WE SHOULD USE THE HAND AND REMAIN IN AGREEMENT WITH THE EYE, SO THAT THE CASTS OR ATTACKS WHICH WE MAKE GO STRAIGHT.

Then truly to joust with sense, and that the soldier always jousts sufficiently well when he has been well armoured and commands a good horse, and to recognise clearly when, in conflict, he is contending or erring, it is necessary that before he goes to charge, that by art he makes a certain thing his habit, which corresponds as natural, that is, that the hand is directed together with the eye in all things we want to do. Just as the crossbow, *spingarda* (springald – a type of catapult) *cerbetana* ('blowgun' - modern Spanish), bow, and similar instruments are placed directly before the eye, aiming through the sight towards the place where we want to cast. But if we are going to throw a dart, lance, or stone with the arm, or some other weapon, shortened weapon, reverse blow, or point, which should be with a short or long weapon, the hand does not come to place itself before the eyes and remain there firmly, for to take power in itself to make a blow, it is necessary that it is turned backwards, and immediately and very speedily directed forward, in which there is no time allowed to place the arm or hand by the sight, in front of the eye, so the arm should be accustomed to direct itself with reason to cast where the eyes look, and therefore we must not have the fantasy that we shall give with the weapon which we throw into the mark, unless with our own hand, which clearly shows us that it should go straight at the mark without turning up, down, or to the sides. And having this intention, the hand always directs the weapon which it throws, or the attack which it makes, holding a straight course at the place where the eyes look, but if when wanting to throw a dart or a lance at some mark we would look at the point of the lance, we would never make a correct blow. And so in jousting it is necessary that we always look at the companion in the place where we want to come together, and the hand should follow the eye, having placed the lance in the rest without it being drawn off target. And meanwhile when the other comes, placing himself at the side, we should go, turning the lance or putting it crosswise towards him, no more and no less. And in this place many are deceived, saying to him they presume to teach, as soon as he goes forth, 'Traverse, traverse,' which as many do, makes him turn too

much and shakes the enemy only with the shaft and not with the full clash. At other times they say, 'Don't turn so far across, don't turn so far across,' and so he does not reach the other jousting, and when he contends or charges, it is by chance and not coming from reason. Commonly all contend well when they put a band or other mark for themselves in a pole and afterwards do not touch at all the person or *clypeus* of the jousting (i.e. when jousting at a stationary target).

Some say that such disparity is caused because of the fear which they have in the ^{clash} and that they go towards the band without fear. But in truth it is otherwise, one may see that the band is not moved from the place where it remained when we began to run towards it, and therefore we can go straight to it without sideways movement even of the lance. But when we are jousting with another and we want to set forth to the clash, it appears that we remain as it were from front to front, and when we start running we immediately go to place ourselves on the left side of the enemy, and he on ours, especially when the woven cloth (*tela* - the barrier) is in the middle between both, so that the lance constantly faces the other's person, one must go across or go straight as much as the companion approaches or flees from the cloth, and when jousting without cloth the lance is to be directed at the place through which the adversary's horse passes. The lance having been placed in the rest, the point should point upwards a little and in no way be removed from this mark, unless only if the person moves aside, lowers, or rises, and in lowering, it should go only so far that it can meet with the other, and it should immediately be directed, and in this way a great blow can be struck, a great lance can be run down and lowered as far as the ground and be raised again. For when one directs his person, he lifts the lance with him which cannot happen by lowering only the lance. Nevertheless the visor should be good, since, when the soldier leans down to charge at, or meet with, the enemy, he also puts the visor in front at which moment the enemy can meet in it. Similarly the right side is to be turned with the lance, since it elongates it very much, in such a way that it meets before the companion does, we understand, when he turns the lance and not the side. When running in this way the lance is easily broken against the ground, the wall, or a similar place. But a blow is to be struck from the warding (*archeto*) in the manner of whipping, which would be difficult when charging straight. And the lance should be hewn of such wood which breaks just a little in doubling it, but resists much when charging straight. To sit strongly in any saddle, especially in that for jousting, the rider should place his buttocks and loins as much as he can in the back *arzon*, and the feet should come directly after the buttocks, neither in front nor behind, and the whole torso, neck, and head leaning forward a

little, so that in whatever clash any of those limbs comes to respond over the buttocks as if in tiny matters, and in this way the jouster cannot take hold of any reverse blow which is recognised with a lance when one wants to hold back or urge on one of the others on foot, where in remaining like so, if the feet remain strong and firm, the body is never bent backwards. Then he who keeps this order will learn the way of jousting. Further, since the hand is often destroyed in this exercise of charging when the lance breaks, it is safe to first of all apply some binding or other fortification to the hand to protect it.

CIV. WHICH QUALITIES DEFENSIVE ARMS SHOULD HAVE TO BE GOOD.

About defensive arms something should be written, which according to reason demand three principal parts, namely that they are, first and foremost, light, safe, and unrestrictive. These qualities we indeed rarely see in the arms which soldiers use very frequently, all the more in white armour, which soldiers in heavy armour usually use, and though they are light according to their construction they are of the greatest impediment. Then they are not safe enough, since they leave many places uncovered, and by experience we know and see that two persons fighting in white armour are wounded almost as quickly as if they are found in shirts. But the skilled should be otherwise armoured, especially in single combat; in this place or way of fighting we say that it is more inconvenient for someone to be too weighed down by arms than if he would leave some limbs uncovered, such as the back parts, or that they are at least lightly armoured. For he who knows how to govern himself in the way we have already prescribed can be very easily protected, to keep him from being caught by the back part, or even by the sides, so that he is not only lightly armoured on all parts, and strongly where needed. But with an iron *lorica* (mail coat) he can fight suitably enough with another soldier, though it be necessary to walk slightly outwards with the greatest attention until he who is heavy with armour fails or is disordered. Finally in a short period at this place there come many excellent weapons throughout the whole of Europe, and in various and different ways, and new ones would be found daily. Therefore we shall say little about defensive arms here.

CV. ON SOME LIGHT ARMS.

About lights arms we shall note down at least a little, since they are made in different ways everyday, sometimes with filaments like iron *loricas* and sometimes like the seams in shoes,

and otherwise of only mail or iron *loricas* and now doublets are made of iron plates. There is, However, a sufficiently good way to make light armour is to take up iron mail or *lorica* quarter for quarter, and stretch it over some cloth, and it should be sewn on the cloth with strong waxed thread, and by whichever thread strength should be inserted, following in accordance with how the threads of the *loricas* go. However at this time in various places, better doublets are made of steel plates than used to be made of old swords. Therefore almost everyone uses armour, even though they go lightly armoured.

CVI. ON THE DOUBLET AND HOW IT IS MADE.

The doublet should be long through the front part, so that it covers the whole groin, and at the back should descend enough (past?) the waist, but not in such a way as to make it an impediment; and on the bones of the haunches it should be well hollowed out or divided, and it should be made of iron mail or *loricas* or indeed of layered plates. For it is good for it to be covered with a woven cloth, so that we can insert a silk cloth between the weave and the iron, and this is very resistant against all kinds of weapons, and to be more loose and covered, one should, in that doublet which we are wearing, insert a silk cloth, as long as it is covered with iron *loricas*.

CVII. ON BOOTS.

To make the boots (*calligas*) which we wear strong and flexible, iron mail must be made, and *listas* or strips of iron *loricas* should be placed between the cloth and the lining of the boots, and the *listas* should not be too long, except that they should reach the knee or the back of the knee, or three fingers below the knee, and above the knee the *lorica* should be divided in two parts like a fork, not to be an impediment to us, and from the knee down the *listas* are to be put in the half-boots (*coturnis*), and they should come to join the others which are inside the boots, and in this way we remain no more bound than if we would have only boots and half-boots, though somewhat heavier. But when having placed the iron *loricas* or mail with the boots of linen weave or otherwise of wool cloth coming up, it is always enormous work; and one *lista* of the half-boots of iron mail should stretch over the foot as far as the toes.

CVIII. ON SLEEVES OR *LISTAS*.

The sleeves (*manicas*) or *listas* of the inner *lorica* should come in the sleeves of the doublet, and under the arms or in the armpits we should always put some *lunetas* (moonlets) or pieces of *lorica*, and they should be extremely strong and spacious, so that the arms can be governed, and should be tied together with strong soft leather pieces (*alutis*) and the *lunetas* should take in, by four or five fingers, the whole armpit, and arranged in such a way that the arm can very easily extend and recollect itself.

CIX. ON *CHIROTHECAS* (*HANDCOVERINGS*)

Chirothecas should be thin and without leather or woven cloth throughout the palm of the hand, unless they have some small grips, that go crosswise below the fingers and hold the *manutheca* (handcovers). The left *chirotheca*, though, should have some *listas* of iron *lorica* through the inner part of the hand, so that we can snatch the enemy's weapon. But these *listas* should be thin and separate from each other. And with the *chirothecas* fashioned like this, the sword can be held firmly with the hand for a long time and a *weapon* can be well cast from the hand, since enclosed *manuthecas* take possession of the hand and quickly exhaust it.

CX. ON HEAD-ARMOUR.

Head-armour is used in different ways: sometimes made of iron mail to go in a more secret way, and sometimes made of tiny *lambas* (lames - little plates) of iron or steel, so that they can be stretched out and recollected, and at other times they bear the *cassis* (shell), though this is of uncovered arms, and then a spike (*spiculum*) can be placed in the *cassis*, to come before the eyes to cover the nose. But any other head-armour should be divided or with holes, and raised above the ears so we can hear. The white *barbutius*, which in the vernacular is called *bauera* (bevoir) or *collarinus* or *gutturarius* of the *lorica* should be somewhat spacious. This we shall deal with in more detail further on.

CXI. HOW WE SHOULD ARM OURSELVES WHEN WALKING AT NIGHT.

If everyone should be armed at his pleasure or when he walks along the roads at night, since then he cannot be clearly seen, a hide piece over the chest is useful, placed above the other arms and prepared like *darghas* or leather *parmas* and it should come almost as high as the beard and lower down so that the body or torso of the man and his doublet is suitably grasped with ties. But this is not to be tightly placed over the chest, and in this way it is very rarely possible for any weapon to be braced in it, or for the person to be tormented or annoyed. For the hide yields in itself, and when they strike a blow in iron armour, very often the armour itself is broken, and equally the body receives great damage, which remains underneath.

CXII. ON SOME HEAVY ARMOUR AND FIRST ABOUT THE *SCHINELLAS* OR LEG-ARMOUR.

Schinellas, or armour which we use on the shins when we are weightily and heavily armoured, should not be full for the thickness of the shins, since they weigh down and restrain the whole person too much, and they should be almost as thin as possible, except at the front part, which is called the *spiculum*. For we see no one wounded because of weakness of the *schinellas*; and at the back there should be some *listas* of iron *lorica* inside, and the *lorica* should be extended to cover the foot, and the iron of the *schinella* should be somewhat short. However, the neck of the foot (the ankle) should be covered with the *lorica* or with tiny lames, and for fighting on foot the shoe should be white (i.e. of plate) or altogether of lames, and it should be spread out and tied together, and under the foot there should be a soft sole, to keep the foot from scattering or being taken by surprise.

CXIII. ON THE *COXOTTI*, OR *ARNESIA* (HARNESS), OR ARMOUR FOR THE HIPS.

The *coxottus*, which armours the thighs, should be fashioned in almost the same way as we have said above about the *schinella*, though the *coxottus* is to be made stronger at the front. But both should be thin in the other parts which they have in common, and they should have two *listas* of *lorica* on the sides, and another at the back, which comes through the curve all the way to the *schinella*, and above the knee there should be tiny iron lames, and that little wheel (*rotula*) which goes through the outer parts of the knees should be small, or the lames should be loose. For those bring little impediment and cover well. The *coxottus*, though, should not be long when it is of one piece only, since the upper part should be of pieces or small lames, and they should give the opportunity for gathering and extending themselves, so

that we can ride and walk freely, and in this way it is sufficiently possible to wear a high *coxottus*, and where the piece finishes, there it should be bigger than the *coxotti* and tied with one soft leather and the soft leather should come from the boot (*calliga*), so that there is no hindrance in gathering and extending the lames, and then they will be loose and reach to the corslet.

CXIV. ON THE WHITE CORSLET.

The white corslet demands strength at the front, and it should go towards the sides losing in thickness, in a way that makes it lighter. For outside of the first charge with the lance, no other point can offend much, except a crossbow or some kind of cannon (*bombardarum*) , and in the first charge it is common to wear another chest-cover over the corslet, and for fighting one with another, the corslet should be very thin at the back, when no danger befalls him there, and because all the thinness can easily avoid the first charge or blow, when we hold the horse on the left hand and thereafter come with a turn, so that we take hold of the other's back while he passes, and in this condition we can go without chest-cover or let it fall away when we pass. But against a charge, it is good to carry one small iron wheel on the left part, which should be light in use but big enough in circumference. A short corslet (should reach?) at least to in front of the belt, and lames placed there should fill in to the lower part, and one should touch lightly on another, and by themselves they should come high in the haunches, so that they do not touch there, for which it is sufficient help that the doublet is very full in the upper part, so that the corslet is braced there and not on the lower parts.

CXV. ON THE CORSLET FOR FIGHTING ON FOOT.

The corslet for fighting on foot is, according to the ancients, long and usually reaches to the knees, and its *circulus* or the lames which hang from the waist should be light, and should very easily be extended out or regathered; with this corslet two bevoirs or *barbutia* with some holes are used. And he who knows how to exercise a poleaxe can without any doubt leave aside one *barbutium*, to go more lightly, except that some windows which face downwards should be made, and one should avoid the holes which usually remain in the front part, because of the imminent danger that the point of a poleaxe may be fixed there.

CXVI. ON THE *CASSIS* OR *GALEA* WHICH IN THE VERNACULAR IS CALLED HELMET, AND ITS VISOR.

The helmet or *cassis* should contain enough space and, be through the front part, at least, high, and on the sides and the back parts it should lose in thickness, and over the ears it should be raised in the way of a bump or a snail, and it should have holes so we can hear, for when we do not hear and the ears are both blocked, and all senses are taken over in such a way that the man has little knowledge about what he will do, and further he quickly fails. If though the *cassis* is raised in the way we have said, it is rendered stronger. For on the sides points come in from outside. Nevertheless at times it should come closer, so that the armour remains firm and it is also good when one little spike (*spiculum*) goes from ear to ear by the top of the *cassis*, just like another spike which goes from the front to the rear part, and on the ^{slot}(*rimula*) or cut-out (*scalfatura*) or aperture of the helmet, which goes before our face, it should be a little low towards the beard for the sake of bigger breath, and the outer edge, or border (*orlus*) or fold (*plica*) which goes around the slot or cut-out, should tend to be fairly big, and it should be rolled outwards a little, so that it can retain the points of the other's weapon there, since otherwise whenever the visor is opened or raised, the enemy's weapon comes to strike in the face. Therefore, all borders or folds should be rolled outwards a little, and the visor through which the eyes look should come sufficiently far from the face for breathing, and there should be one cut out above either eye, so that we can look upwards. But it has to be narrow, so that a point, even if it touches there, cannot enter, though the danger is small when the helmet or *galea* slips backwards there.

CXVII. ON A CERTAIN SECRET HELM (*CASSIS*) WHICH IS USEFUL TO WEAR UNDER THE HELMET.

For anyone in a fight on horseback, who fears that he will be struck with great blows by a club, it is good to insert under the helmet one very thin *cassis* (helm), which should be temper^{ed} and it should be folded double in whatever direction, and it should not be broken or let itself be pierced easily, and in this way, and in this way even if the helmet is broken, this *cassis* does not allow us to feel a blow on the head. But it is understood that inside there is some lining or wool, and likewise between one piece of armour and the other; and equally, to make the resistance much greater and to let the man turn, the helmet should come out to enclose or join itself to an iron collar which surrounds the neck. Similarly it is held by the

corslet by the front and back parts, and on top of it it (the collar) has a little of the rolled border made like a channel. The helmet, too, contains another, similar, below, and in this way the collar and the helmet come to join, and they have place to go around because of those channels; however, one pin is inserted in either side to keep the head from turning more than we are used to turn it without damage, and in such a way it can also be rolled out with a small bevoir.

CXVIII. ON THE BEVOIR (*BAUERIA*), OR ARMOUR WHICH IS USUALLY FITTED IN FRONT OF THE NECK AND THE BEARD.

With the armour which is usually carried, the bevoir or *barbutium* (is the) piece or part (which) gives us more trouble than all the other armour; it should be spacious and have two windows in the lower part of the *barbutium*, so that we can see our chest and arms, and the horse's saddle. But it is necessary that in the *barbutium* there are the same little windows as in the helmet itself, and that it is spacious in front of the chin. If, however, the *galea* or helmet is of heavy armour, it should also have the same windows under the point of the *barbutium*, and some small holes above, and the little windows should adjoin in the same straight line with the others of the *barbutium* which will be placed above, since the *barbutium* and visor are of the greatest impediment to breathing; we cannot last in that way, nor discern our persons, and with these little windows we can see and breathe better, and in this no danger can occur, since the little windows go straight down, so that no weapon can come to strike straight through it, and we see how our weapons should go and, which is greatly useful, we continuously receive fresh air through these little windows. And similarly we see the weapon of the adversary; and at the rear part of the helmet, over the neck, it is appropriate to have iron mail or *loricam*, and it should be tied together below in such a way that it cannot expose the neck, and an iron guard or round shield (*rotella*) should be carried when many are joined in combat. The handcovers (*chirothece*) should, because of club-blows, be raised in the hands, so some wool can be placed underneath so the iron doesn't compress the hands, and there should also be a guard over the elbow, and the *scapularia*, which are called shoulder pieces (*spallacci*) in the vernacular, should not sit (directly) on the shoulders. But they should be thoroughly raised, not to sit on them, because a club could not (then) torment you so much with blows, and we should attach them with pins (*clauis*) and straps, so that the lames cannot be separated. The helmet or *cassis* or *galea* should be spacious and reduce upwards, and the iron should not touch the top of the head, and the *lorica* which comes through the edge of the *galea* should be doubled. For often a single one, even if it is strong, is quickly penetrated,

especially in the back part, which, when the man leans down, is left unarmed between the neck and the rear part, so that in that place one must provide for long and doubled mail.

CXIX. ON A BEVOIR OR *BARBUTIUM* FOR ARMING LIGHTLY.

For armouring with light armour, there should be one *barbutium*, which should come to attach itself to the collar with lames, as we have already said above when discussing the helmet, and at the rear part it is appropriate that a single narrow lame comes, like a finger, which runs through the collar which remains below, for otherwise the *barbutium* could not be well encircled, nor it should not be longer than that little lame which other *barbutia* are usually.

CXX. ON THE HELMET (*GALEA*).

The *galea* should indeed be of a broad sort, so that the *barbutium* can enter under it, and the *barbutium* itself should hold a tie, so that it comes to tie itself on one pin which is placed under the *barbutium*. In this way the *barbutium* will turn around together with the head and the *galea*, and the collar should be short and spacious and have two windows, and it should be tied to the corslet at the front and back, and in this way it is safer than *lorica*, since nowhere can it be injured. The *galea* should have a little iron mail, and in the rear part it should be sewn to cover the neck. The *barbutium* should also have little windows, since it can go around. But it is not as safe or as good as if it has a collarinus.

CXXI. ON ARMOUR FOR THE ARM.

About the armour for the arm, one gives great attention or observation to the shoulders, especially under the arms or the armpits, for club-blows very often come to strike on the shoulders, and the points of estocs or swords at the armpits.

CXXII. ON *SPALDATIA* (SPAULDERS) OR SHOULDER PIECES (*SCAPULATIA*).

Armour or *scapulatia*, which come on the shoulders and shoulderblades, should sometimes be arranged in the corslet towards the spine of the back. But not in the universally used way

which cover the entire shoulderblades, and there one is put on the other and they also continuously come together and are hindered in such a way that weight without usefulness results. If, however, it is made of small lames it is more easily managed, and by the upper part of the *scapulatium* they seek a strong spike through the middle. The Germans use these spaulders (*spilatia*) well enough, except that behind they are too broad and in front not well covered. One should have a crescent (*lunetta*) of small lames which should cover the armpit, and they should be well attached to the shoulders with thongs and come to cover under the arms, and lames placed like this can be gathered and stretched out, and this is not an impediment to the arm neither when running or striking with the lance, and where the white armour does not reach, one should cover with the best mail. Light armour, indeed, lacks strength from all sides, because arrows and any other adversity usually come also from one side.

CXXIII. ON THE GAUNTLET OR IRON *MANUTHECA* (HAND COVER)

A gauntlet is to be made sufficiently wide, not to cause an impediment to the fingers, especially the index finger, or indeed to the weapon which we hold in our hand, and in the part of the arm there should be a hollow and also in the *manutheca* for there the handle of the sword rests. For if in fact the *manutheca* is round and long there, the handle cannot be well braced, and therefore it is laborious to hold the sword in the hand, and by that part of the *manutheca* as well as over the index finger a little iron mail should be inserted, so that it protects and defends the hand from points between the thumb and index finger; the gauntlet (*manica*) should be cut a little, so the sword can be enclosed there.

CXXIV. ON THE LEFT GAUNTLET.

The left gauntlet demands some strips of mail through the palm, so that it can seize the other's weapon when it is time, and at that moment we should enter with the right hand against the adversary with very great, rapid blows. And the handcovers (*chirothecas*) should be made in such a way that they come with mail to cover over the fist in the place from which the sword-handle goes out. For there men are often struck with points. Therefore in any offensive weapon, when one person wants to fight another and they are heavily armoured, one should attach a little wheel in the cross of the sword or *stocchus* since they defend us from points

thrown by the hand. The *manutheca* is found to be safer or rather it helps the lames and it wants to be as far from these lames as the sword-handle goes back above to touch the muscles of the arm, it is understood that of our finger with a long *manutheca*, it should itself open and close at the same time as the hand, and such mail or little lames protect the hand or ^{secure it} on all sides.

CXXV. ON THE WAY OF FASTENING ONE PIECE OR PART OF ARMOUR TO ANOTHER.

Where one piece of armour is fastened to another, it is appropriate also to attach, besides the pins which are put there, some strong ties, not just of those which are normally attached with the nails, but also so that they pass through the holes to support one part or piece with another. This fastening however is loose and it is not broken and always preserves the armour at the same time, and pins are very different, since while they endure they retain strongly. When however we strike it a blow with a club, any piece leaps apart, so indeed experience is obvious in fights, for with a few blows the fighting man is left unarmed in many parts, and ties of this kind are more necessary in *scapulatia* (shoulder pieces) and *chirothecas* than in any other place; for in these places we receive more blows with club or shaft.

CXXVI. ON THE FRINGE OF THE *LORICA* WHICH COVERS THE BUTTOCKS AND THIGHS, WHICH WE BY OUR VERNACULAR LANGUAGE, CALL *FALDA*, AND ON THE *GOCETIS* WHICH COME ON THE SHOULDERS AND UPPER ARMS.

The *falda* (fauld), which is placed under the edge of the corslet and the *gocetis* of the arms should not be of such a great size as is commonly used, since the *goceti* or iron mail sleeves (*manicas*) add much weight and little or nearly no usefulness; it is enough that they are attached inside the corslet by one hand or around with hollow spaces, and the *goceti*, also, should be short and sufficiently tight and fastened in the place to which they reach, in such a way that they remain loose and cannot go back up, so that the arm is not accidentally uncovered. If though there is an entire piece of lame in the arm, it is not fitting to have *lorica*, except when the piece of lame does not reach to cover, and if we don't have white iron arm covers (*brachialecti*), the *lorica* should reach all the way to the hand, and there the sleeve should be tight, and broad in the armpit, so that other strong *lunettas* can themselves stay under those sleeves and in this mail.

CXXVII. ON THE CONSTRUCTION OF THE *FALDA* OR FRINGE OF THE *LORICA* OR IRON MAIL.

The *falda* should not be big, and it is safer when it is attached or sewn to the corslet, for in that way, even though the man lowers himself, his loins remain covered, which does not happen if it is gathered up with a belt; and through the inner part of the *falda* itself another piece of strong *lorcia* should be attached, so that it encloses the loin and the buttocks, and it should pass through below or between the legs, covering the groin, and it should reach to the navel by the front side, and there it should be fastened with soft leathers (*alutas*); and this *falda* or breeches (*bracha*) covers the lower parts and brings no impediment whatever, since another *falda* is often lifted, for which reason it becomes unsafe. The Germans use these breeches very much: they weigh little and are useful.

CXXVIII. ON ANOTHER LIGHT ARMOUR FOR FIGHTING.

To fight lightly armoured the corslet should be sufficiently firm where the rest is placed; in other places it is not appropriate that it is thick, and the rest in which the lance goes should be able to be folded. The *chirothecas* on the hands should come high because of club-blows. The elbow-guards should be made raised, similarly the *scapulatum* high above the shoulders, that blows do not bring damage to them, as we have already explained above, and in the rear part they should not be so poor or short that they uncover the shoulderblade or arm at a blow. And under the arm in the armpits, *lunettas* are to be put in such a way that they are attached to the corslet, or come to the armpits of the lames of the armour, which can be regathered and extended. The *scapulatia* can, moreover, be made in such a way, with the whole arm piece (*brachialis*) all the way to the hand, and by the elbow there should be little windows so that the arm may be turned around. But these arm pieces are very heavy and not agile. Therefore it is better to put those few lames on the arm so that they can be stretched and regathered. Other places in which something is uncovered should always be covered with excellent iron mail, as before the elbow and under the buttocks and groin. The helmet should be spacious, and narrow upwards, and all around wax should be placed, so the blows are not felt and do not make a noise in the head, the space which is inside from the visor to the *barbutium* or the point of the visor itself should be made slightly in a curve. The lining of the helmet, especially for jousting, should be well split or hollowed over the ears to let them remain free to hear, and for this reason the lining should not touch them. For the first blow, arms of various types are

normally carried, such as the *chypeus* or *scutum* and *rote* (lit. wheels), sometimes belted on the person, and sometimes tied on to the foremost *arzon*, in such a way that it can be released, so that they fall, passing the first charge (*incontrum*). And we say *incontrum* (lit. meeting) because one comes against the other to meet. Indeed of arms of this kind, many others are invented every day. If we enter a fight on horseback, especially one person alone with another, one must pay the utmost attention to armouring the horses, as long as there is an agreement that the horses may be killed, and because of charging, they should be more strongly armoured in the front part. And there, on the iron *testera* (chamfron), which the horse wears on the forehead, it is good to put another one, very light and small, which can very easily be destroyed with the charge, and at the back of the horses head or neck there should be one little iron wheel, which may turn, because of *club*-blows, and on the neck, at the left side, some lames or pieces of iron, which may be easily raised with the charge; for he who wants to injure the adversary's horse with the lance targets from the ear to the shoulderblade, and still almost near the ear, for the point of the lance can choose any part of the neck, either before the shoulderblade or below the saddle or in the hollow through which the man's legs go, and that part in which our thighs remain commonly stays unarmed, which of course is a very great danger. Therefore, in this place one should throw a blow with an *estoc* or other *mucro*, and so many parts of the horse are to be armoured with *lorica*, especially the lower parts, though this is more appropriate for going among footsoldiers. If someone wants to handle light and safe arms, he should altogether take up iron or steel. In Spruco¹¹, a city in Germany, the best iron and steel is found. Therefore the masters there put arms to the test with crossbows, and commonly it is said that such tempering is caused because of one body of water which passes through those places. But in fact they temper with any cold water, and some who had seen the excellence of this iron wanted to experiment to make a corslet resistant to *sclopetis*, which is a small kind of cannon, and in fact achieved this. Nevertheless, one should wear a silk quilt and a well-sewn cloth over the corslet. And when it becomes wet it is rendered stronger, though such armour is heavy according to the Germans, but not according to the Italians or French, and this armour should be strong through all parts. Now though there are arms made in Italy which are nearly as good as those from Spruco. Although the art recently originated from Germany, and afterwards hands are of good nature and well-equipped, the secret consists in beating the arms a lot when they are already cold, and they should produce strong tempering, though they should not be broken but remain like any iron of an arrow, weapon, or things like these, which are neither broken nor folded. At the time when I was composing this work,

¹¹ According to [a](#) place-names dictionary, this might be Spork, now Bocholt, in Germany.

Duke Sigismund of Austria, Galeazzo da Sanseverino, and Claudius de Voldre of Burgundian birth, engaged much in dealing in different kinds of arms. Before them, in truth, nearly all armsbearers were armed in one and the same way, especially with arms which are worn; those three illustrious nobles invented many new arms for footsoldiers as well as for mounted retainers, and not just different but extremely useful. And since shortly afterwards the French entered Italy to conquer the Kingdom of Naples and the Duchy of Milan, many Germans and Spaniards came together to join in this attack, in such a way that already in these days arms became diverse and excellent. At first defensive arms made in Spruoco were so very strong because of tempering and because they were beating them very much in the cold when they already had their shape; now, though, this and that is known in many places. Those however who invented this good thing were, first, Duke Sigismund and second, Galeazzo da Sanseverino.

CXXIX. ON *BRACHERIA* OR THE UNIVERSALLY ADOPTED WAY OF THROWING.

Bracheria in Spanish is understood for any kind of throwing with the arm, and *brachieria* and *brazear* we call it when we are in the act of throwing, and there is little difference in the way of throwing between one weapon and another. But he who works without reason or art is found to be as it were new in any kind of throwing; and in throwing, the principal caution is that we do not hang on the left side when we want to throw a weapon, stone, or other arm, and a great turn should be made through the right side at the rear, and in front it should go on a straight path, and neither the head nor the arm must lean on the left side, to keep us from assuming a bad habit, and from this one should hang a little on the right side. Therefore, whenever we throw well, we sense some fatigue in the right side, and when the weapon is rolled on the left a little, the weapon which we call dart (*dardum*) can go, and a lance should always go high. Therefore it is fitting that the arm stays high at the moment of dispatch as much as possible, and that it is dispatched extremely loosely. Any weapon, when discharged, demands that the arm is aimed upwards, except for the iron pole, which should go lower and close to the side, almost in the same way as we draw away a ball when we play with it; and nevertheless, in throwing the arm is to be lifted and the weapon cast off by it.

CXXX. ON THE FLYING STONE OR MISSILE.

The flying stone, which we call *volandera*, requires that the arm goes extended, but sufficiently lowered, furthermore the right side should lower, in order not to allow the stone to be directed to the left side.

CXXXI. ON THE WEAPON WHICH WE CALL THE DART (*DARDUM*) IN THE VERNACULAR.

The *dardum* should not go as high as the lance, though it should be thrown higher than a small stone. But the arm should cast off strongly and remain straight and the little fingers should go under the haft, and the other next to it is called 'from the heart' (the ring finger), just as is done with the lance, or as other arms are hurled, the other two should hold the throwing strap (*abiectum*) or soft leather (*aluta*) to throw, together with the thumb, and the most powerful and greatest secret for casting a weapon consists in that when we want to discharge it from our hand, all five fingers should remain fixed: they should not be opened, stretched, or even raised, and the arm should on no account be bent, but should, as much as possible, remain straight, and in this way the weapon is always thrown well, and likewise any other weapons fit to be thrown require that we always hold the fingers fixed.

CXXXII. ON THE LANCE.

The lance we should cast almost straight over the shoulder, though on the right side it is to be slightly lowered and held tight with two fingers, namely the thumb and the index finger. The other fingers though should grip lightly and take care to support the weapon.

CXXXIII. ON THE PRINCIPLE FOUNDATION FOR CASTING THE LANCE, THE JAVELIN, AND THE POLE.

The most powerful foundation for throwing the lance, javelin, and pole we shall explain in a few words, though elsewhere we have written in whatever way otherwise. To make it look beautiful and let the man relax, the *ginetta*, or lance fit for casting, demands that we come with maximum fury to the mark in which we will fix our feet, and run straight, deviating neither to the right nor to the left. But though we should see to it that the right foot does not

remain too far behind the left one, unless, as level as possible, it goes away on the right side, and then it does not allow the arm to be turned to the left over the head, which is very bad in the way of throwing, and also it makes us place all power in the hand, the arm, and other necessary or appropriate places; we should not pay attention to discharge the weapons, except to remain upright and slightly on the right arm, and however that side should remain raised as much as possible, and we should forcefully brace the left foot in front. But indeed, because of the impetus we make when we run to the mark, it is fitting that we at some time depart after the lance, but to fix the left foot, as we have already explained, it departs with little fury outside the mark. Here, though, one must note that the right foot goes along the ground with the upper part or a sweeping strike, and no one who does not observe this rule can be a good thrower of lance, javelin, or even a small or flying stone, and the pole requires that one foot remains almost as much in front as the other, and likewise the big stone, which we call *schina* in Spanish. Also in the lance, one must note that the right foot goes forward almost as far as the left, and goes aside as much as possible to avoid that the arm goes over the head, but deviates to the side, and this is why many throw well when on horseback, though less so on foot, of course when riding they hold their feet level so that they have no opportunity to lift the arm over the head, which I truly consider a great and common error among those who throw.

CXXXIV. HOW THOSE WITH LITTLE STRENGTH IN THE HANDS SHOULD THROW A LANCE.

For those who possess little strength in their hands it is very useful to throw the lance in between the two longest fingers, and in this way greater strength can be applied in the hand. But it is better, as the lance is commonly taken, that the little finger and its neighbour remain under the shaft, and the lance should enter well within the hand, in such a way that it is seized with the thicker joints of the fingers, and the thumb should pass over the haft as much as it can, always directing itself up or towards the rear part of the haft, and this applies to those with little strength in the hands just as to all, as long as we throw with hard wood. But throwing with a soft lance, it is appropriate for it to be lightly placed in the hand, since one should support or guide with the fingertips, lightly discharging it upwards, and the thumb and index finger are only to be held tight when we throw a shaft, especially at the moment we expel it from the hand.

CXXXV. ON THE BIG STONE WHICH IS CALLED *SCHINA* BY THE SPANISH.

The big stone, or *schina*, is thrown over the shoulder, and it is fitting that we perform a great turn on the right side and send the arm upwards, and when the stone leaves the hand we should not go after it, and we should bend down on the knees and slightly to the left side, to keep from departing after the *schina*.

CXXXVI. ON THE *STIPULA* OR STICK WHICH THE SPANISH CALL *VARIGLIA*.

The stick or *stipula* is to be thrown under the arm, in the same way as a small stone, and the fingers should be forcefully tightened, casting with the whole arm, especially the fingers, and the thumb and index finger should always remain firm.

CXXXVII. ON THE WAY TO THROW A LANCE WHEN WE ARE MOUNTED.

To cast a lance when mounted our thighs must be forcefully tightened, and it is fitting to make a big turn, and afterwards at the time of discharging the javelin or shaft one must remain in an erect way on the stirrup, and we should not go to the left side nor to the horse's neck, unless we remain almost directly over the front *arzon*, for if we go back to the back one we can only apply little force, and going towards the neck the lance is pressed below.

CXXXVIII. HOW THE STIRRUPS SHOULD REMAIN TO CAST A LANCE WHEN WE ARE MOUNTED.

To cast when we are mounted, the stirrups should be almost equal in length, and the left stirrup should go before the waist, the left side however rearwards to be braced over the left foot, as we have already explained concerning how to throw when on foot, though it may be overstated, to go over the front *arzon* when we want to throw a lance, because the left leg holds us back. But it makes us put in all our strength, and further, it does not let us turn to the left side, which would happen very often, if the left stirrup were longer than the right.

CXXXIX. HOW THE SADDLE SHOULD BE ARRANGED ON THE HORSE FOR THROWING.

A saddle for throwing on a horse, wants to hang a little forward, or it should remain straight, and it should be spacious, which also requires high *arzones*. It is easier for raising ourselves when we want to throw, when it hangs forward. But if we have sufficient strength and courage, we should turn on the back *arzon* or the horse's rump, and afterwards we should quickly straighten ourselves in the front *arzon*, it will be better that the saddle sits straight or level on the horse. But when it hangs forward the man is more easily raised, but yet throws a little less. To cast with a sling, the arm should be very extended, but the sling also destroys the arm for throwing other things.

CXL. REMEDY AGAINST PAINS IN THE ARM WHEN IT IS PAINFUL BECAUSE OF THROWING.

Many things are found which offer some remedy for the arm when it is painful because of throwing. It can, however, rarely be prevented, if we do not allow it to rest for a long time. But from continuing, medicine seems more useful for a small impediment, that we hold the hand firm in some place and place the whole body straight over the arm. And the quicker this happens, the more useful when we finish a blow. Moreover, by diligently rubbing the arm with warm pieces of cloth and washing with spirits, the pain is removed and the weariness cast off, and in this way it sustains the arm so that we can throw more often. But it is much better to smear the arm with fat from a goat, deer, ram, or cow. For this is very comforting for all sinews, all the more when the pain comes from some blow or coldness, and this remedy helps against any weariness of the limbs, especially against weakness and coldness of the sinews, and so, he who wants to use such an ointment will never have a pain in his arm caused by throwing.

CXLI. A NOTE ON LIGHTNESS.

All arts of lightness agree in one particular, this is that we always in acts of lightness we raise our limbs, sending our strength into the shoulders and the chest, and when we start to work we must act quickly, as in other things, and we should consider where we wanted to go even though we could not attain it. For it is a greater danger to want to go back after we begin, not to pursue our first intention.

CXLII. HOW VAULTS (VOLTA) OR TURNS SHOULD BE DONE ON HORSEBACK.

Rotations on a horse should always come as high as our arm is long. Indeed big circles can not happen otherwise, and they will not be graceful to the sight, and the whole body should go gathered, and should also be placed over the left arm equally or in the right, and the legs should go in a circle as high as the head. In vaults, placing us over the saddle with the feet, the *pomata* (pommel), *peregrina* (traveler), *remontata* (remount), and *maura* (Moorish) contain the way from all vaults. Therefore, to maintain lightness it is enough that we now and then make those vaults or circles. We shall explain something about the names of those vaults in their proper places.

CXLIII. ON ROTATIONS WHICH ARE COMMONLY DONE ON THE HORSE OR IN THE SADDLE.

On the vaults which are commonly made on horseback we have decided to note here a few of the more important ones, and those which appear best to the sight. And since we here use vernacular names for the revolutions, we shall add a few explanations. For many of these are named in pleasure rather than in conformity. There are, however, some which take their names from the names of their inventors, and we will place a few more names of this kind. Finally, to understand vaults we should know how to *tripudiare* (dance) or *girare* (circle) on the saddle. In Spanish this is called *volteare*, and *volta* (vault) can be called or conceded to be *girus* (circle) in Latin. For we say *volvo*, *evolvo*, *revolvo*, (roll, roll out, revolve) and similar words.

At the beginning of the vaults the front *arzon* should be seized with the left hand, and we should keep with the feet over the saddle, erecting the body upwards at the same instant.

Having completed (the vault) grasping from the front *arzon* and moving across to the horse's other side, and the body should not touch the saddle.

Dimidia pomata (half-pommel) from the back *arzon* with the left hand, and the right hand should come over the horse's rump, and we should go to ride in the saddle.

Dimidia mamia (half-mamia), which others call *rotata* (revolution, rotation), grasping from the back *arzon*, and we should ride over the saddle towards the rump.

Baldassina, named after its inventor Baldassino, is the same vault as a *dimidia mamia*, except that it is done the opposite way, by the horse's right side.

Tota pomata (full pommel), seizing with the left hand, and we should come to ride in the saddle with both legs at one side, in the way that women usually sit on a horse.

Volta staffilis (stirrup-leather vault) with one hand and both taking with the left hand from the stirrup-leather, and the other hand touches on the back *arzon*, and our body makes a circle over the saddle and returns to the ground, where we were at first.

Tornus or *girus* (circle) of any *arzon*, namely the front and back (*arzones*), that we go over the saddle, going back to the ground with a vault.

Volta de crinibus (hair-vault) it is called when the left hand seizes around the middle of the horse's neck by a few hairs, and the other hand touches the middle of the saddle, and the body comes with a circle over the front *arzon* to the ground.

Volta de pugno (fist-vault) it is called when we put the fist on the saddle-cover in the side, and not gripping anything with the hand we should make a circle, which in the vernacular is called *tornus*.

Volta staffe (stirrup-vault) we call it when the stirrup comes below the horse's belly and sending the left hand inside in it we make a *circle* or *tornus*.

Volta de aluta (vault of the soft leather) happens when one rider remains on the saddle and the other takes him by the soft leather of his boots and touches with his right hand on the rider's arm and makes a circle over the rider's shoulder, going back to the ground.

A *peregrina* (traveler) is done when passing beyond a *dimidia mamia*, and we must only touch the saddle with the hands; the whole body goes with a *circle* to the horse's right side with the feet onto the ground.

Tota mamia (full *mamia*) should go as is contained in the *peregrina* (as described in the paragraph on the *peregrina*), and go back to ride with the legs on the left and the sight should remain in the front part. In Italy they also call it *tota mamia* in another way, which, however, is a quite small *vault*, since it is done of two blows or times, and this is, when making a *dimidia mamia*, the left knee should come over the horse's neck and the foot should pass to the left part, and then the vaulter can very easily go back to ride with the right foot, in the saddle with the face towards the front part. But he (who) does a *remontata* from the front and back *arzon* without touching the horse's neck, and with a *tornus* after he passes into the saddle or returns in the rump to ride, can very easily do this *mamia* which we have described.

Dimidia mora (half-Moor) it is called when passing beyond *tota pomata* and we should ride with the left leg in the horse's rear part. And *dimidia mora* and *tota mora* are called so because of Ludovico Sforza, Duke of Milan. For he was called 'the Moor'.

Tota mora (full Moor) goes the same way as the *dimidia mora*, nevertheless it travels across with both legs on the horse's left side to sit.

Legiera or *leuis* (light) is done in the same way as *dimidia mamia*, except that the body should go so far upwards that the feet are put on the saddle, and then the man should erect himself upwards.

Galeacia, in respect of Galeazzo da Sanseverino or made with him at the same time and called so, is like a double *dimidia mamia*, and should go around twice before the saddle is touched, except that it should not even be braced with the hands, and one should ride behind with the face.

Volta de Medina, after its inventor Medina, is done by taking the stirrup-leather with the right hand only, and the vault should happen in reverse almost in the same way as a *sclauonescus* leap (see below, in this chapter), and it becomes dangerous unless the man goes over the saddle and turns back with a circle to the ground, though he should not pass totally over the saddle, except the feet only, or the legs.

A *cimata* (shears) is done by seizing the back *arzon*, and the feet enter by the same way into the saddle, and we remain erect there with the face towards the front part.

A *volta capriola* (caper-vault) is called by the same grip as the *cimata*, and we should pass to the horse's right part, and then the feet should be placed on the saddle, or we should come lower, as if doing a *tota pomata*, except that the whole body should follow erect.

Some *volte damicelle* (damsel vault) or *dela dama* (of the lady) happen when the man takes position on the horse's rump in the same way as a *dimidia pomata* and *passa volta*, which is that the feet pass by the middle of the saddle to the other side, and should go back to a *tota pomata* to sit. Moreover, this grip is used for riding and passing through the middle of the saddle to the other part. But this is easy.

Groppata (the rump) is seized by the horse's right part, and the body should come over the saddle with a circle and be sent with the feet over the rump.

Arzonata, (the arzo) we come, remaining firmly or running crosswise, both *arzones* are seized with the hands and in the other part, one jumps through the middle.

A *volta remontata* (remounting vault) should come from any *arzon* or stirrup-leather, like when we want to do a *tornus* coming from the ground. But the body should go higher and more over the saddle, so that we have an opportunity when we pass the whole horse, so we can ride again. But when we grip the front *arzon* or stirrup-leather, one should ride in the saddle with the sight in the front part, and taking the back *arzon* we should go back to the rump, and this is very easily done.

A *montesina* (little mounting?) it is called when we come by the way of the *remontata* and pass to the horse's other part, and the saddle should only be touched with the hands. This vault, however was difficult for me, but I do not know what it would be like for other, lighter men if they would happen to make it. With running the saddle should be seized with two hands, and coming by the horse's rear part we should place the saddle on the horse, at the same instant jumping with our feet on it, but another should come running and only one hand should be sent over the rump, jumping with the feet on the saddle; for a vault with both hands is small.

Sclauonesca, or what should be called *de collo* (of the neck), happens when one person remains in the saddle and the other comes running and at the same time sends hands and head over the rump, and his legs should go over the rider's shoulders and the other should catch them, and then the other sits on the neck of the one remaining in the saddle.

A shoulder-vault happens when coming at a run, that the feet and hands should quickly be placed on the rump and likewise on the rider's shoulders at the same instant without delay we should jump with feet and hands, at the same time erecting ourselves and jumping to the ground, and it is not fitting to lean on the other's shoulders, not even in the back part with our feet, unless we try to go upwards, to be able to jump, and we should not tire out the person who remains in the saddle.

CXLIV. ON SOME VAULTS WHICH USUALLY HAPPEN WHEN THE HORSE IS RUNNING.

When we are riding at a run we use certain vaults. But here we shall only mention the strongest or greatest ones; and the vaults are such that the man is placed with the feet in the saddle and remains straight while the horse is running, and for this the man remain very straight in order not to hang anywhere (in any direction), tightening his knees straight as much as possible, and the hand should hold the reins, drawing them softly towards itself, and always in a way without pause. And when he wants to make the horse firm, he should open his legs and sit in the saddle. Another vault is done when we are mounted, placing the leg over the left stirrup-leather, and the stirrup comes backwards behind the leg to place itself in the foot, because the stirrup-leather should offer an opportunity to let the legs rotate and let us ride, and then when the horse is running the right leg is to be drawn towards us over the horse's neck, and we should turn our face to the left side, and with a circle over the left stirrup only, one should return to the saddle to ride in an upright way, and the right leg should enter over the back *arzon* to ride.

Then another (vault), too, can be done quite easily, in which the man is not turned, except that the right leg passes over the front *arzon* and through the middle of our other leg and of the horse's side, and goes back again through the back part to ride. It is very useful that the man is exposed to doing vaults, so that he is accustomed to some vaults, such as *cimata*, *capriola*, *leuis* or *legiera*, which lighten our person very much.

The *peregrina*, *remontata*, and other vaults, which go along this way, teach to support on the arms, and the *volta staffilis* of the pommel and front *arzo*, and the *volta de crinibus* and *volta de pugno* brings courage, so that the man turns rolls over the saddle onto the ground.

CXLV. WHICH WAY GREAT VAULTS SHOULD BE OBSERVED, AND WHICH OF THEM REQUIRES STRENGTH IN ONE ARM, AND WHICH IN THE OTHER.

In the same way as the *dimidia mora* and *tota mora* go along the way of the *tota pomata*, those four which we call *dimidia pomata*, *tota pomata*, *dimidia mora*, and *tota mora* we should sustain in the left arm as much as possible. Therefore, in the first leap we should ascend so high that the arm remains straight and stiff, since otherwise it bends when we go in a vault over the arm, and we cannot complete it. And in these four vaults we care little about the strength of the right arm, except inasmuch as we give strongly with the right hand in the

saddle or rump. Thereafter, though, we are supported on the left. Four other vaults, such as the *peregrina*, *tota mamia*, *galeatia*, and *remontata*, go into the right arm, and it is not appropriate to move it until the *vault* is finished, or when we already are about to complete it, and the left hand and arm should rest extended and straight, so that we can go over the fist. And to make a *tota mamia* and *galeacia*, it is fitting to have such an image of going, naturally, first to a *peregrina*. And to do a *mora*, in fact our intention should first be directed at a *tota pomata*. And when we want to carry out a *remontata*, we should look at the *volta staffilis*, though one should come more over the horse and higher, since with the height the opportunity is found to come wherever we want; for if we go low, there is no opportunity to do a large or long vault, as we quickly meet the saddle or remain so very low that the arms cannot lift and support us, not even carry us where we want to go.

CXLVI. ON THE VAULT OF THE DAMSEL OR LADY

In the *volte damicelle* the man should lift the feet as much as possible, bending himself by the waist in the front part, because the head should lower over the horse's neck as our feet pass by the saddle, and at the time of sitting our body should be erected towards him who sits on the rump. In all vaults it happens that the left arm is straight and does not draw the horse or stirrup-leather to any direction. And the body must not be bent and after we are over the saddle or arm we should go through the whole vault in one single and firm way.

You should note that as much as in one single blow not touching the saddle, not even enter between the *arzones*, unless with the hands such a large circle is called for but when the buttocks or hips are already between the *arzones*, though the man is turned around, it is not a vault any more, since he goes with the elbows and buttocks, touching through the saddle itself or taking new strength, and a similar way of wheeling is not called one vault only, but two or three done in different blows. Therefore, ^{in whatever measure the arm is long, the same is it fitting that} that the body goes high circling over the saddle, and it should come down to sit where it wants to be supported, for those who go low, stumbling with elbows, knees, and buttocks by the saddle do not make vaults truly called, but *tripudiationes* (tumblings) somehow similar to vaults, as boys are in the habit of doing, and this is often a great deception, since they sit with the buttocks and at that moment lift their legs and circle around, from which around the inexperienced passes for a vault. For this reason circles should always be made as high as our arms are (long), and in this way there is no deception, since it is perfectly clear where anyone achieves in a single blow.

CXLVII. ON THE WAY OF LEAPING WITH JOINED FEET.

When jumping with joined feet we should take stones in the hands and we should go as high up as we can, and at the last leap the stones are to be thrown down or onto the ground. And if the man comes at a run, it should be with great speed. And when he comes to the mark he should be raised up. Be careful, however, that nothing is bent by the loins. And in this way one should go, though we should make many leaps, so that we can keep them up them, since, if we would bend the body or lower over the knee we would be unable to make great leaps or maintain many. And when we make one leap when running, we should reach the mark vigorously, especially through the four or five last steps, but they should not be long, and when one foot is braced at the goal, the other is to be lifted up as much as possible, so that it follows the other, for otherwise we jump low, but the foot which is found in the air should not remain behind (but) should be placed as much in front as possible. It is good to keep the breath in any leap and way of throwing, and strength and speed should always strive upwards. A running leap wants a stone fixed on the ground, which should be two palms high, on which the foot should be braced. To jump with a stick, we should grip it with force, and we should lean with all the strength in our hands and arms bracing ourselves on that stick. To leap (with) two steps and one leap, the legs are to be sufficiently opened, and we should go upwards. And in a single leap with a stick, one foot only is to be placed on the mark, then both should go together. And one must note one thing especially in all ways of jumping and running, that the arms, at the same time as the legs, are greatly straightened and lifted on the front, for if we want to lift ourselves with the legs and the hands remain joined to the sides or chests, we can only lift ourselves a little, we go heavily and take a small step or leap. Therefore, when jumping, in every leap the arms are to be stretched towards the front part and must go upwards as much as possible, and the feet or legs are held to follow the arms, and when we run the same order is to be observed, so that the whole body is very loose, or *dissoltum*, as they say in Spanish, since no animal can jump or run, not even fly, very much, if the front feet or arms or wings are not very much extended, and if we want to jump towards the rear, as if with joined feet the arms are to be also stretched out towards the rear, and however, the head should not lower over the back, but it should always remain on the front part. For one thing is to be noted, as being the most powerful in all ways of jumping, namely that, from the first to the last, when the body goes to raise up it should endeavour in accordance with its strength to discharge itself upwards towards the front.

CXLVIII. ON THE WAY TO RUN.

When we want to run, the breath is to be held back in ourselves, and strength is to be sent into the shoulders, and the body should always vigorously hang a little to the front, though upwards, and go on the points of the feet. Finally the top of the forehead should go before the point of the foot by at least one ell, so much that it seems always to want to fall forwards, and we should support ourselves with long strides, which do not allow us to fall, and it is fitting always to have such a mind that it seems to us that the course is only one step, since in that we can let go of ourselves a little, and all the way to the end we should go with this mind. The hands should go open and extended and hard. The arms though should be recollected upwards, and the legs should bend upright at the knees, that is, not allowing them to go back much, except that the feet should be lifted upwards, and the points of the feet should hang outwards a little; and it is appropriate to open the legs much, so that they take long strides; nevertheless we should hang forward as much as has been said, with the neck and the whole person raised, so that the person goes by itself, but, however, changing the feet must be observed to keep from falling. And among other rules for running, this is truly the best. The beginning and the end on which a man should be supported when he wants to exert himself in running, are to be observed differently, namely, above all opening the legs by the thighs as much as possible, for in this way the strides are long and the runner does not fall, and for the man to quickly catch on to this way of running and be trained in it he should for a few days, while walking without running, get used to opening the legs as much as possible by the upper part, so that the strides become very long, and having assumed this habit of walking it is easy to keep it when we are running.

CXLIX. ON SOME ORDER OF OBSERVING OUR PERSONS WHEN WE WANT TO PREVAIL IN STRENGTH.

We have already written enough about exercises of the limbs. But to make them perfect or carry them out as should be done, it is fitting to have an excellent natural talent, and similarly we need diligent vigilance concerning food or sustenance for our persons, since those who spend their time inordinately in luxury of food or other vices and crimes soon become ill and so unable to carry out great works relating to their bodies. And that everyone may keep himself in good health for a long time, whatever his temperament, we can have no better, or even as universal a remedy in the way of following a certain rule which suits those who fear

becoming fat. Even though many deny that there is a similar rule which benefits against fatness and does not bring damage in many other things, we however feel otherwise. Though sometimes it would be useful for this rule be promoted or diminished, but it will be universally good at all times and for all persons; that which is principle, we say, to drink little and moderately, especially outside of the meal, and this amount should be taken many times. For if we drink much at one time, the organs are opened, refilled, and ruined. Then other humours find an opportunity to flow through. Water on it's own relaxes very much, and unwatered wine takes over the limbs with its fumes. Therefore fat men are actively known to be soft and taken over; and at one meal one should not eat much, so the limbs don't enlarge, in the way we have already set out. Other food should have more of dry than moist, therefore fruit is to be avoided; and to sustain the strength, one should take roasted rather than boiled food; this is understood, however, to be about the youth. When they are not disturbed by illnesses, the belly should not be left completely loose or without a belt. For the first part in which someone begins to grow fat is in the belly. Therefore, he who is afraid of becoming fat should always constrain the belly somewhat, not however to constrict it too much, to make sure that things can pass through there. We see some people fasting or eating once a day and yet growing fat. They take, though, much food at one meal, which should not be done. Moreover, we should exercise ourselves in something. For it is rarely seen that some animal which spend most of its time working grows very fat, as long as it is not because of some illness.

CL. A RULE ON THE ATTENTION MEN SHOULD ASSUME TO BECOME MASTERS IN VARIOUS THINGS.

At the beginning of this book we put forward wrestling as the measure for many exercises, though wrestling in itself is a practical skill or an exercise which satisfies the senses. Nevertheless, it is fitting how our limbs should be put into convenient places, sometimes straight and sometimes bent, sometimes leading and sometimes being gathered back, at that time when they are going to attack or defend, and equally running away in others as necessary. And all these things can be known because of diligent continuation, even though we have no true basis for proving any with reason. But, though, to avoid ignorance of this kind it is fitting to commit all our works to the intellect. For not only does he put the limbs in order with due measure in the exercises frequently carried out by the limbs, but also, beyond

that, the intellect gives them sufficient knowledge to be strong in any exercise, as long as there is some little experience. And the limbs are not in themselves powerful enough to adapt themselves that quickly to carry out various things. If, though, we were about to do only what we are used to from long continuation, there would indeed be a very great waste of time. In the end anyone would do what we are used to, and not what we would know to prove by theory or reasoning, but doing something as by nature and unclearly. But when we have the intellect to guide or guard us, or that we commit all our cares there, when we know one exercise it instructs us in many others, and first of all it teaches rightly to consider before all things which we are going to do, and for this it is appropriate to remain moderate and be strangers to vices and sins.

The first part according to custom of exercises, is that we apply ourselves in that place where others cannot attack us. And then, that we govern ourselves in such a way that we can with great ease depart to attack adversaries and then recollect ourselves. Of this, however, in the arts of construction there is a very evident example. For when they build surrounding ditches and ramparts, so that the enemies are unable to approach, and, to support cannons, work them into the thickness of walls, sometimes the walls are high. And at the top they are even convex, so they are not possible to scale, and besides, they build doors, covered and uncovered, along the lower part, through which they can safely leave and return to their fortified place. For at least we hold it for an infallible thing that no one can for a long time defend a fort unless he has the courage and opportunity to frequently harm the adversary. This example is indeed to be applied to any of our exercises. Always one foot should stand there where it may be found above itself (upright), and so it can very easily support the other, and we say the same about any other limb, which should be looking out for the benefit of the whole body.

CLI. HOW HAVING KNOWLEDGE OF THE TEMPERAMENTS BENEFITS EVERY INNER KNOWLEDGE.

Already above we have said something about exercises which are almost a remedy for bodies, in proceeding we shall set out a section, in which we shall show how useful it is in almost every art or science to have a recognition of the temperaments. Therefore it seems difficult and laborious to be a good philosopher when having had no correct recognition of the temperaments, for in accordance with good sense, a temperament is nothing but the interior nature or the quality of any thing. And the first force which brings us to some learning, seems

to be the desire to receive food, and so we begin first with the force of taste, then we mark the difference between tasty and not tasty, savoury and bland. Then indeed the other senses or forces gradually begin to discern whatever agrees with us, until the senses attain an intrinsic quality in any object, such as sight to perfections of colours, and hearing to sound, and this perfection is nothing but the intrinsic temperament or quality. Since the first recognition of taste or any other sense is indistinct, it is not universal or particular, true because it is unknown and not noted until internalised not even correctly noted distinguished from other objects. Therefore we say that meanwhile we know true recognition when we recognise each one individually from its quality or temperament, distinguished from others. Recognition which is common to many or, as it were, universal, does not attain much praise. For everyone recognises that a man is not a horse or a lion; then each one that there is some difference between themselves, and even if we recognise that a man is powerful, it does not follow from this that we understand all of his nature. Therefore it is permitted to begin in another, more interior, recognition, and follow it, even though it is individual in everyone. And in this way a master surpasses another when they come to internal particulars or individual things. For our descent, birth, way of life, and death are always singular and never universal. For this reason, our recognition should be true and necessary concerning individual things. Therefore it is not enough to recognise men inasmuch as they are universally reduced to their species. For when saying that a man is a rational animal, this kind of definition, easily assumed, gives us little understanding, since it is presupposed that when defining that, the knowledge that a man consists of intellectual soul and human body is taken for granted. But if we would not understand that, the definition would be worth little or nothing to us. Here indeed it is not made at all clear what a man is like, since it does not explain soul or body, the unity in them, or even the beginning and end of a man. Therefore, in this step very many have been deceived, thinking that they know by only the definition that they are learned or recognise the natures of things. But let us now leave this; for this is common to one and the same species, and let us come to individual recognition. For when asking what kind of man Peter is, or what his nature is like, if the answer is that he is a man like other men or indeed a rational animal, such an answer however gives us little clarity on what we are asking, for we were not asking about Peter by speaking absolutely as a man or a human animal, but by the qualities by which he differs from others. To attain recognition however of the ultimate perfections of every body, we need to have information about his temperament, since it is this temperament which renders him different from others, or assigns variety between one and the other. Actually he who lacks this recognition goes along the surface not though in the interior, since when

coming to particulars it is not enough to have simple knowledge from simple difference between one and the other. But one should also understand to what degree each is perfect in his temperament. And when all our teaching, at least at the beginning, is born from experiences of the senses, we can honestly hold that recognition of those particulars, even though they are corporeal, are good for any knowledge, even though it be spiritual or incorporeal, since one must come from less subtle to subtler, from corporeal to incorporeal, from visible to invisible. And when someone takes this way to know to bring himself from small to great, and from one faculty to another, he is master enough by himself. However we should always make frequent use of the senses, since if we would never read, see, or hear that there is need of senses, we could follow little or no teaching, in which it is proved that the use of the senses is always praiseworthy. Though some who are completely unlettered want to call themselves considered, they sometimes dare to say the opposite. And without use of the senses or activity of the limbs, no perfect animal can live for a long time. Indeed, we experience that by nature nothing under the sky is fixed or remains constant; not even the sky, though most perfect in the whole machine of the world, influences incessantly and in an equal way usefulness or adversity over those below, and if the sky, which is of a substance which cannot be created or corrupted and cannot pass from one type to another, works so many different ways in us, what shall we say about the elements and other inferior bodies, which because of corruption and generation make many changes at every moment, by which differences we are now born and then die, are first children and then grow old, when living are burdened and oppressed, by hunger, by cold and heat, now by fullness, now by illness, and sometimes by prosperity. Sometimes, however, we are favoured by heavens, elements, stones, plants, and sensual animals and men, and sometimes by them all. And when so many differences by nature are found in the rising of one and the fall of another, how can we live here suitably without very great diligence. For if we altogether commit our needs to nature, or do not bother to do any labour with the limbs against hunger and thirst, by which we would be fed, and clothed to remedy extremities of hot, cold, wet, and dry conditions, how shall we be freed from diseases, which break out partly by nature and partly by accident. Granted, in early spring we could walk about without clothes and man made food acquired with the sweat of our hands. However, in winter, which makes all fields dry up and draw back to themselves the food, which makes it rot, how can we endure without also dissolving by rotting and return to the earth and the other elements. But when alive we seek food which cannot be found anywhere in the fields in winter and what can be found is of little or almost no value. Therefore, if we do not, in early spring, struggle with every effort to work, so that we can eat

in winter, and in daytime for what we need at night, and in one year for another, if we apply no remedy when we are young for supporting our old age, while we are strong we work hard for sustenance. And though weak fathers seek food for their sons when they are small, and the sons sustain their fathers when seeing them being dragged towards old age. This industry has been invented as a remedy for the adversities with which we suffer by nature. Therefore we can easily take an example of our own against those who live at pleasure without labour or activity by the limbs, but complain to God that they are not so rich in this world, and in the same way complain that the sins committed here should be punished in another, arguing ‘why did God make us if he is going to allow us to be sent to hell, and why does he agree that others have more wealth than we in this life?’ These, though, are wrong, not only in their idleness, when they refuse to search for necessities for themselves, but also in counting how far we are forced by nature to support our life by industry, wanting to sustain it in peace for a few days. For if Almighty God or nature, in accordance with what people say, would want us to be able to live without tiredness and industry and delighting our persons, he would have ordained that it would always be early spring, or the way it is in May or September; for then we would not be not oppressed by cold, heat, hunger, and thirst, since the fields would pay out the necessities to us. And for this it seems that it is convenient if by nature there are two suns, so that when one would be over our hemisphere the other would stay in the other, and that both would be weaker than the present one, so that, if there were continuous daylight everywhere, we would not be oppressed by excessive heat. Finally, with so many adversities placed on the life which we live here, it befits us to be industrious, not only for the natural necessities, but also to collect as many artificial ones as possible. For while some with passionate mind give themselves over to labour and others flee it altogether, and we all want to be clothed and fed, there should, between those who tire themselves and those who do not, continuously flow forth dissension, namely on this which you want, and I should give.

THE THIRD BOOK OF PIETRO MONTE'S COLLECTANEA.

PIETRO MONTE'S BOOK ON THE MILITARY ART.

PROLOGUE.

Until now, we have not written any separate chapter about the military art, at least that it be named as the military art, even though, in truth, this whole treatise is understood to be about the exercise of military men, yet and in other places we have also treated the temperament of men and the order suiting each man to conform to his temperament, and how he should behave in exercises, and how boys are to be reared. And since we have there written at some length, here a few things will be explained more briefly, and we shall comment on two parts especially. The first will be of what quality or nature are those who have a talent for battle. The second, though, concerns which exercises are most suitable for them, though it should be understood that all exercises, which dispose our persons towards greater strength and force, are good. But one principal exercise or military practice is more appropriate, and another less so. But here, indeed, we shall touch on a kind of universal way which anybody can apply wherever he would wish, though he who knows how to adapt to different exercises will prevail more at military service, especially at commanding. For often it is enough for a squire or individual foot-soldier that he knows how to help himself with just one weapon, and to have one single type of saddle, or ride just one horse, though it is always better to learn many and diverse.

I. SO FAR AS WE UNDERSTAND THE WAY OF FIGHTING IN SINGLE COMBAT AND THE ELEMENTS WHICH ARE NECESSARY, IN THE SAME WAY ONE CAN RECOGNISE WHAT IS APPROPRIATE FOR SMALL AND LARGE ARMIES.

In some other places we have shown a way to bring any ability to the benefit of another, even though they appear to be completely different, when each contains some subtlety, by which the intellect can support itself, placed in other abilities, some by similarity, others by its own circumstance, since, though there may seem to be a great difference between playing with a long lance and a sword, knowing how to thrust two *stocchatas*, one short upwards and one long, lowering the arm a little, in the same way there will be a good thrust made with a long lance. And in other differing encounters or arts, we can at least

draw a comparison by the example of one art to another. In war, indeed, different encounters occur, sometimes with many weapons and sometimes with few, some long and others short. It happens that on both sides there is a great number of fighters and there is fighting few to few or one to one, in such a way that he who will lead armies needs knowledge of various plans. And if he would want to, where he has praiseworthy talent and habits, he can judge what is appropriate for one to another, between any greater number. For about knowing the strength and breath of each one, he will offer weapons and an opportunity to fight or employ some other force when he wants to support he gives appropriate to himself, if he however does not support, the contrary, and this is openly recognised where we treat wrestling. For the first thing which we teach there is that a man should place himself in such a way that he can cautiously defend himself, come out to attack the enemy, and recover himself without any loss. And this is required in any arms which anyone takes in his hand to fight with others, and so commanders, just as we say about the way of wrestling, or those to whom it relates, will prepare camps where they may be safe or strong against the enemies' attack, and so that they cannot take away their provisions, and so that they themselves can go forth and enter moreover to attack or for what they please, and for this great moderation is needed with some way of remaining upright¹². For he who puts himself in hardness or gathers himself up protects the enemy by not attacking, in so much that within a few days he is destroyed by himself through misery. Strongholds or fortifications will have such a position that they can attack and issue through many parts which are in it, and that retreat is easy. With the strong, one wrestles or fights much more primarily with dissimulation and flattery, watching for any deviation by the enemy who is with hardness and deliberate mind, and one must strive moreover for a place to which one can retreat, lest the strongest reach it with all his might, and yet with dissimulation at the beginning or at length, seeing oneself having no other means, no one should out of weakness of mind bind himself to destruction, but should in whatever tiniest deviation in which the strong one happens to run in, attack him with great swiftness and boldness. For in this way the strong are often defeated by the weak. As it happens however, it is, on the contrary, suitable to behave towards a weak man, seeking without fury or scorn to force him into a narrow place, from

12 *super se* = 'above oneself'.

which he cannot flee, nor even turn around, with him in light combats of few soldiers, but foot in front of foot, and defeating him or driving him out of the camp. One who is quick or sanguinic, should enter with another who is phlegmatic or slow, with dissimulation and speed, for the phlegmatic's strength is slow and sluggish at the beginning, therefore (one must attack) before he can gather it. If the adversary is quick and prudent he does him great damage. And in the same way with he who has a great army, which has pitched camp here and there or in disorder, many can be overcome by few men. But a phlegmatic should exercise himself before he approaches the camp, so that his strength is unified when he reaches it, and he who has many men will observe the same rule; he who is weaker or is found with few weapons often takes any one corner, one enemy, one ladder or other narrow place to defend himself from another power, larger than he is. And he who holds onto much breath and recognises that the enemy has little, walks uprightly in the way of defence while the other grows tired. This plan is very well suited to phlegmatics, since they grow in strength from moment to moment. But he who has little breath should attack with the greatest wisdom possible, for a phlegmatic grows in breath from hour to hour, or does not diminish and in a similar way we say about commanders that when one sees that the other cannot sustain battle because of lack of money, provisions, or assistance, it is stupid to speed it up. But we must rather test at different places, so that he fails of his own accord; and he who has the least preparation should, for a long time, with all his strength and diligence take away or shorten the difference.

II. HOW THE COURAGE OF A MAN PRINCIPALLY CONSISTS OF REASON AND DEXTERITY.

For already we have explained in another book how we cannot know through the temperaments what kind of men are brave, and what kind are fearful, since in any temperament there are men found who are brave and those who are of a weak or base mind. Therefore we can honestly establish that courage consists of a man's virtue and modesty, and in the experience and or industry of fighting which he has, or if he is prudent and wise in arms. For we often see some men, such as pimps, who are vicious and lack modesty, and by their habits and learning, with which they have been educated in arms, they do works which belong to the brave and strenuous. But very many others,

honest men of sober character, are unused to arms, and do not do the work which belongs to the strong, even though we cannot expect continual or great victories of those full of vice; for by exceedingly abusing sins, they are found in the greatest disorder, sometimes because of drunkenness from wine, and now and then because of extravagance and food, and at other times occupied by sleeping, then again because of long-lasting watches, at other times because of much liveliness, and very often they lapse into irritability and temptations. If indeed it happens that men of perverse habits are plundering and others, who live well, are dying, this comes from the fact that the perverse and criminal are disposed and given to acting at their pleasure. Similarly, sometimes God and reason send forth the malign to fight against the good. For it rarely happens that some man is living completely without any error, and it is not fitting to attack with the hands to punish evildoers, for this is the duty of the perverse. Finally, if a man is honest and deft in arms, he is much better in them than another who is wicked, even though their training and temperament are the same; for everything we do, we work for some goal, and the greater and more perfect a foundation they have, so the more durable we are in them. And since the perverse however have an evil goal or empty fantasy, they can never last for a long time in victory; for this one however needs continuous vigilance, fearing any inconveniences which can arise in a short or long time; this vigilance is indeed very alien to men full of vice. For just as men, by nature, fear death, as other animals do, where there is no sense of shame, or any reason, they quickly flee from battle, especially when expecting no gain or wages.

III. HOW A CONFLICT OF MILITARY MEN IS TO BE ORDERED IN ACCORDANCE WITH TEMPERAMENTS.

The way in which we should organise our men to come to a conflict will be divided in two parts, of which the first, we say, is because sanguinics are very fast at the beginning and soon wane. Therefore they are to be sent in at the start of the battle, because then they charge with all their strength, but if they would delay a little before going to clash, they would lose a great part of their strength. Melancholics are strong in the second place in fights, since they resist powerfully at the beginning, because of hardness. Choleric are to be sent in the third rank, for at the beginning of all operations they always have a kind of

veil hindering them a little, but when they begin to loosen up they are stronger than others in laborious exercises. Phlegmatics are to be put in the last place for engaging in fighting, since strength and courage comes to them late. When they remove themselves for a while they gradually come to burn with courage. But what we say here about the four simple temperaments, is to be understood about the other, blended temperaments. Just as a choleric-sanguinic, who should not be set in order as quickly as a pure sanguinic, nor as late as a simple choleric. If though he is phlegmatic-sanguinic, he should be loosened up a little with tiredness before joining in battle, that is, he should be held for as long as if he were a pure phlegmatic, and it is not appropriate to let him go as quickly as a sanguinic; and through this kind of ways men of other temperaments should be ordered as they are unrolled among themselves, which is apparent to everyone. But if we make a weapon, and one pound of hard metal is added, and another of soft metal, it will turn out midway between hardness and softness. If indeed we put together one part which is slow and another which is fast, the whole composition will somehow be similar to both parts, but not completely like any of them.

IV. WHO SHOULD GO IN FIRST PLACE BECAUSE OF STRENGTH AND HEALTH OF THE LIMBS.

In this second section we set out the order in accordance with the strength and health which we recognise in men; above we have already said that sanguinics should go before the others in armed combats; here it is also to be understood that we should enter into conflict, and against which men the fight is to be had, and if the enemies are ready and go separated or far apart as is usual in light battles or skirmishes, as they are called in the vernacular, sanguinics are appropriate and best adapted against them. For they go immediately and are able work whatever they are going to work. If though it is a large host which is packed together and united and moves gradually, choleric-melancholics or melancholic-cholerics are the best at such a time to go in the first company, and of those the strongest and most dexterous and best used to arms should go first, and similarly on all sides the strongest men are to be set in order and placed, so that they can stand in the way of the first onset of the enemies and forestall the weakness and feebleness of their own. For when those who precede the others flee or are separated they spur the enemies'

bravery and give them an opportunity to come forward. For this reason the first company should employ the greatest resistance and onset against the adversaries, and for carrying out the onset, sanguinics if they are strong have the character, equally as fleshy men; for flesh works fast, and bones and sinews last long. And from this comes (that) the French, by nature and habit, are strong at the start of a war. By nature, because they are fleshy, and by habit, since they carry out all their works impetuously. Therefore, in doing whichever exercise, they begin after breakfast, or at least drink well when they want to enter into a great conflict against the enemies, or into an exercise at pleasure, which is against the opinion of temperate men. Germans, Hungarians or Pannonians, and others who live in northern regions possess more sinew and bone and less flesh than the French. Therefore they are not as impetuous against their enemies at the beginning, but with greater time they resist in every way, and from them we can take an example of how powerful it is to be strong in battle and firmly stand by our men against the enemies; for they are not deft in arms, nor agile in their persons, and do not even contain much strength, and just by facing and resisting until the end they tend to win very often. At this very time we see some foot-soldiers in our countries being set in the order of the Swiss or Germans, much more powerful than earlier, when they walked separately, jumping from one place to another. Nevertheless one fighting another one on one can turn away in any direction, in front, behind, and aside, when however many men come together at once in order, one must walk with ordered paces and the hands are to be moved as much as possible, without any imagination of retreating, nor leaving the combat without victory or death, and making a foundation that all should remain firmly, similarly all work and help one another until death. For if we want to diligently examine the order placed in our limbs by nature, by which one helps another in a time of necessity, we shall easily recognise to which extent we shall order our men for battle, so that they can offer remedies between themselves. Our limbs have been organised or put in order by nature in such a way that when we feel damage in one part, the rest wants to come to help, so that when making a wound in any part of the body, the blood and all humours which are found throughout the limbs go there as fast as they can, thinking that this guards against the damage. And if we fear or are to some extent made to sin with a fantasy of some damage coming to us from outside, according to common opinion all spirits which are

spread throughout the different limbs run back to the heart as if to their principal defence, judging that they can be stronger together and placed in the centre, as if in a master-tower or *almenagijs*, as they say in Spanish, and in such a way the order is to be taken up, in order to imitate nature, when coming to break army against army. For any greatly vital spirit in his entire army is drawn back towards the centre as much as possible, for there, taking forces together the approach is more difficult for the enemy, and separately or being diverted to the sides, they are in a short time overthrown or put to flight.

V. HOW, ACCORDING TO THE COMMON WAY, MEN WHO ARE SUITED FOR WARFARE CAN BE RECOGNISED.

In the previous chapters we have showed a little how, by nature as well as by art, men should to pursue warfare. However, proceeding more plainly, we write with respect to those who have little knowledge about men, though by observing the rules which we have already divulged in many places, anyone can quickly recognise the suitabilities and unsuitabilities nature has brought into the animals, though we also have some writings by ancient authors, in which we can read, such as Vegetius, who dealt with the art of warfare. In that however he said nothing about nature, nor even enough about art, except in a broad way, saying that men suited for warfare should be strong and exercised. But this activity or understanding is common among all. At the beginning he specifies from which country they are to be chosen, and whether they should be of the people or *plebians* (common people). About the provinces he asserts that they should be from the north, because they are sanguinics. For when they abound in sanguine, they do not fear wounds, for even though indeed a great part of blood departs, they have a great quantity left. And since in hot provinces men are allotted little sanguine, and because of this they have weaker and less courage. Between cities and towns he says that the best for this exercise are those who have been brought up in the country, because they are more exercised and, being more used to it, they are strong in enduring cold, heat, hunger, and thirst.

VI. HOW NORTHERN MEN ARE NOT COURAGEOUS BECAUSE THEY ARE SANGUINICS.

Above we have pointed out that certain ancients preferred that mercenaries or soldiers should be chosen from the northern parts, because they are sanguinics. We have, however, discussed this matter sufficiently in *De Cognitione Hominum*, (saying) how in the northern regions the men are not sanguinics, but rather choleric-melancholics or choleric-phlegmatics, as is understood for the most part. But since their bodies and their amount of flesh are abundant there is necessarily much and vigorous blood, but it is not because of that that we call someone a sanguinic, but those who have assumed a greater proportion of the fiery element at their birth, as we prove more extensively in other places. And though northern men do not fear wounds much, that does not mean that they are better than others for military service. For they wait in the fields or the countryside, since they are somehow immobile and little agile. Therefore they are not quick to go to attack, laying waste the land of the enemies, nor for scaling strongholds, nor to walk day and night through valleys to be able to attack the enemies, and even when they walk they cover a small distance. Moreover they do not well endure hunger and thirst, though they are strong against cold and heat. Those who live in Africa, however, or towards the south, are more enduring in (lack of) food and faster, and bring greater deceptions into battle, since, while Germans or Hungarians, when forced to do so, march ten or fifteen miles in one night, an African or Spaniard marches thirty or forty miles. And that a man be more strenuous than others, it is appropriate for him to be very enduring in food and drink, so that, when there is need, he can last for a long time on little food in attack and defence, in a wasted and deserted area, and he should be of such a temperament that he is found to have the strength to endure all hardship, for otherwise a soldier cannot claim great fame for himself. The choice rather should be made between men who have grown up in towns or cities. For here one must be attentive if we accept them as if by chance, like men who cannot become better than they are, or that we select them in accordance with their natural talent and the information we have about their habits, especially when we select them in adolescence or at one time rather than another; for if we have the knowledge for selecting young men, we should also know how to teach them and exercise them in suitable places. And even if a man has been brought up in a city, he can learn very much of what is usually taught in the countryside, such as fighting-games and other strategems,

and different kinds of learning. And even if he has been brought up in the country, he can have greater knowledge of mountains and roads for passing at favourable and adverse times, and because of his habits he may be more enduring in hardship than one brought up in the city. Perhaps the other, because of his greater learning, can work better.

VII. FROM WHICH PROVINCES COME MEN WHO ARE MORE SUITED TO THE MILITARY.

Which country's men are the most able for war or to make any great resistance, will be described in detail in the following. The places – cities, towns, or countryside – in which able men are found, are situated in hilly and unobstructed lands, and should be established towards northern regions and at the foot of a mountain, not too high nor on a plain, and places of this kind, situated around mountains, have soil which is ready and fertile for any exercise. For on the plain, because of excessive heat or humidity, men are little given to exercises, especially when commonly in similar places (people) are weak. And in land which is too high, small men are reared. And because of the cold and roughness of the lands they cannot much exercise their persons freely. And in hilly habitation the middle way is always found. Between plains and places for ascending and descending, the hills should be open and unhindered, since in a country where the mountain peaks appear and one is not far from another, there both men and other animals are born impeded and raised with great work. And for the best arrangement one should seek ground which is fertile and dry, and wells should be flowing there. From provinces in which agile men are born one should take soldiers, such as in Spain, where they have ableness of body, especially to do many exercises, but are not very strong. For their size is not in their favour. In England those of good stature are put together with bones and sinews, and so, they are usually able in arms. In France they are fleshy and consequently little agile, except in border regions, such as Gascony. In the province of Brittany they are strong and vigorous but too rigid, since they are commonly melancholics, or of the earthy temperament. In Germany they are usually born quite slow and fleshy, and besides, through nearly all northern parts they are somewhat slow, or not very fast. In Greece they are allotted a good composition of temperament. However, they do not have much strength, and not even agility, for universally they are little restricted because of hardness.

In Italy the men's bodies are often slightly gathered in. And when they have long or thin joints, they adapt better to learning than to exercising their strength. In Africa, at least near the Mediterranean towards the part of the Moroccans or the kingdom of Fez, and in Asia towards Jerusalem and the mountains of Armenia, the men are sufficiently agile and lean, and work hard; few of them, however, are very strong. And extending around the south, unable men are living. And from any of the provinces where we have set out the differences, very much is found from one place to another, and for this reason men of any characteristic are found in any region, but mostly they are stronger in one country and less strong in another. Since indeed, somehow things happen in certain ways in wars, we shall also select men in accordance with various ways of fighting and military service. For if they should stay strong in the camp, northerners are better than others, and very thick horses, such as Frisians, and from some places in Italy and Sicily. But if we want to fight or plunder for a long time, incessantly day and night, to compel or exhaust the adversaries, and to attack and defend strongholds, other peoples and horses, such as the Spanish, are better than northerners. In truth, certainly, northerners will still make cannon-machines better than other nations, or with less consideration and perhaps always in the same way, especially when they go in such a way that they almost seem to neglect death and life, and with these cannons or machines they carry out much, but concerning their persons they are very unsuited indeed to storm walls, and since they are not more brave than other nations, when only one with another or few with few, it is made clear they only show courage at the time when their multitude is together, and this only seems to result from keeping a distinct order. For when they are found outside that order, they are not very able.

VIII. OF WHAT MAKEUP, SIZE AND AGE MEN SHOULD BE TO ENTER INTO COMBAT.

If we would neither recognise the character of men through temperament, nor through habit, we should select them by good bones and sinews, and their joints should be well connected in a way that is neither long nor knotty, and of persons of lean and average stature, or between average and large. For the largest are commonly of little vigour, on foot as well as on horseback. For if they ride much, they exhaust the horse completely,

and they progress little on foot. Rarely, however, it happens that small men show great strength, and so, their presence puts almost no fear into the enemies, and though the wise fear deeds and not the size of the limbs, we are nevertheless naturally more frightened of the strong than of the weak. And the people or the common folk are not afraid just of men of excellent stature and vigour, since they also fear, solely because of the appearance, a hairy and long beard, and men who snort like bulls, though neither hairs nor snorting gives strength to the men, though sometimes usefulness arises so that a commander dresses his men in clothes which savage men are wont to use. About the age of men selected for war, they should be between twenty and fifty. For younger men have no firmness, nor do they know correctly what they are going to do. Older men, on the other hand, cannot endure much labour of the limbs, though they are able enough to restrain the formation, though they are elders, they are nevertheless not able to stick to other people's commands to work different things; and observing this way for selecting men, we similarly take the suitable and firm, as we do with horses and any other animal. For always we take those which are suitable for the work we are going to do. For this it is very useful to recognise the temperaments of the men, for otherwise we are frequently cheated. For when we see animals of the same stature, age, and thickness of limbs, many imagine that they are equal in strength, or that there is little or almost no difference; it is very different, since, if it will be phlegmatic or melancholic, it is first of all distempered and, further, has little strength compared to the size of its body – if though it is choleric or sanguinic it contains enormous vigour in respect to itself. Therefore, when men are choleric, and melancholy or sanguine follows in them, we should beyond doubt take them. And likewise if any of those three temperaments goes first, as long as the other two follow, the composition is good, or at least one of them should follow another, though it is frequently better if choler goes first; phlegm though must never go before others, even if it is followed by choler. Truly, his temperament is better suited to tempering or moderating others than any other temperament of men. Then, for selecting men for bearing arms, one thing is chiefly always to be before the eyes of the selector, that men and horses have limbs which are unimpeded for war: for those who are slow or heavy can be good at a particular way of fighting, but indeed not in all, since when one should pass from one place to another across a long distance, they cannot walk as fast as is sufficient

for the necessities which often come against us in war, and if heavy and unable men want to go on horseback, this can never last, besides, since because of heaviness and unsuitability they quickly destroy the horses on which they ride, and when they are about to depart into the mountains or elsewhere where there is passage, the strong cannot endure the labours, and by no means can men who are unsuitable, such as the fleshy and heavy, endure hunger and thirst, or a lengthy watch; they cannot for long endure (bearing) arms, not to defend strongholds, and much less for capturing or encircling them, though for one determined march heavy men and horses ordered after the custom of the Germans are capable, since they are stout, and in a big body big strength can remain; but if bodies are big, they are not able to endure daily labours. And in this way, wherever men are born with able limbs they are warlike, especially for enduring in war in whatever way, and this is because Germans, French, Bretons, and similar nations, if they are not born in some mountains which tend to be dry, they are not sufficient for continuous war considering all its conditions, but are fit for one particular day, since they are stout and sufficiently strong. Bretons are not soft, but hard and heavy, and so, though strong, they are not warlike, at least on foot. The English, though, are sufficiently strong and unimpeded. Bohemians are very strong and unimpeded indeed. Greeks are sufficiently unimpeded, but tending towards hardness. Spaniards for the most part tend towards temperateness, but are not very strong. In Italy indeed, they get averageness in sufficiency, though for the most part they tend towards softness. Finally, concerning differences similar to these among peoples, we set that out when treating the various provinces in detail above.

IX. HOW A COMPANY OR WHAT IS CALLED A GREAT NUMBER OF MEN SHOULD GO TO A CONFLICT.

I shall set out a little on the order which a unit should acquire when in an equal conflict, that is, one with another, we have appointed very many strategems, which we can advance when we are few and clash in battle with many. Just as it is appropriate to show greater hardness against one or another, and sometimes great softness, or rather temperateness, similarly when many are together and are strong, it is good to send in some persons who go lightly, so that they force the others to depart, such as crossbowmen and others, who in our vernacular language are called springalders or handgunners,

attendants of sorts of cannons, since they can exhaust the enemies from a long distance; and against those who walk separately or dividedly, one must rush in massed together and in tight array, and with very good observation in all parts. Besides, the greatest vigilance is needed in the camp, especially with generals, so that they make provision for many things, such as their men's pitching camp in safe and secure places, and not to permit the men turn away, and he should always send in guards. When the host comes together for battle, one should seek out particular places, as he who has the greater number of infantry should set them in order around mountains or marshes, valleys and pits, and he who has more cavalry will make other arrangements. For, however, in a war between princes, one cannot enter on the enemy without it being said to be treason, one must continuously hold on one's position, for even though one of the two parties advances to join in battle with the other, it will always hesitate with some advantage. Therefore it seldom happens that one comes to conflict with equal will of both parties. For when the camp of one is found to be in a weaker state than that of the other, they diligently flee from conflict and seek to concentrate on the enemy when he is unprepared, such as from hunger, thirst, heat, or cold, through sleep or deep sleep, or if they are exhausted or staying in places where they cannot be assisted, and therefore he who is intent on capturing an enemy who is moving away or uncoordinated, may experience fortune very often and in different ways, until something befalls himself, and this can be done more safely especially at night, or at some other time but in a tight and narrow place.

X. CONCERNING THE PRINCIPAL EXERCISE WHICH MILITARY MEN SHOULD PRACTICE.

The principal exercise which soldiers should practice to become more dexterous in arms, we have already described fully in this little book. Nevertheless we say that to make military service more complete from the beginning, it is praiseworthy and useful to be learned in reading and writing, since one can read until he understands to learn histories and deeds of other men, and by one's own hand inform others, and find out secrets from them through letters. When, however, a man is in adolescence, almost only (then) can he learn letters. Then it is also greatly useful to learn to swim, if some river needs to be passed through, or for entering and returning into some place which is surrounded by

water. Likewise, one must know wrestling with art: for this practice teaches many others; and leaping with one jump, running, and leaping a jump with a stick, with a rope is excellent. It is also found to be useful to practice some vaults on a saddle, as it prepares and enlivens our person, as it is held on the horse with torso, feet and hands. And before all of each weapon one must learn something, keeping them especially in habit, with which we are found to be entrusted with greater deeds. And similarly it is praiseworthy to sometimes exercise hunting, since, besides exposing the body to labour, hunting teaches how to proceed across the countryside, sometimes on a straight path or road following the way, and at other times turning aside, crossing and climbing through mountains, rivers, valleys, lakes, marshes and others of this kind, and descending through cliffs, trees, and buildings, and building bridges and other similar things appropriate for the military. It also teaches how to endure cold and heat and care for one's possessions, and feed and govern animals, (which) by no means brings little for soldiers. For when a man is brought up in cities, he attains little knowledge of this kind of work, and such things are appropriate for the military. Therefore a father who wants to send his son to undertake military service should instruct him, so that he can know to be made ready with some reason in all arts or manual exercises, or most of them, so that he can, on his own, repair in times of need, and knows how to build some weapons and mend, when they do not work properly, his clothes, saddles for horses, and other things appropriate for himself and his horse. About a certain Roman it is said that he forced young men to dig all day. If this is correct, his intention was sound but poor in exercises, since it led to ignorance of very many other arts, which are however more useful and praiseworthy, in which the young men (should) pass their time; even though one should know this, just as other exercises, to be done when it is time. Cutting and building (with) wood, stone and similar (things) belonging to military service is useful, though at present few mercenaries look to to get knowledge of exercises, horses, and other similar things. For they spend their whole life rather spoiled and looked after without moving and, what is worse, they are continuously destroyed in luxury of food and drink, and apply their concerns to perfumes, clothes, and pleasurable living. So then it often happens that, remaining in this same sort of life without other moderation, they want to go against enemies in war. And though they are pupils of great lords, it will on no account be possible that they shine in things

which they have never seen, nor that they possess anything even close to a talent for working these things. For even though we are fit by nature to work something, it is appropriate, if we have to be good at that work, we should have it in habit for a few days. And from this comes that nearly all who learn games with weapons and thereafter use them in noise or battles, often have sufficient courage, and others, who by nature are stronger than them, always act with timidity of mind, like Jews, artisans or craftsmen, and peasants normally do, since they have no continuity in pursuit of arms. Therefore, when they see some outcry or onset of arms, they scatter in extreme fright. For that reason leaders of armies should not be satisfied only to find men who are naturally suitable, nor that they are said to be courageous, for by reason they should be tested, so that we understand how much knowledge they have, so that we may teach them where they are deficient, and that often to work them against enemies, we make them clash with one another. If so a cobbler leads along one who serves or works before sending him into the principal work, he teaches the most part of the art. And here officials, not to lose one pair of shoes, they depend on teaching their workers; how much more should a general teach his military men, because of such praise and dignity which he expects from the learning they have, and, on the contrary, the harm, trouble, and cursing, as long as they are ignorant mercenaries. Finally we can say one should seek for the military men who by nature are most apt, most experienced and good, and this is not undeserved. When there are placed among humankind, such as justice and of every restraint, by those dignities indeed they should be more honest and catholic than all others. For they should not just instruct the people and preserve them in justice and excellent custom, but it is also appropriate for the soldiers to pass time in the greatest devotion, as they are very often placed in the hands of fortune, or at least more often than any other kinds of men. And at least at this time we can consider closely a few delights, which should not be common among military men, such as luxury in enormous quantity, blasphemy in the greatest part of their words, and jests and plunder and gluttony and drunkenness in a similar way running through the rest of the vices, and for similar reasons it is difficult and nearly impossible that they are of any benefit at all to the art which they say they are pursuing. When ministers err to such a degree, their subjects follow them in many things. For

though clients are punished when they err, seeing themselves castigated or tormented by others who are worse, they are rarely sufficiently corrected.

XI. WHAT CHARACTER A GENERAL OF SOLDIERS SHOULD HAVE.

Now, though, we have seen of the agility and goodness which are suitable for nature and art, or which is observed in men who exercise military service. But since up until now we have spoken on common things, it will thereafter be allowed to direct a few words to generals, who themselves not only demand courage to fight against enemies, since it also is fitting for them to have learning in order to govern an army in equity and justice, and so that all esteem each other and calmly live under the wings of the general, as sons under their father; therefore it is fitting that the commander behaves cheerfully towards everyone, but nevertheless that he loves only the good, teaching all, good and perverse, though rewarding the good and punishing the wicked; and in chastising he should not act as if he is a stranger to benevolence, but that he gives a punishment, to let justice have its place, as benign fathers towards sons who do not follow the correct way. For he does not chastise them as if he hates them, but to take them away from vices. And just as the father is common to all his sons, permitting them to deal with him, even though he may deal better with one than with another, so a general, too, should be good and without regard, impartial to the whole army. For if he goes looking about or roundabout, avoiding the company of the soldiers, he will be altogether hated by them all, and when he needs them, they will scatter at once. And when the leaders would wish the mercenaries always to be ready to serve them, they also wish to find them as decreed, or at least in honest business, and a general, if he cannot do anything else, should at least dispense good and true words. For if they are not true, they cannot be good. And when so many virtues are required for a general, who says that he is deservedly called by such a great name unless he employs some things which are fitting and worthy for a man.

A general should truly have a suitability of nature and reason, at least for an average person, so that he possesses enough strength, and he should also be agile, so that he can exercise that strength. He should be similarly endowed with a good presence so that they imitate his cheerful spirit, look out for him, love and fear him. In this, an excellent

temperament is indeed required: he should have choler for the greatest part, and this should be followed by sanguine, and in this nature a man is placid in any company. By nature and habit he should be courageous and able, and should have learning, to judge dissension. He should be endowed with a generous mind, such as is possessed by magnanimous princes, who neither should nor can be honestly thought to lack any necessary things, as long as they observe the principles of equity. In the same way, a commander should have learned to read, so that he can look at and understand writing, likewise knowledge of geometry and the suitability of men in the city and countryside, and he should have dexterity with all weapons, remaining sometimes on foot and sometimes on horseback, so that he can select the good and restrain and instruct the others who go against reason, and, before all else, put honesty and fear of God, the most high, before their eyes, since otherwise, various distresses and temptations will happen, not only to him in person, but also to all those who walk under his shadow. And one must note that all men who will administer others should be wise, at least in that capability in which they have been placed above others. For example, a cobbler who is placed to teach some others to be cobblers; if this cobbler who has the task of attending to the others does not frequently take a hide, handle it, cut and sew it, it is truly very difficult to make the others learn correctly. And if they understand anything, they will go on for a long time until they become masters, if they can become masters in this way, since it is doubtful that we really teach, if we ourselves, do not work to bring about that which we say, so that those who see it may take an example and do as we do. And just as we place an example of cobblers or other mechanical arts, this is to be understood in any other ability. Under this rule, if a general or leader is wise in all things pertaining to war, in such a way that he works that which is to be done with his own hands and is willing to apply similar principles to that which is to be exercised, all others will also follow him, and in this way they will arrange in a brief moment that which they were going to do in many days. And when this is necessary in any *promipero* (this may mean something like ‘boot-steward’, perhaps a slang term for a military leader) who governs others, we can truly hold that the old and the weak, even though, when they were young or healthy they were excellent army-leaders, when they have been brought to weakness or old age, they can hardly help others. Therefore, when any prince wants to give someone a duty, he should first of all

take care to select a man who is such that he knows sufficiently by himself how to exercise all those things in which he will administer others. And above all, that he is eager to do what he is going to do, and here one must note that if we take on a public office in administering others, we lose our personal particular freedom, since we receive a price from other men in place of prizes, and everyone who accepts a reward from another is held altogether, by divine, natural, and casual law, to satisfy him who gives him the reward, though in our times, and also in other times, many princes and other ministers are much deceived, thinking that they can rightly take the taxes surrendered by the people, and abuse them, not caring about administering the people, but about hunting, as well as other's women; now locked in his chambers or given over to games, sometimes occupied in long sleep, now passing a long time in taking various kinds of food, having no concerns for the advantage of those ministers who pay them; these are crooked operations, as no man is so able, by nature or art, that he can properly take care of various offices at once; for if someone should be a good blacksmith, he needs to be forging day and night in the blacksmith's art, with his hands as well as his mind, since, if one day he goes to hunt, and another to the games, now through villages and streets, he will never be a good blacksmith; and yet, his art is small and quickly grasped, and he can gain little by it. Then, the blacksmith ought to be concerned about all the things we have placed here, in order to become a good master, and to be able to live off his art, and in him princes can take a clear example, since, if even in the lowliest duties every craftsman should give himself completely, how much more appropriate is it, in deep and very wide duties, for the ministers to be concerned at all times to first dismiss other things and always remain attentive to the pursuit of their duties. It is certainly not fitting for a prince to put another man to govern for him, so that he may rest on the other's shoulders, since, just as princes, they want to take and consume the money of the office; they are also bound to undertake the work in person, for others who have been placed as if inheritors do not enter like true shepherds, but rather come to govern by an indirect way, and in the end they want to be paid much too much for their work, which places a double load on the people: first by the prince and second by the governor who has been appointed by the prince.

Furthermore, as the most important of all, it is appropriate for a general or leader of an army to be temperate and pious; without those two virtues it is impossible, by nature, let

alone by art, for a man to be called altogether honest, and in this place we adopt temperateness not only by moderation of the soul, but also by temperateness of the limbs, for just as we have seen above, when dealing with exercises, soft bodies which are excessively quick and excessively slow, do not have the ability to carry out the greatest and praiseworthy works. The result is that, if someone among other men wants to prevail in strength of the limbs, he needs to be temperate of the limbs, and beyond natural temperateness he should also become temperate by art, so that he is always intent on observing and attaining this temperateness, as much as he can. And temperateness corresponds to all things at the edge and in the centre, and with these characteristics he can work many things against everyone, when he wants to. Piety, indeed, is seen to pertain to the soul rather than the body, nevertheless where there is true temperateness, piety does not lower to support the arrogant or those who stay in the dishonesty of working evil, but only the piety in temperate men comes to support the bent or the bound, who cannot come to further harm. And this virtue is so very commendable in all leaders or generals, for granted that they do many things in detriment of others, when they are temperate and pious they are commended by all, taking by the greater part, and so, since cruelty is the opposite of piety, all men blaspheme friends and enemies, cruel and intemperate. And piety is still commended in brute animals, since they have such great goodness in themselves, that it softens all hearts, even if they are hard, for if something loves what is similar to itself, piety especially loves piety. Under this rule, being religious, we have, taken from the blessed Augustine and from reason, that pious men cannot die a bad death, that is a death which is damnable to punishment after this life, since every pious person always does as good a deed as he can to his neighbour, since he has an incessantly ready will, and the result is that even if the pious men do not work a great deed to the benefit of his neighbour, they are highly esteemed, since with a healthy will the deed is firmly in the same way that they themselves wanted it to be done. And on the other hand, taking, one should understand, men who are moved by small piety, they are always hated by all peoples where they are recognised, since no one loves another by nature, so long as he does not expect any benefit from him occurring in case of necessity; and from men who are not pious one can expect little or no support, as they want all inward and outwards riches, which they can have only for themselves, from which it

follows that they are all greedy in the greatest blasphemy about all peoples, especially when they happen to be lavish on themselves, but wondrously greedy towards all others, since we do not consider only their greediness but at the same time also their wickedness, since they love themselves so much, thinking little of their parents, friends, and enemies. And he who is greedy for himself and all others shows that he has less ill will, since, however much he makes those associated with him live in misery, he also equally lives in scarcity, and we seldom or never envy miserable persons; the result is that on many occasions through us taking up the last means, to satisfy companions and servants, that we get a smaller part of the goods we have acquired for ourselves, than we give to them.

XII. CONCERNING THE PARTS APPROPRIATE FOR A MAN, SO THAT HE MAY PROPERLY BE CALLED A COURAGEOUS OR EXCELLENT SOLDIER, AND THAT IT IS NECESSARY IN ANY CONDITION OF WEAPONS AND IN VARIOUS PRACTICES, TO HAVE STRONG AND ABLE LIMBS.

In the chapter above we laid down some lines describing a part of the conditions which should be in a commander to make him good, and furthermore I hope that I shall deal with how a man can be called courageous, vigorous, or perfect in arms. ‘Perfect’, though, we mean according to military capability, and in respect to other soldiers. The word *validus* (- valiant, strong, powerful, vigorous, etc) means in many duties ‘vigorous’, or *sfortiatus* in the Castilian tongue, is used commonly for courageous in arms, and warlike for industrious and courageous conduct in warfare. But to return to the the word by which a man is called *sfortiatus* or courageous, it must be explained whether one should understand ‘with all arms in the way of harming enemies’ or if a man can be truly called vigorous if he can oppose his adversaries only with one weapon or in one way. To answer it must be conceded that any one who, with constant and stable mind, does whatever he can against enemies, even if he goes with one sword or a single lance, is to be called vigorous. But to place a difference between the more sufficient and the less sufficient, we understand those who are fit to bear a greater amount of things and likewise for things of greater importance, and of those who cannot suffice. We shall say something about what any soldier observes for that which will make him be said to be good in that art without any regard. Soldiers, from one moment to another, meet many inconveniences, in which

there is an imminent danger for temporal goods and for the life of persons, together with the honour of this world. In a formation, among military men, there is sometimes a great abundance of food, drink, women, and other riches, and at other times a scarcity; he who in such a place lets himself be preoccupied by food or that kind of inconveniences, if he is a captain, he is, when his enemies assault him, unable to govern either his men or himself, and if he is in an inferior condition and without anything to help in their own defence, he will die disgracefully like an animal. Taking other's women is offensive to many and weakens one's own limbs, and he who is occupied by luxury does not care about what pertains to the army, nor does he consider the machinations which are made by the enemy. If he is eager to plunder, he mostly pays attention to the booty of the enemies, anticipating all loss, which could fall to himself and his companions. From whence it happens that anyone will be destroyed. He should be true and pious, in order to have trust among those who often see and speak to him, and he should not be a blasphemer or a violent person lest everyone flee from him, especially if he is someone of influence. And a captain can however do little by himself where there is indeed scarcity, everyone must be abstinent by himself, making it clear to everyone that it is to be observed that food is only for the ultimate preservation of life, and not for some other delight, and one should take in mind understanding what it is reduced to after being put in the stomach. When there is a lack of food, to show favour to all, he should take little for himself when it is divided. It is often said that this one is a valiant man with a sword in his hand, this one is strong on foot, that other on horseback. This person is good in skirmishing and another in combat on the battlefield, a certain one in besieging strongholds and another in defending them; or when someone finds himself in wide fields, one is good with one weapon and another with another. But this particular quality is not enough to support with sufficiency in every chance in which anyone who pursues warfare happens frequently to find himself in, especially when going through alien or unknown lands. It is not hidden from him who has some practice that it often happens that one is assaulted in or outside the war, sometimes by manifest enemies, sometimes, though, by brigands, and that we find ourselves with weapons, and other times without weapons, sometimes with just a dagger, and sometimes with a sword, sometimes with a lance, and sometimes with a poleaxe or partisan, and so, in various ways, now on foot,

now on horseback, and now we are driving others into prison, and now we are being driven, sometimes one must flee, and sometimes pursue, then swimming to cross waters, then, indeed, working to raise walls, now to lower, and at other times to open, and so we can be found in various ways. We ask for in this place a man who is valiant or courageous to fight with only a sword or in his shirt; if he is weak what will he do to flee from some prison, even though the enemy is open and otherwise the place is suitable for departing. If he is guarded by two or three men, even if they are without weapons, just as himself, and even though by just one, he does not on any account dare to leave, knowing his own weakness; if he is going to make a hole in the wall, he has to be strong in his mind, and if he is going to climb up and then descend, he needs lightness and knowledge of raising up and going down, and if he is going to guard another who is a captive, he recognises that which anyone can do and anticipates it in full. If he is courageous and has to cross a multitude of water to attack enemies or flee from them, if he does not know how to swim, without doubt he is lost, even though he is of good courage. Knowing just how to use a sword when he is found with a lance against an enemy who has the same, he is reduced to misfortune. If, from weakness some of the members of the army, by age or custom, are good only on horseback; if they find themselves on foot, as happens by various cases, they are reckoned as if bound. If he would like to enter on foot into some walled or barred place, or a place into which he cannot secretly go on horseback, to avenge himself on some one of his enemies, or to escape when they would want to take him, what shall he do to escape if he is not light and strong? For whoever, from one place to another, can come to oppose him. And by such inconveniences we could add various examples, and therefore it is required to this end, that anyone who can be said to be excellent, warlike, and courageous, contains many praiseworthy parts in himself. A great intellect, discourse which is not furious but temperate, great strength, and lightness of the limbs. For when a man sees that he cannot save himself amongst few or many enemies bearing down on him, considering it, he is afraid that they will commit, even if he is light, and he thinks that he can be restrained by anyone, if he joins with him. He greatly hesitates to take on difficult things, if he falls with a horse or by himself when he is armoured, he can only rise with difficulty. He should be practised in fields, to recognise passages of rivers, mountains, valleys, and plains, and as a very principal part it is required that he is

amicable and generous to others, for rarely can one remain without the other among military men. He should continuously support himself on things suitable for war, on foot and on horseback, for if he happens to be made a commander, the whole army should rejoice, for when soldiers are not content with their general, they rarely do a praiseworthy job. In our times there was a knight called Alphontius Paiardus from the kingdom of Murcia, who with his courage and goodness raised himself to king of that kingdom. At one and the same time he was at war with the kings of Castile, Aragon, and Granada; every day gaining something of those kingdoms, but the other got nothing from his. Nevertheless, his prosperity lasted as long as he lived with the honour expected of a prince. He was a good speaker, handsome and valiant in his limbs, sometimes when he was questioned on what had been required of his life, he said that when he was young, he found no one who would defeat him in running, leaping, wrestling, and throwing, no one on foot and no one on horseback, and so, in any exercise of the limbs, when meeting others, he always won, and he said, 'When I was about to go to fight in light battle or war against few or many, I could hardly consider, even though the enemies were more numerous, that they could defeat me. For I did not principally look at the number, except that in my judgment, I seemed to be more powerful than any of them. And when they (his men?) would help me a little, all enemies ceased single combat.' Therefore he added these words, 'At that time I was good, chaste, devout, generous, benefactor of many without prejudice against my neighbour. But as soon as I began to abandon all these things, having little devotion and taking others' women and others' riches, it seemed that not just men and animals, but even rocks, hated me, and just as I had earlier won, I then yielded, defeated by anyone.' Therefore he advised, 'if you want to be courageous and defeat others, you must lead an honourable life, acknowledging your creator, pressing on with strong and light limbs, and reflective in intellect, but always pleasant and ready for dealings with many.' In truth, he who is not worthy of leading great armies, is improperly called valiant or sufficient in military service, since, not only when we are found together with others, but even if we remain alone, various events will come to meet us, which require that a remedy be applied with strenuous courage and activity. And to ascend to generalship, we need much practice, and to make sure that the practical case rests on a greater foundation and is explained with reason, it is appropriate that the commander has

seen the histories, in which from antiquity and modern times, many cases have happened, by which we easily have given an example to to guard against our necessities. He who knows letters and at the same times possesses some natural goodness, easily moves the minds of his soldiers everywhere with the appropriate words, in accordance with what is found in it in which they are found when they devote themselves to fighting enemies. When the captain is valiant in his limbs, he can break through among the first, and open a place through the point where he breaks through, in such a way that all his men follow him with agreeable and deliberate spirit. But if the captain withdraws and is so weak that he falls in the first conflict without a blow, or does not suffice to personally defeat any of the enemies, the whole of his army will enter the war with a chilled spirit. And if he has neither letters nor great experience, as long as he goes against the enemies courageously with few or many of his men, it happens that he wins, this however, but by chance, and so he cannot last like this, certainly not when some time he falls against against enemies who are prudent and accustomed to war. Then, no other test is needed except only by the example, which has been left for us from our ancestors, from which we understand how anyone defeated many with weapons, subjected various provinces, and persevered in victories; they were immensely strong men and of very sharp intellect, and very many of them were prolific in letters. Beginning from the law of Scripture, it is read that David was extremely strong, though of small stature. Of Hercules and Hector, it is recounted that their strength was admirable above other men, especially about Hercules, together with great wisdom. Of Alexander it is not written that he had great strength, but only a good disposition of the limbs, and tending towards the strong side with mind and industry for many letters. About the industry, intellect, and bodily strength of Hannibal, I do not know what I could write more than which has been written. Julius Caesar excelled in almost all abilities over all contemporaries, in the gifts of body and intellect. Charlemagne, Duke Osfredius of Golione, El Cid, Rodies were, according to the writings, very strong in limbs and intellect, and so we find an example in very many others, by which it is made clear that he who is to be chosen for war must necessarily contain in himself all praiseworthy parts which are looked for in any man in any duty. For an excavator or digger, a miller, a breadwinner or persons of such rude responsibilities can be better than others only because of great strength. One can even be greatly learned,

even though being very weak in the limbs, badly enduring hunger and thirst. A merchant can be sufficient, though weak and without letters, as long as he has some sharpness and industry, picked up through some practice. And any good commander is complete in everything, although if the art in him is crooked, for so he places poverty on very many, both friends and enemies, brings many to a scandalous death, both those who are without blame, and of those who take up arms to attack and to defend themselves. Finally, when we add so many perfections suitable for those who engage in military service, we do not understand that there should not be any other kind, nor honourable wisdom, unless, because of more frequent necessities, we assign some difference between soldiers and other men, though it is fitting for everyone to know how to walk along the road and outside it, through cultivated and uncultivated places, and to know how to prevail by one's limbs against other men and any animal, learn of means against cold and heat, ascend and descend through heights and other rough terrain, crossing waters, by jumping without any device, but also, indeed, such as by a pole or stick, or building a bridge. And in this place, on a remedy for crossing waters, for a long time, among all fathers, great inattention has broken out in what is commonly taken up, since from ordinary rule it is not found what fathers should do to make their sons learn to swim. But rather they tend to even prohibit them from learning, fearing a present threatening danger that they may go under, and they do not at all look at the usefulness which is expected for a long time afterwards, even though it is said that more go under of those who know how to swim than of those who do not, since they are more often given over to danger. We concede that they very often throw themselves into the water, but that a greater number go under, we immediately deny, especially concerning those who have learned the way of swimming as they should, and learning at a tender age, there is time to take it up perfectly. He, though, who knows little about the way and knowledge of swimming calls to mind but does not in any way consider the extent, so that that he who will swim easily through any expanse is drowned. But if he has been sufficiently instructed from his boyhood, undressing when some danger is imminent or taking other remedies which suit the distance he would want to cover, few drown, when they would not fall much within the sea. Of course, he who learns some duty sufficiently, not only relies on prevailing by one single tool, but rather on many, when he sees himself forced by necessity. Always he

goes with some remedy. And since we would concede that even persons who know how to swim drown, just as those who do not know, no one can deny that knowing is not a virtue, and a virtue is praiseworthy amongst everyone, and if it is praiseworthy to know it, it is shameful to remain without it, especially in things which we meet frequently, and waters are close to our habitations, and therefore we enter them by will as well as by necessity. Therefore those who are born around rivers usually know how to swim, and others do not know, from which we cannot excuse the inattention of the fathers, after they do not send their sons from boyhood to learn how to swim, especially since all boys desire this by nature. And just as we place the example about swimming, we understand it to suit any other suitable ability of the limbs, common to every man, if only out of necessity.

ON THE SAME.

Among other very mighty points, having knowledge about the pole star (literally the Bear Star, hereafter referred to as the Bear) and knowing how to navigate, results in great usefulness for soldiers, for often it happens that they find themselves at night in a country of which they draw no knowledge, nor know what time it is at night, so much so that it happens that when thinking that they are advancing, they are withdrawing, or when fleeing enemies, give themselves over to them. And if they have learned about the Bear they know at the first sight from which part he comes, and again, which way he will go to follow the purpose, and also what hour it is, exactly or with little difference, in such a way that it is extremely necessary for soldiers to be familiar with the Bear precisely for those who perform the function of commander or offer themselves as guides, and he who is not, cannot be said to be wholly sufficient for directing others. We see that some unsentient objects have knowledge about the Bear, a knowledge by which we as men receive great usefulness, such as of the needle which is a path for navigators, without which it would not be possible to navigate far from land, unsheltered, especially by night. And since an unsentient body of this kind has such a strong instinct or natural desire to draw itself back towards the pole star along the way of the lodestone, how much more should men, who have not only sentience, but reason, have the same knowledge?

Accordingly, it is a great and useful secret of nature to have devised this process of navigating, having followed in this way a very small steel with a lodestone, which always looks towards the north. In the same way, navigation is necessary, for mostly, if not today, at least tomorrow, it happens that one enters the sea or other waters, to cross from one place to another, or to save ourselves in them. Anyone who knows how to navigate can, by himself or together with another, take a big or small boat and offer himself a remedy. But if he does not know how to navigate by himself, even if he finds many rafts in a place where he is free to take them, it is no use to him. And the way of navigating and having understanding of the Bear is learned in a few hours and easily, so that everyone should know it. Navigation is wondrously helpful for swimming, and in the same way, swimming for navigation; for he who knows how to swim takes a board, some bundle of dry wood and rushes, and a bladder gourd on top, or of any other thing which stays on the water and attaches or ties it to the neck, so that it does not scatter and always goes below the chest; in this way he can cross a multitude of waters, or stay long in it without sinking. He who knows how to navigate in the way of rowing will help himself diligently with feet and hands when approaching the shore, placing himself to some extent in that place in which the wind or water goes. It is done better, however, when knowing how to swim and navigate. But even though one knows much, it is always good to take something which does not sink in the water and is tied to the throat. For a few years now they use a device or float (*natatorio*) made of leather sewn in the way of what is called *pilote de vento* (ball of air – a football) in the vernacular, and also of that leather by which those balls can be inflated and deflated. Nevertheless, in this place or air opening there should be a tube or reed stalk, to let it be frequently inflated, as pipers do. And this device or belt should be tied on under the arms. However, a support of this kind should come tightly under the armpits, so that anyone can prevail. There should be a cord from above over whichever shoulder, which grips the support in front and behind, to make sure that it does not turn aside but remains fixed under the armpits. And another crossing to the back of the head, so that it goes from one cord to the other, crossing over the shoulders, and in this way the cords cannot spread out over the arms, nor even the support be turned. For if it would be turned, it would be turning the head downwards and the feet upwards. But holding it tied on in such a way that it goes behind the person, we raise our foot, treading

water, and that nowhere can we put the head under it, and therefore no one goes under, though if remaining long, he can die from cold or any other inconvenience of that kind. And since this belt is so useful and light to carry, not only soldiers but any traveler should take it with him to cross any water where some danger can occur. While traveling by water, because of sudden accidents, one should carry it continually belted on, and it should be thick in accordance with the wearer's size, and it will have a suitable thickness if it is like his upper arm and slightly smaller. It should be made like a boot of double leather, like what in the vernacular is called a football, and then to be inflated, though it should be of convex and not straight construction, so that it can be more easily girded, though both would suffice, and anyone who makes footballs will know how to handle this belt or support. Anyone can prevail by himself, even though he is dressed, holding it with feet and hands to ascend to the shore. In the same way, with this instrument sails can be made, fastening over a pole and held with the hands; for the wind will leap up towards the seashore.

He who works with bags or boots, if he will smear the leather with fat, and equally, sew, as one should with any common leather, can make this float. And each by himself, having any bottle or wineskin or other leather which can be inflated, and keeping the air in it is sufficient to retain us hold us up on the waters. It should always, however, be tied on, to make sure it does not scatter from the neck or roll over the shoulderblades. Therefore it is best to take two wineskins at once and tie one to the neck and have it placed over them, and it should come under the armpits. Nevertheless they should be tied to the neck, so that they cannot scatter or escape. And this is commonly the way, and of lesser expense than can be found in a device of this kind, and in the best quantity, especially in Spain, since they use bags, and there are similar things in any house, and in these bottles the haunch or the thigh is appropriate for inflating, placing a tube and fitted above, not to let the air out. One must not place a flap as is usual in footballs. For this is dangerous, for sometimes it lets itself be inflated and retains the wind, and sometimes neither. It is best that either bottle can be inflated on its own, so that, if one happens to be torn, we may stay with the other. It is good to apply some grip on either, so that they can be fitted towards our shoulderblades with a rope, and then we go more safely, although it is in no way necessary that they are joined through the shoulderblades, except that they come

close. Finally one must note that it is not only by knowing how to explain those things which relate to honourable men, that we are held to be honourable men, unless we do those things we say are to be done. Therefore one must not only apply oneself to reading books, but rather to what is to be worked, as do the men whom we commend.

XIII. WHY EXPERIENCE OF VARIOUS PEOPLES IS SUITABLE, SO AS TO HAVE FAMILIARITY WITH THEM WHEN INDEED IT IS NECESSARY TO OPPOSE THEM.

If we want to get perfect control over some thing, we should know its own nature, so that out of our pure will we give it what is proper or contrary. For if we want to overcome some hardness, another, greater, hardness is to be applied, or we should add great readiness or looseness, though some things are destroyed by their opposites, such as sins. But here we take “defeat” to rather mean “endure” or work in accordance with the course of nature or of the body, where always or most of the time the men who are stronger defeat the weaker. War is indeed, by its own nature, a cruel thing, which is always intent on totally defeating others with arms, partly by savage death, and also partly by plundering and imprisonment, so that if someone refuses to follow the conditions of war, he is totally useless in battle, even though, if we could win, being compassionate would be praiseworthy. But this way of conquering is not properly called war, but rather the opposite. Therefore it is necessary, when at war, to apply some cruelty, acquired by nature or art, and concerning this we have very many examples in the Holy Writ, where God commanded that enemies and their property should be overthrown by the sword. About Hannibal the African it is said that he fought his enemies with extreme harshness and rarely kept any promise to them. Some others, too, who were famous and applied the greatest cruelty in warfare, until they defeated their enemies, nevertheless very readily spared everyone once they had acquired their victory. In this age, when Ferdinand, King of Naples, had found out about the condition of the French, he worked in likeness with them, so that they would be defeated and yield, and he kept neither pacts nor faith, to the extent that he quickly overcame them and threw them out of the kingdom; in the meantime also, we see that the French have up to now defeated very many in Italy through false promises, cruelty, and savageness. It is not, indeed, that we, because of this, praise cruelty, but rather that we neglect it though sometimes in war, because of

conformity, and from this comes that the arrogant or ferocious subjugate as many in a few days as the gentle do in many days. Truly, in fact, often peoples give themselves to humane and friendly leaders, but if one has to attack some regions with onslaught of arms, they tremble at the savageness of any cruelty, since they are not only afraid of violent death, but also they think that a cruel man will kill whoever he can seize. And because those who, through reason and experience, reach another kind of understanding than the common or fearful people have, these are not many. Because of this, as we have already said at the beginning on the characteristics of the general, it would be an honourable and useful thing for princes and nobles who wage war, to send their men into the various provinces, that they may recognise the different characteristics of the peoples, and the methods they follow in fighting. For if afterwards one has to engage in battle with them, they know how to treat them differently from how others usually do, and because of fearing one nation more than another, which commonly happens, since one has a different way of fighting than another, and very many are too afraid of others who do not order their companies in their way. And, as often happens in games, such as ball games and game of dice or *lassiditrio* and wrestling, that John beats Peter, Peter beats Ferdinand, and Ferdinand beats John. Nevertheless, if John would be sufficiently endowed with art or reason to recognise all diversities and strategems of that game, by beating Peter he would also beat whoever Peter beats. Yet another principal point which must be very much kept in mind, is that everyone is shown to be more belligerent in a foreign country than in his own. Therefore he is not strong, when brought into a foreign country a cow excels a bull. Since it is understood about men that many are together or that they have a lord from that country who favours them, and then foreigners are like wolves who have no home and always go exploring, so that they can enter to plunder all. For they forge no respect, plundering and killing everywhere, since they find neither parents nor friends whom they should protect. Therefore he who sees those men, so very harsh and so far removed from any friendly way of life, is very frightened of them. If, though, the prince of that country would have great understanding, he would quickly and easily teach his followers to fight against the custom and ability of the foreigners, for when having their whole country in mind, they can very easily stir up disorder against the foreigners. A coming together with the whole army is not at all to be sought, for it is not

safe, since it happens late to come in conflict at the pleasure of both camps, that always the side which seems weaker is excused. Therefore one must strive day and night for victory, for though the other conquers gradually in a few days, the opposite side loses the peoples' favour together with other advantages. Therefore, following this, neither people nor money give them help. And therefore it is more wholesome if, whatever the weaker wear out in years, they do the same amount in a few days, especially when no great help is expected; and beyond that generals should consult with those who have many times applied their hands in wars and won. For it continuously happens that the words conform with the mind. Therefore, those who are timid when they imagine that they might be present in a conflict, always give the advice that there should not be a war. And if this is not plainly uncovered they do not dare go against the enemies with determined mind, since it indeed brings no small risk to come to a conflict.

XIV. ON THE ORDER TO COUNTER THE ORDER WHICH THE GERMANS USUALLY KEEP.

For the sake of setting out some way for universally withstanding many peoples, we shall here place an example against the order and formation of Germans in conflict, for here the German order in our times appears almost untouchable. Even though they may be few and must pass from place to place and have no offensive arms except for lances, riding crossbowmen and soldiers with heavy armour can be very strong against Germans. Indeed when Germans wholly keep their order, they bring all sorts of weapons along with them; they especially have very many kinds of cannons on all sides. Therefore they can very easily go against riding crossbowmen and against weapon-bearers with heavy armour, which in the vernacular are called men at arms. When the Germans want to charge or clash with them, they bring all lances into contact in strength, somewhat like the cross of St Andrew, and in this way horses can pass without great detriment through the middle of the German footsoldiers, and those who remain far away are often constrained by these footsoldiers. And when the whole array or unit begins to retreat, it can be said to be devastated, and therefore, against Swiss or German footsoldiers, another, stronger, order must be assumed. And here it can be said that it will be useful to have some armed carriages against the enemies, since the people can move the carriages

all the way to the middle of the enemies and walk safely. But this will take place only on plains, and once in many years. Therefore it is appropriate to devise another formation which is easier and more common, where one must pay special attention in every way to an order which is stronger than the German custom. This can be done, having considered the Germans' strength, and it is to be done in such a way at first: the units are to be ordered in accordance with the German custom, with lances and halberds, and along the sides one should attach handguns or *springalds*, and crossbows, and all these things of the side are machines for striking or killing at a long distance. But beyond the German order, a unit of heavily armoured cavalry is to be placed behind, and on the face or the front part, very strong and excellently armoured men, and all first men, for seven or eight ranks, should have very big shields, and at least in the middle some very strong lames of steel, and at the back and in the middle of those who carry the shields, one should insert other men, strong and armed, with longer lances than those the Germans bear. And here the Germans will be forced to choose one of two: either throwing with their lances in a loose or unrestricted way against the shield-bearers, or putting their lances in a cross, to keep the enemies from concentrating in their middle. Against the first choice, as long as the Germans strike loose blows with their lances, the shieldbearers can enter in the middle of the Germans, and there, when all are armed with swords and other short weapons, they can quickly and easily devastate the Germans' entire formation, and beyond this order, the Germans are less strong; and if they put their lances like the cross of St Andrew, those who have longer lances coming between the shieldbearers, without difficulty, give enormous trouble against the Germans, and in this way they can easily enter in their middle, and when they are divided or rolled back, the heavily armoured cavalry should run against the enemies with maximum force, and men who are fast and sufficiently strong in similar things are sought. For all Germans are by nature slow and so, when they are rolled back together with enemies and are found out of order, they suffer much adversity with little effort because of their slowness or inagility; and this order which we have set out will always oppose the order of the Germans, since it goes against their temperament, and just as we have said about them, one should, against other nations, investigate methods contrary to their own.

XV. HOW A GENERAL SHOULD BE, SO THAT THE SOLDIERS SHOULD OBEY HIS WORDS IN TIMES OF NECESSITY.

On making a speech before battle, this is not our task, at least in this kind of speaking. Nevertheless, we shall set out something about the leader's aptitude for delivering speeches to the soldiers. For first of all, it must be asserted that the general is like a father, brother, companion, and friend towards the whole army. For if he is very harsh and not in harmony with the common companionship and usefulness for the soldiers, then, in times of necessity almost all will hate him or be estranged from him, and therefore no one will want to obey his orders. But if the general speaks in his speech like this: 'dearest sons, brothers, companions, and friends', no one at all will understand him in these words, when he has never been seen in conversation of that kind. Therefore, when one has to consider the harshest death, every soldier has a willing spirit, if he can, to flee from the battle, and even though they come together in combat, they attack like peoples divided between themselves and the leader. For which reason they are very easily and quickly broken. And so, it is fitting for the general always to behave like a father towards his sons, and then, in times of necessity, all obey his orders together and carry out all commands. For if the leaders are the best and for the common good of their subordinates, anyone will support their orders, since they are held to be towards all as if their own. For if a commander says, 'Sons, until now you have experienced that all our goods have been in common use, for apart from the name and title of general I have nothing which differs from you, that I have not shared with you. And now you see hostile enemies prepared against us; if we flee or are too weak or infirm to fight, our names and our labours for many years will be lost, we can have no hope for our lives, since enemies normally do away with their enemies when they can, and, if they happen to spare our lives, they will take away whatever which is good for sustaining them. For this reason, we must indeed make the most honourable choice: die by sword now in battle, or in a few days' time and always in misery. For there is no doubt whatever that we shall die, today or tomorrow. Therefore it is fitting to follow what is good or appropriate for military service. Indeed, the military art, from beginning to end, always advances to defeat enemies or die in battle, and so, each one of us, who is offered, for his own and military honour, in whatever battles, should fight hard, like a strong man, against the enemies. If, indeed, we

defeat the adversaries, all our past deeds would be restored, and in it there will be confirmation with the greatest praise, and in the future we shall have much good in our life. For indeed, many will, in praise of our labour, commend us, even after our death, and if we all fight together, like true brothers, friend, and companions, we will without doubt have victory in our grasp.' And when soldiers recognise that they will share in the temporal goods and famous name together with their leader, they will all in whatever inward or outward circumstances, have a willing spirit to engage in combat together. And when the whole army remains fighting in unity, it is extremely difficult to be defeated. But within that, soldiers should be wise in the art of fighting. For he who does not correctly know what to do or how to do it, can on no account fulfill the general's orders, since, in any thing he who knows little can work little. For the Germans always teach everyone in his youth to keep his order; but when someone errs, all punish him sharply, so that, when time demands, he does not do the same and be the cause of the ruin of many, and so they keep order in their battles. But in other methods of warfare, the Germans know little or nearly no art. Finally, any excellent general should teach his soldiers all exercises and matters which occur in war, and then they obey and serve him in everything.

XVI. WHICH EXERCISE SUITS EACH PERSON ACCORDING TO THE CHARACTERISTIC OF HIS AGE.

Having above touched on various things which correspond to bodily strength, now we should deservedly recall something about whether exercises of this kind are to be followed in youth, or indeed, in old age, or for one's whole life, though to avoid lengthiness we shall explain in few words what our intention was to instruct or teach (how) our strength can reach its peak and thereupon overcome other men. When, however, we begin growing heavier because of age or by some other sickness, to decline, we must cease altogether from any exercise where we want to defeat another. For when our strength reduces, anyone can easily stand against and prevail over us. But since our intention is towards acquisition of honour we are found openly in a contrary inclination. These same exercises are avoided at all times. But, though, if we want to excuse ourselves, nothing is of benefit however much we would produce, how well or badly I do

this exercise, inasmuch as we are old or weak. But if we sufficiently work such things, those who see say that it is more honourable to strive to preserve health moderately, however, by covering one's unfitness or weakness. For this exercise relates only to men who are healthy and robust youngsters. But if we can work very little, all will say, quoth: 'truly that old man is mad and his heart is delirious'. For with declining age, we are seen with bad eyes in similar exercises, not entirely undeservedly, since to follow the correct progression brings to anyone a certain appearance suited to that thing in which we are competent. Therefore, if someone is fat, especially where the lower parts are concerned, it seems almost impossible to us, and against nature, that he should be light. Therefore, even though he does something light in quantity, because of the vigorousness of art or custom, always, however, it will appear contrary to the fact and foreign to his ability. For this reason, we we happily listen to boys in peace and playfulness. In counsel, however, or difficult matters, we pay attention to the old. And since this is the natural order, we commit those who wish to annul the error into ignorance, of which an example appears everywhere, such as if a man wants to enter the work of a woman, or a woman claims a man's exercise, for even if the woman is strong and good at the art of exercising weapons or any other things which pertain to valiant and vigorous men, frequently we talk about her with mixed grumbling or praise. For we have some intrinsic idea which incites us to think that exercises of this kind do not belong with women. Therefore, women rarely or never possess the grace and charm suitable for exercising the arts of men. And if any man or woman wants to enthusiastically endeavour to love with lasciviousness, he or she is considered as if mad by everyone. For this kind of plan belongs only to adolescents. Even though we should love and esteem at all ages, that should not be in lasciviousness or stupidity, as young people usually do, and so, when we say that it is shameful for the old to decline to childishness for taking delight in the limbs, in which there is an enormous disparity between the extremes of the young and the old. For, indeed, an adolescent is praised when he imitates in wisdom and quietness. But an old man is never praised when he wants to imitate the young, though the young should not apply the slowness and lateness of the old, except only for their moderation. For slowness is of the part of the body. Moderation, tho' or counsel is of the soul, and therefore we praise an old man who applies himself to the usage of the soul, since this is seen to accord with him by nature,

because, just as we decline by age or proceed towards old age, our limbs become weaker and more feeble, and meanwhile the rational souls approach their end and the release of the limbs, in which the souls are embraced. Therefore, by intrinsic instinct, we recognise that the old will be strong in the strength of the souls and fail in bodily power. About adolescents, though, we feel very differently.

E N D

Printed in Milan by Ioannes Angelus Scinzenzeler in the year of the Lord 1509, on the 27th day of July.