

# **eBook**

## **The School of Recreation (1696 edition)**

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# The School of Recreation (1696 edition)

OF

Hunting. Hawking.  
Riding. Tennis.  
Racing. Bowling.  
Fireworks. Ringing.  
Military Singing.  
Discipline. Cock-Fighting.  
The Science of Fowling.  
Defence. Angling.

By *R. H.*

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*The School of Recreation.*

[Illustration]

*Printed for Henry Rodes near Bride lane in Fleet streete.*

*The preface to the Reader.*

*Reader, in this small Book you will find such Variety of Recreations, that nothing of the nature ever appeared so like Accomplish'd in any one Volume, of what Largeness soever: For besides my own Experience in these acceptable and delightful Particulars, reduced under proper Heads, easy to be understood, and put in practice; I have taken the Opinions of those whose Ingenuity had led them to these Exercises in Particular or General, and are approved for the Performance of them in the exactest manner, whose judicious Approbations the more embolden'd me to a Publication of them: In which you will not only find Pleasure, and keep up a Healthful Constitution in moderately pursuing them, but in most or all of them find considerable Profit and Advantage, when you can spare leisure Hours from your Devotions, or to unbend your Cares after the tiresome Drudgery of weighty Temporal Matters; Not that I think it is proper so eagerly to pursue them, as if you made them rather a Business than a Recreation; for though in themselves they are harmless, yet a continual or insatiate Prosecution of any Thing, not only lessens the Pleasure, but may render it hurtful, if not to your self, yet in giving Offence to others, who will be apt to reflect upon such as seem to doat upon them, and wholly neglect their other Affairs.*

*We find the Taste of Honey is delicious and desirable, yet Nature over-burthened with too great a Quantity, Surfeits, and begets a loathing of it. Wherefore to Conclude, I commend them as they are, viz. Suitable Recreations for the Gentry of England, and others, wherein to please and delight themselves. And so not doubting this Work will be accepted, as it was well meant to serve my Country-Men, I take leave to subscribe myself, Kind Reader,*

Your most humble  
and obliging Servant,

*R. H.*

## OF HUNTING.

Hunting, being a Recreation that challenges the sublime Epithets of Royal, Artificial, Manly, and Warlike, for its Stateliness, Cunning, and Indurance, claims above all other Sports the Precedency; and therefore I was induced to place it at the Head to usher in the rest.

But to come to the Purpose: The young Hunter, as yet raw in the true Knowledge of this Royal Sport, with what is merely necessary and useful, without amusing him with superfluous Observations for his Instruction: I shall therefore observe throughout this Treatise this Method: 1. The several *Chases* or Games which fall under the First Denomination, Hunting. 2. The genuine of Infallible Rules whereby we are to direct our selves, for the obtaining the true Pleasure in prosecuting the same, and the desired Effects of it.

Know than; the Beasts of Venery or Forest, are, *viz.* The *Hart, Hinde, Hare.*

As likewise the Wild Beasts, or Beasts of Chace are, *viz.* the *Buck, Doe, Fox, Marten, Roe.*

The Beasts of Warren, are, *viz.* *Hares, Coneys, Roes.*

*Note,* The *Hart* and *Hind* before spoken of, though they are of one kind, yet, because their Seasons are several, are esteemed distinct Beasts; and in the *Hart* is included the *Stag*, and all red *Deer* of Antlier.

And because I reckon it the most necessary part of the Hunter to understand the Names, Degrees, Ages, and Seasons of the aforesaid different Beasts of Forest or Venery, Chase, and Warren, I therefore, present him with these following

*Beasts of Forest, &c.*

The *Hart*, the first year is called a *Hind-Calf*, 2 A *Knobber*, 3 A *Brock* 4 A *Staggard*, 5 A *Stag*, 6 A *Hart*.

The *Hind* the first Year a *Calf*, 2 A *Hearse*, 3 A *Hind*.

The *Hare*, the first Year a *Leveret*, 2 A *Hare*, 3 A great *Hare*.

*Beasts of Chase.*

The *Buck*, The first Year is called a *Fawn*, 2 A *Pricket*, 3 A *Sorrel*, 4 A *Sore*, 5 A *Buck* of the first Head, 6 A Great *Buck*.

The *Doe*, the first Year a *Fawn*, 2 A *Teg*, 3 A *Doe*.

The *Fox*, the first Year a *Cub*, 2 a *Fox*.

The *Marten*, the first Year A *Cub*, 2 A *Marten*.

The *Roe* the first Year A *Kid*, 2 A *Gyrl*, 3 A *Hemuse*, 4 A *Roe-Buck* of the first Head, 5 A Fair *Roe-Buck*.

As for the Beasts of Warren, the *Hare* being spoken of before, little or nothing is to be said. The *Coney* is first A *Rabbit*, and then an Old *Coney*.

Thus much for their Names, Degrees, and Ages: Now let us next observe their proper Seasons for Hunting.

The *Hart* or *Buck*, beginneth fifteen days after *Mid-Summer-Day*, and lasteth till *Holy-Rood-Day*.

The *Fox*, from *Christmass*, and lasteth till the Annunciation of the Blessed *Virgin Mary*.

The *Hind* or *Doe*, from *Holy-Rood-Day*, till *Candlemas*.

The *Roe-Buck*, from *Easter*, till *Michaelmas*.

The *Roe*, from *Michaelmas*, till *Candlemas*.

The *Hare*, from *Michaelmas*, to the end of *February*.

Thus much I thought fit to speak briefly of the proper Names, Degrees, Ages, and Seasons of the several Chases which we Hunt: But having almost forgot some, I shall insert here, as intending to speak somewhat of them, and they are the *Badger*, *Otter*, and *Wild Goat*.

As for the Terms of Art appropriated to Hunting. And now I bring you to the second thing I proposed, *viz.* the Rules and Measures we are to learn and observe in the aforementioned Sports or Chases; and in this we must begin with the Pursuers or Conquerors of these Chases, namely.

#### *Of Hounds.*

There are several kinds of Hounds, endued with Qualities suitable to the Country where they are bred; and therefore consult his Country, and you will soon understand his Nature and Use: As for instance, the Western Countries of *England*, and Wood-land, Mountainous Countries, as also *Cheshire*, and *Lancashire*, breed the *slow-Hound*; a large great Dog, tall and heavy. *Worcestershire*, *Bedfordshire*, and many other well mixt Soyls, where the Champaign and Covert are equally large, produce the *Middle sized Dog*, of a more nimble Composure than the fore-mentioned, and fitter for Chase. *Yorkshire*, *Cumberland*, *Northumberland*, and the North parts, breed the Light, Nimble, swift slender Dog. And our open Champaigns train up excellent Grey-Hounds, hugely admired for his Swiftnesse, Strength, and Sagacity. And lastly, the little *Beagle* bred in all Countries, is of exceeding Cunning, and curious Scent in Hunting.

For the Choice of Hounds we are to rely much on their Colours, and accordingly make our Election. The Best and most Beautiful of all for a general Kennel, is, the *White Hound*, with Black Ears, and a black spot at the setting on of the Tail, and is ever found to be both of good Scent, and good Condition, and will Hunt any Chase, but especially the *Hare*, *Stag*, *Buck Roe*, or *Otter*, not sticking at Woods or Waters. The next is the *Black*, the *blacktann'd*, or all *Liver hew'd*, or the *milk White Hound*, which is the true *Talbot*, is best for the string, or line, as delighting in Blood; the Largest is the comliest and best. The *Grizled*, usually *shag-hair'd*, are the best Verminers; and so fittest for the *Fox*, *Badger*, or other hot Scents; a couple of which let not your Kennel be without, as being exceeding good cunning Finders.

For the Shape of your Hound, you must consult the Climate of his Breed, and the natural Composition of his Body; but by these following Characters you may know a good Hound. If you like a large, heavy, true *Talbot* like Hound, see

His Head be round and thick. Nose short and uprising. Nostrils wide and large. Ears larger and down-hanging. Upper lip-Flews lower than his Nether Chaps. Back strong and rising. Fillets thick and great. Thighs and Huckle-bones round. Hams streight. Tail long and rush grown. The Hair of his Belly hard and stiff. Legs big and lean. Foot like a *Fox's*, well clawed and round. Sole dry and hard. All these shew an able Hound.

If you would choose a swift light Hound, the *Yorkshire* one in the generality will please you; for that (as these have) he ought to have a slenderer Head, longer Nose, shallower Ears and Flews, broad Back, gaunt Belly, small Tail, long Joynts, round Foot; and in fine of a Gray-Hound-like Make.

Thus much to direct the choice of Hounds; now something ought to be spoken of the Composition of Kennels, wherein I must appeal to the Affection of the Gentleman, the Lover of this Sport, and let him tell me the Reasons that induced him take pleasure in Hounds, whether it be he fancies Cunning in Hunting? Or Sweetness, Loudness, or Deepness of Cry? Or for the Training his Horses? Or for the Exercise of his Body only?

If for Cunning Hunting; breed your Dogs from the slowest and largest of the forementioned Northern Hounds, and the swiftest and slenderest of the West Country, of both Kinds, approved to be not given to lie off, or look for Advantages, but staunch, fair, even running, and of perfect fine Scent. These will make a Horse gallop fast, and not run; being middle-siz'd, not too swift as to out-run, or too slow as to lose the Scent; are the best for the true Art and Use of Hunting.

If for Sweetness of Cry; compound your Kennel of some large Dogs, of deep solemn Mouths, and swift in spending, as the *Base* in the Consort; then twice so many roaring, loud ringing Mouths, as the *Counter-Tenor*: And lastly, some hollow plain sweet Mouths, as the *Mean*: So shall your Cry be perfect. Observe that this Composition be of the swiftest and largest deep Mouth'd Dog, the slowest and middle-siz'd, and the shortest Legged slender Dog. For these run even together.

If for Loudness of Mouth, choose the Loud clanging (redoubling as it were) Mouth, and to this put the roaring, spending, and Whining Mouth, which will be loud, smart, and pleasant: Such are for the most part your *Shropshire*, and *Worcestershire* Dogs.

If (lastly) for deepness of cry, the largest dogs having the greatest Mouths, and deepest flews, are the best; such are your West-Country, *Cheshire*, and *Lancashire* Dogs.

But if you have your Kennel for Training Horses only; then compound your Kennel of the lightest, nimblest, and swiftest Dogs, such as your Northern Hounds are. For the strong and violent Exercises of their Horses, through the Natural Velocity of their Hounds, in the North parts, have render'd them famous for Truth and Swiftness above all other parts of *England*.

Lastly, If for the Maintenance of your Health, by preventing Infirmities and Grossness of Humours, you compose your Kennel; consult first your own Ability for this Exercise; and if you think you are able to foot it away, then the Biggest and slowest Dogs you can get are best. But if you would pad it away through an Unability of footing it, than choose the slowest or middle-siz'd Hounds, of good Mouths and Noses, for loud Cry, and ready Scent.

Thus far for the Composing a Kennel: I come now to the *Kennel it self*, of which I need say little, as indeed unnecessary, leaving that to the Discretion of the *Huntsman*; only I would have him observe, that it be built some pretty way distant from the Dwelling-House, in a warm dry Place, free from Vermine, and near some Pond or River of fresh Water; and so placed, that the Morning Sun may shine upon it. Be sure to keep it clean, and let them not want fresh Straw every day. Feed them early in the Morning at Sun-rising, and at Sun-set in the Evening. As for the Meat, I leave to the ingenious Huntsman to get when they come from Hunting; after you have fed them well, let them to their Kennel, and wash their Feet with Beer and Butter, or some such thing, and pick and search their Cleys, for Thorns, Stubs, or the like: If it is in *Winter*, let a Fire be made, and let them beak and stretch themselves for an hour or so at the fire, and suffer them to lick, pick, and trim themselves; hereby to prevent the *Diseases* incident to them, upon sudden Cooling, as the *Mange*, *Itch*, *Fevers*, &c.

But before I treat of the keeping your Hounds in Health by curing their Diseases, I must speak a Word or two of the way to *Breed good Whelps*, viz. Having a Hound and a Bratch of that general Goodness in Size, Voice, Speed, Scent, and Proportion you like, put them together to ingender in *January, February, or March*, as the properest Months for Hounds, Bitches, and Bratches to be Limed in; because of not *losing time* to enter them. When you put them together, observe, as near as you can, if the *Moon* be in *Aquarius* or *Gemini*; because the Whelps will then never run Mad, and the Litter will be double as many Dogs, as Bitch-Whelps. When your Bitch is near her *Whelping*, separate her from the other Hounds, and make her a Kennel particularly by her self; and see her Kennell'd every Night, that she might be acquainted and delighted with it, and so not seek out unwholsom Places; for if you remove the Whelps after they are Whelp'd, the Bitch will carry them up and down till she come to their first Place of Littering; and that's very dangerous. Suffer not your Whelps to Suck above two Months, and then *Wean* them.

When your Whelps are brought up, *enter* them not into Hunting till they are at least a Year and half old: That is, if whelp in *March*, enter them *September* come Twelve Month; if in *April*, in *October* come Twelve Months after, *&c.*

When you would *enter* them, bring them abroad, with the most Staunch and best Hunting hounds; (all babling and flying Curs being left at home:) and a *Hare being the best entering Chase*, get a *Hare* ready before, and putting her from her Form, view which way she takes, and then lay on your Hounds, giving them all the Advantages may be; if she is caught, do not suffer them to break her, but immediately taking her, strip off her Skin, and cutting her to pieces, give every part to your young Whelps; and that beget in them a Delight in Hunting.

*Diseases incident to Dogs, and their Cures.*

*For Sick Dogs.* Take Sheeps-heads, Wooll and all, hack, and bruise them into pieces, make Pottage of it with Oatmeal, and *Penny-Royal*, and give it warm.

*Lice and Fleas.* Boyl four or five handfules of *Rue*, or *Herb of Grace*, in a Gallon of running Water, till a Pottle be consumed, strain it, and put two Ounces of *Staves-acre* powdered, and bathe them with it warm.

*Itch.* Take Oyl of *Flower-de-Lys*, Powder of *Brimstone*, and dry'd *Elicampane-Roots*, of each a like quantity, and *Bay-Salt* powdered; mix these Powders with the Oyl, and warm it, anoint, scratch, and make it bleed, it will do well.

*Tetter.* Take *Black Ink*, Juice of *Mint* and *Vinegar*, of each alike, mix them altogether with Powder of *Brimstone* to a Salve, and anoint it.

*Worms.* Give your Hound *Brimstone* and new *Milk*, it will kill them.

*Gauling.* May *Butter*, yellow *Wax* and unflackt *Lime*, made to a Salve, and Anoint therewith, is a present Remedy.

*Mange.* Take two Handfules of *Wild-Cresses*, of *Elicampane*, of the Leaves and Roots of *Roerb* and *Sorrel*, the like quantity, and two Pound of the Roots of *Frodels*, Boyl them all well in Lye and Vinegar, strain it, and put therein two Pound of *Grey Soap*, and after 'tis melted, rub your Hound with it four or five days together.

*For any Ear Disease.* Mix *Verjuice* and *Chervile* Water together, and drop into his Ears a spoonful or two, Morning and Evening.

*Sore Eyes.* Chew a Leaf or two of *Ground Ivy*, and spit the Juice into his Eyes.

*Surbaiting.* Wash his feet with *Beer* and *Butter*, and bind young red *Nettles* beaten to a Salve to his Soles.

*Biting by Snake, Adder, &c.* Beat the Herb *Calamint* with *Turpentine*, and yellow *Wax* to a *Salve*, and apply it. To expel the inward Poyson, give the said Herb in Milk.

*Biting by a Mad Dog.* Wash the place with *Sea-Water*; or strong *Brine*, will Cure him. The quantity of a *Hazel-Nut* of *Mithridate*, dissolved in Sweet Wine, will prevent inward Infection.

*Madness.* Lastly, If your Hound be Mad, which you will soon find by his separating himself from the rest, throwing his Head into the Wind, foaming and slaving at Mouth, snatching at every thing he meets, red fiery Eyes, stinking filthy Breath; then to Knock him in the Head, is a present Remedy, and you'll prevent infinite Dangers.

And now I proceed to give some brief Instructions for Hunting the several Chases, *viz.* the *Time when?* and the *Manner how?*

Having your Kennel of Hounds in good order and plight, lead them forth, and to your Game; only take this Caution; do not forget to have in your Pack a couple of *Hounds*, called *Hunters in the High-ways*, that will Scent upon hard Ground, where we cannot perceive Pricks or Impressions; and let a couple of *Old stench Hounds* accompany you, by whose sure Scent, the too great Swiftnes of the young and unexperienced Ones may be restrained and regulated.

*Of Hart or Stag Hunting.*

To understand the *Age* of this our Game, it is known by several Marks, amongst which this is the most authentick: That if you take his view in the ground, and perceive he has a large Foot, a thick Heel, a deep Print, open Cleft and long space, then be assured he is Old; as the Contrary concludes him Young.

To find him? Examine the following Annual, or Monethly.

*November*, in Heaths among Furs, Shrubs, and Whines.

*December*, in Forests among thick and strong Woods.

*January*, in Corners of the Forests, Corn-fields, *Wheat*, *Rye*, &c.

*February* and *March*, amongst Young and thick Bushes.

*April* and *May*, in Coppices and Springs.

*June* and *July*, in Out-Woods and Purlieus nearest the Corn-fields.

*September* and *October*, after the first showers of Rain, they leave their Thickets, and go to Rut, during which time there is no certain place to find them in.

When you have found him in any of these places, be careful to go up the Wind; and the best time to find him is before *Sun-rising*, when he goes to feed; then watch him to his Leir, and having lodged him, go and prepare; if he is not forced, he will not budge till Evening. Approaching his Lodging, cast off your *Finders*, who having Hunted him a Ring or two, cast in the rest; and being in full Cry and maine Chase, Comfort and Cheer them with Horn and Voice. Be sure to take notice of him by some *Mark*, and if your Dogs make *Default*, rate them off and bring them to the *Default* back, and make them cast about till they have undertaken the first *Deer*; then cheer them to the utmost, and so continue till they have either set up or slain him. It is the Nature of a *Stag*, to seek for one of his kind, when he is Imbost or weary, and beating

him up, ly down in his place; therefore have a watchful eye unto *Change*. As likewise by taking *Soil* (i.e. Water) he will swim a River just in the middle down the Stream, covering himself all over, but his Nose, keeping the middle, least by touching any Boughs he leave a Scent for the *Hounds*; And by his Crossings and Doublings he will endeavour to baffle his Pursuers: In these Cases have regard to your *Old Hounds*, as I said before. When he is Imbost or weary, may be known thus: By his Creeping into holes, and often lying down, or by his running stiff, high and lumbering, slavering and foaming at Mouth, shining and blackness of his Hair, and much Sweat; and thus much for *Stag* or *Hart Hunting*. As for the *Buck* I shall not speak any thing, for he that can Hunt a *Stag* well, cannot fail Hunting a *Buck* well. As likewise for the *Roe Hunting*, I refer you to what is spoken of the *Hart* or *Stag*.

#### *Of Hare Hunting.*

As for the *Time*, the most proper to begin this Game, note; That about the middle of *September* is best, and to end towards the latter end of *February*, when surcease, and destroy not the young early Brood of *Leverets*; and this Season is most agreeable likewise to the nature of *Hounds*; moist and cool. Now for the *Place* where to find her, you must examine and observe the Seasons of the Year; for in Summer or Spring time, you shall find them in Corn-fields and open places, not sitting in Bushes, for fear of Snakes, Adders, \_&c\_. In *Winter* they love Tuffs of Thorns and Brambles, near Houses: In these places you must regard the *Oldness* or *Newness* of her *Form* or *Seat*, to prevent Labour in Vain: If it be plain and smooth within, and the Pad before it flat and worn, and the Prickles so new and perceptible, that the Earth seems black, and fresh broken, then assure your self the Form is new, and from thence you may Hunt and recover the *Hare*; if the contrary, it is old, and if your *Hounds* call upon it, rate them off. When the *Hare* is started and on Foot, step in where you saw her pass, and hollow in your *Hounds* till they have undertaken it, then go on with full Cry. Above all, be sure to observe her first Doubling, which must be your direction for all that day; for all her other after Doublings, will be like that. When she is thus reduced to the *slights* and *shifts* she makes by Doublings and Windings, give your Dogs *Time* and *Place* enough to cast about your Rings, for unwinding the same; and observe her *leaps* and *skips* before she squat, and beat curiously all likely places of Harbour: She is soon your Prey now.

#### *Of Coney Catching.*

Their *Seasons* are always, and the way of taking them thus: Set Pursenets on their Holes, and put in a *Ferret* close muzzled, and she will boult them out into the Nets: Or blow on a sudden the Drone of a Bag-Pipe into the Burrows, and they will boult out: Or for want of either of these two, take Powder of *Orpiment* and *Brimstone*, and boult them out with the Smother: But pray use this last seldom, unless you would destroy your Warren. But for this sport *Hays* are to be preferred above all.

#### *Of Fox-Hunting.*

*January*, *February*, and *March*, are the best Seasons for Hunting the *Fox* above Ground, the Scent being then strong, and the coldest Weather for the *Hounds*, and best finding his Earthing. Cast off your sure Finders first, and as the *Drag* mends, more; but not too many at once, because of the Variety of Chaces in Woods and Coverts. The Night before the Day of Hunting, when the *Fox* goes to prey at Midnight, find his Earths, and stop them with Black Thorns and Earth. To find him draw your *Hounds* about Groves, Thickets, and Bushes near Villages; Pigs and Poultry inviting him to such Places to Lurk in. They make their Earths in hard Clay, stony Grounds, and amongst Roots of Trees; and have but one Hole straight and long. He is usually taken with *Hounds*, *Grey-Hounds*, *Terriers*, *Nets* and *Gins*.

#### *Of Badger Hunting.*

This Creature has several Names, as *Gray Brock*, *Boreson*, or *Bauson*; and is hunted thus. First go seek the Earths and Burrows where he lieth, and in a clear Moon-shine Night, stop all the Holes but one or two, and in these fasten Sacks

with drawing Strings; and being thus set, cast off your *Hounds*, and beat all the Groves, Hedges, and Tuffs within a mile or two about, and being alarm'd by the Dogs they will repair to their Burrows and Kennels, and running into the Bags, are taken.

*Of the Martern or wild Cat.*

These two Chases are usually hunted in *England*, and are as great Infesters of Warrens, as the two last mentioned Vermine, but are not purposely to be sought after; unless the Huntsman see their place of Prey, and can go to it; and if the *Hound* chance to cross them, sport may be had. But no Rule can be prescribed how to find or hunt them.

*Of the Otter.*

This Creature useth to lye near Rivers in his Lodging, which he cunningly and artificially builds with Boughs, Twigs and Sticks. A great Devourer of Fish. It is a very sagacious and exquisitely Smelling Creature, and much Cunning and Craft is required to hunt him. But to take him, observe this in short. Being provided with *Otter-Spears* to watch his Vents, and good *Otter-Hounds*, beat both sides of the River's Banks, and you'll soon find if there is any. If you find him, and perceive where he swims under Water, get to stand before him when he *Vents*, (*i.e.* takes breath) and endeavour to strike him with the Spear: If you miss him, follow him with your *Hound*, and if they are good for *Otter*, they will certainly beat every Tree root, *Bul-rush Bed*, or *Osier-Bed*, so that he cannot escape you.

*Of the wild Goat.*

The *Wild-Goat* is as big and as fleshy as a *Hart*, but not so long-legg'd. The best time for hunting them is, at *All-hallontide*; and having observed the Advantages of the Coasts, Rocks, and Places where the *Goats* lie, set Nets and Toils towards the Rivers and Bottoms; for 'tis not to be imagined, the Dogs can follow them down every place of the Mountains. Stand some on the tops of the Rocks, and as occasion offers throw down Stones; and place your Relays at the small Brooks or Waters, where the *Goat* comes down; but let them not tarry, till the *Hounds* come in, that were cast off.

*Thus much for Hunting.*

*Of RIDING.*

Here we must first examine the Ends and Design of our proposing this Art to our selves, and accordingly lay down as briefly as may be the necessary Rules and Lessons are to be observed and learnt; and I take these to be the usual Perfections we aim at. *To ride well the great Horse, for the Wars or Service, and the Horse for Pleasure*; of both which as concisely as I can, in their order.

We must begin with *Taming a young Colt*. After you have kept him at home some time, and made him so Familiar with you, as to suffer *Combing, Currying, Handling, and Stroaking* any part, 'tis high time then to offer him the Saddle, which you must lay in the *Manger* first, that by its smell, he may not be afraid of it, or the *Styrrups* Noise. Then gently saddling him (after his dressing) take a sweet *Watering Trench*, anointed with Honey and Salt, and place it in his Mouth so, that it may hang directly over his *Tush*; then lead him abroad in your hand, and Water him; and after he has stood an hour rein'd take off his Bridle and Saddle, and let him feed till Evening; then do as in the Morning; dress and Cloath him, having *Cherisht*, by the Voice delivered smoothly and gently; or by the Hand by gently stroaking and clapping him on the neck, or Buttock; or lastly by the *Rod*, by rubbing it on his Withers or Main.

On the next day as before; and after that, put him on a strong *Musrole*, or sharp *Cavezan*, and *Martingale*; which is the best guide to a Horse for setting his head in due place, forming the Rein, and appearing Graceful and Comely; it Corrects the yerking out his Head, or Nose, and prevents his running away with his Rider. Observe therefore to place it right, that it be not buckled straight, but loose, and so low, that it rest on the tender Grizzle of his Nose, to make him the more sensible of his fault, and Correction; and so as you see you win his Head, bring him straighter by degrees; let him but gently feel it, till his Head be brought to its true perfection.

Having observed this well, lead him forth into some soft or new Plowed Land, trot him about in your hand a good while: Then offer to Mount; if he refuse to suffer you, trot him again; then putting your foot into the *Styrrop*, mount half way; if he takes it impatient, correct him, and about again; if not, cherish him, and place your self a moment in the Saddle, dismount, cherish, and feed him with *Grass*, or *Bread*: All things being well, remount, even in the Saddle, keeping your Rod from his Eye; then let one lead him by the *Chaff-Halter*, and ever and anon make him stand, and cherish him, till he will of his own accord go forward; then come home, alight gently, *dress and feed him well*. This Course in few dayes will bring him to Trot, by following some other Horse-man, stop him now and then gently, and forward; not forgetting seasonable *Cherishings* and *Corrections*, by Voice, *Bridle*, *Rod*, *Spurs*.

Being thus brought to some certainty of *Rein*, and *Trotting* forth-right, then to the treading *forth of the large Rings*. And here first examine your Horses Nature, before you choose your Ground, for, if his Nature be dull and sloathful, yet strong, then *New-Plow'd-Field* is best; if *Active*, *Quick* and *Fiery*, then *Sandy-ground* is to be preferred; in the most proper of which mark out a large Ring, of a Hundred paces circumference. Walk about it on the right seven or eight times, then by a little straightning your right Rein, and laying your left leg calf to his side, make a half Circle within the Ring upon your right down to its Center; then by straightning a little your left Rein, and laying your right Leg Calf to his side, make a half Circle to your left hand, from the Center to the outmost Verge, and these you see contrary turned make a Roman S. Now to your first large Compass, walk him about on your left hand, as oft as before on the right, and change to your right within your Ring; then Trot him first on the right-hand, then on the left, as long as you judge fit, and as often Mornings and Evenings, as the Nature of your Horse shall require. In the same manner you may make him to *Gallop* the same Rings, though you must not enter it all at once, but by degrees, first a Quarter, then a Half-quarter; and the Lightness and Cheerfulness of your Body, not the Spur, must induce him to it.

The next Lesson is to *Stop Fair*, *Comely*, and without Danger. First see that the Ground be hard and firm, then having cherished your Horse, bring him to a swift Trot, about Fifty Paces, and then straightly & suddenly draw in your Bridle hand; then ease a little your hand to make him give backward, and in so doing, give him liberty and cherish him; then drawing in your Bridle hand, make him retire, and go back; if he strike, ease your hand: if he refuse, let some by-stander put him back, that he may learn your intention and thus he may learn these two Lessons at once.

*To Advance before*, when he stoppeth, is thus taught: When you stop your Horse, without easing your hand, lay close and hard to his sides both Calves of your Legs, and shaking your Rod cry, *Up, Up*; which he will understand by frequent Repetition, and Practice: This is a Gracefull, and Comely Motion, makes a Horse Agile, and Nimble, and ready to turn; and therefore be careful in it: That he take up his Legs Even together, and bending to his Body; not too high, for fear of his coming over; not sprawling, or pawing; or for his own pleasure; in these faults correct him with Spur and Rod.

*To Yerk out behind* is the next Lesson, thus learnt, Presently upon your making him stop give him a good brisk jerk near his Flank, which will make him soon understand you. When he does it, cherish him; and see he does it comely, for to yerk out his hinder Legs, till his Forelegs be above Ground, is not graceful; or one Leg yerk't farther out than the other; or one Leg out while the other is on the Ground; in this case a single Spur on the faulty side, is best. But to help him in Yerking, staying his Mouth on the Bridle, striking your Rod under his Belly, or Touching him on the Rump with it.

To *Turn readily on both hands*, thus: Bring his large Rings narrower, and therein gently walk him, till acquainted. Then carry your Bridle-hand steady and straight, the outmost rather straighter than the inmost Rein, to look from, rather than to the Ring; trot him thus about, on one side and the other successively, as aforesaid. After some time stop, and make him advance twice or more, and retire in an even Line; then stop and cherish him. To it again, after the same manner, making him lap his outmost Leg above a foot over his Inner. And thus the *Terra a Terra, Incavalere & Chambletta*, are all taught together. Perfect your Horse in the large Ring, and the straight Ring is easily learnt.

Your Horse being brought thus far to perfection, with the *Musrole* and *Trench*, now let a gentle *Cavezan* take their place; with a smooth Cannon-Bit in his Mouth, and a plain watering Chain, Cheek large, and the Kirble thick, round and big, loosely hanging on his nether Lip; and thus mount him, and perfect your Horse with the *Bit* in all the aforesaid Lessons, as you did with the *Snaffle*; which indeed is the easier to be done of the two.

To teach your Horse *To go a side*, as a necessary Motion for shunning a blow from an Enemy, is thus: Draw up your Bridle hand somewhat straight, and if you would have him go on the Right, lay your left Rein close to his Neck, and your left Calf likewise close to his side (as in the *Incavalere* before) making him lap his left Leg over his Right; then turning your Rod backward jerking him on the left hinder Thigh gently, make him to bring to the right side his Hinder parts, and stand as at first in an even direct Line: Then make him remove his Fore parts more, that he may stand as it were Cross over the even Line, and then bring his hinder parts after, and stand in an even Line, again. And thus you must do, if you would have him go on the Left hand, using your Corrections and Cherishings on the right. Use it, and you may be sure of Perfection.

For the *Carreere*, only take this: Let it not extend in length above six score yards, give your Horse warning before you start him by the Bridle hand, and running full speed, stop him suddenly, firm and close on his Buttock.

For the *Horse of Pleasure*, these following Lessons are to be learnt. As first to *Bound aloft*, to do which: Trot him some sixteen yards, then stop, and make him twice advance; then straighten your Bridle-hand; then clap briskly both your Spurs even together to him, and he will rise, tho' it may at first amaze him; if he does it, cherish him, and repeat it often every day, till perfect.

Next to *Corvet* and *Capriole* are Motions of the same nature, and in short are thus taught. Hollow the ground between two joyning Walls a Horses length, by the side of which put a strong smooth Post of the same length from the Wall, and fasten at the Wall an Iron Ring over against the Post: Thus done, ride into the hollow place, and fasten one of the *Cavezan* Reins to the Post, and the other to the Ring; then cherish him, and by the help of the Calves of your Legs, make him advance two or three times; then pause, and Cherish him; make him advance again a dozen times more, and then rest; double your Advancings, and repeat them till it becomes habitual to him, to keep his Ground certain, advance of an *equal hight* before and behind, and observe a *due Time* with the motions of your Legs. The Inequality of his advancing his hinder Legs, is helpt by a Jerk on the Fillets by some body behind him with a Rod.

#### *Of RACING.*

A Racer must have the *Finest Cleanest Shape* possible, and above all, *Nimble, Quick, and Fiery, apt to Fly with the least Motion*; nor is a long Bodied contemptible, it assuring *Speed*, tho' it signifies *Weakness* too. The *Arabian, Barbary*, or his Bastard, are esteemed the best for this Use, these excelling *Fennets*, tho' they are good too.

Having furnished your self with a Horse thus qualified, you are to observe his right and due *Ordering*, before your designed *Racing*. *Bartholomew-tide* is the most proper time to *take him from Grass*; the day before being Dry, Fair, and Pleasant: That Night let him stand conveniently, to empty his Body; the next day *Stable* him, and feed him with *Wheat-straw* that day, and no longer; lest you exceeding that time, it straighten his *Guts*, heat his *Liver*, and hurt his

*Blood*; for want of *Straw*, Riding him Morning and Evening to Water, Airing, or other moderate Exercises will serve. Then feed him with good old sweet *Hay*, and according to the Season, and Temperature of his Body clothe him; for a *Smooth Coat* shews *Cloth* enough, and a *Rough Coat* want of it. Observe likewise where you *Water*, your *Race-Horse*, that it be a Running *Water*, or clear *Spring*, far distant (a Mile or more) from the *Stable*, adjoining to some *Level*; where after he has once well drank Gallop him, and so *Water* and *Scope* him till that he refuse to drink more, for that time; then Walk him gently Home (being an Hour on your way, or more) clothe, and stop him round with soft *Whisks*, and let him stand an Hour upon his *Bridle*, and after feed him with sweet sound *Oats*, throughly dryed either with *Age*, *Kilne*, or *Sun*; if he be low of flesh, or bad *Stomach*, add a third part of clean Old *Beans*, or two parts of *Oats*, or Wash his *Oats* in strong *Beer* or *Ale*.

For *Dressing* take these Rules. *Dress* your Horse twice a day, before you *Water* him, both Morning, and Evening, thus: *Curry* him after he is uncloth'd, from his *Ear-tips* to his *Tayle*, and his whole Body intirely (save his Legs under the Knees, and *Cambrels*) with an *Iron-Comb*; then *Dust* him, and *Rub* him with a *Brush* of *Bristles* over again; *Dust* him again, and wetting your hand in clean *Water*, rub off all the loose Hairs, and so rub him dry as at first; then with a fine *Hair Cloth* rub him all over; and lastly, with a fine *Linnen Cloth*; and then pick his *Eyes*, *Nostrils*, *Sheath*, *Cods*, *Tuel*, and *Feet* clean.

The best Food for your *Racer*, is good, sweet, well dryed, sunned, and beaten *Oats*: Or else *Bread* made of one part *Beans*, and two parts *Wheat* (*i.e.*) two Bushels *Wheat*, to one of *Beans*, ground together: *Boult* through a fine *Range* half a Bushel of fine *Meal*, and bake that into two or three *Loaves* by it self, and with water and good store of *Barm*, knead up, and bake the rest in great *Loaves*, having sifted it through a *Meal-sieve*: (But to your finer, you would do well to put the whites of Twenty or thirty *Eggs*, and with the *Barm* a little *Ale*, 'tis no matter how little water:) With the *Courser* feed him on his *Resting* days, on his *Labouring* days with the finer.

The best time for feeding your *Runner* on his *Resting* days is, after his *Watering* in the Morning, at One a Clock at Noon, after his *watering* in the Evening, and at nine or ten a Clock at nights: On his *Days* of *Labour*, two Hours after he is throughly *Cold* outwardly and inwardly, as before.

As for the Proportion of *Meat*, I shall not confine your *Love* to a *Quantity*, only give him a little at once, as long as his *Appetite* is *Good*: When he begins to fumble and play with his *Meat*, hold your hand, shut up your *Sack*.

As for his *Exercise* it ought to be thrice a *Week*, as his bodily *Condition* requires; if he be foul, moderate *Exercise* will break his *Grease*; if clean, then as you judge best, taking heed of breaking his *Mettle*, or discouraging him, or laming his *Limbs*. Before you air him, to add to his *Wind*, it is requisite to give him a raw *Egg* broken in his *Mouth*: if your Horse be very fat, air him before *Sun* rising and after *Sun*-set; if lean, deprive him not of the least strength and *Comfort* of the *Sun* you can devise. To make him *Sweat* sometimes by coursing him in his *Cloaths* is necessary, if moderate; but without his *Cloaths*, let it be sharp and swift. See that he be empty before you course him; and it is wholesome to wash his *Tongue* and *Nostrils* with *Vinegar*; or *piss* in his *Mouth*, before you back him. And after his *Exercise*, cool him before you come home, house, litter and rub him well and dry; then cloath him, and give him after every *Course* a *Scouring* thus prepared.

*For scouring a Race-Horse.*

Take 20 *Raisins* of the *Sun* stoned, 10 *Figs* slit in the midst, boyl them till they be thick in a *Pottle* of fair *Water*, mix it with *Powder* of *Annis-seeds*, *Lycoras*, and *Sugar-candy*, till it come to a stiff *Paste*, make them into round *Balls*, roul them in *Butter*, and give him three or four of them the next morning after his *Course*, and ride him an hour after, and then set him up *Warm*. Or this may be preferred, being both a *Purge* and a *Restorative*, a *Cleanser* and a *Comforter*, thus prepared.

Take three Ounces of *Annis-seeds*, six Drams of *Cummin-seeds*, one Dram and half of *Carthamus*, one Ounce and two Drams of *Fennugreek-seed*, one Ounce and half of *Brimstone*; Beat all these to a fine Powder, and searse them; then take a Pint and two Ounces of *Sallet-Oyl*, a Pint and half of *Honey*, and a Pottle of *White-Wine*; then with a sufficient Quantity of fine white Meal, knead and work all well into a stiff Paste; keep it in a clean Cloath, for use. When occasion requires, dissolve a Ball of it in a Pail of Water, and after Exercise give it him to drink in the Dark, that he may not see the Colour, and refuse it: If he does refuse, let Fasting force him to be of another mind.

To conclude, these Instructions, I will give you 'em in short before you run, and then away as fast as you can.

*Course not your Horse hard four or five days before your Match, lest you make his Limbs sore, and abate his Speed.*

*Muzzle him not (except a foul Feeder) above two or three Nights before the Race, and the Night before his bloody Courses.*

*Give him sharp, as well at gentle, Courses on the Race he is to run.*

*Shoe him a day before you run him.*

*Let him be empty on the Match Day.*

*Saddle him in the Stable, and fix to him the Girths and Pannel with Shoe-makers Wax.*

*Lead him with all Gentleness to his Course, and let him smell other Horses Dung to provoke him to stale, &c.*

And Lastly, being come to the starting place, rub him well, uncloth him; then take his Back, and the Word given, with all Gentleness and Quietness possible, start and away; *And God speed you well.*

School of Recreation. *How to make Artificial Fire-works of all sorts, for Pleasure, &c.*

Of Artificial Fire-works for Recreation, there are three general sorts, *viz.* Those that ascend or mount in the Air. Those that consume on the Earth: And such as burn on the Water. And these are again divided into three Particulars, *viz.* For the Air, the Sky-Rocket, the flying Saucisson, and Balloon: For the Earth, the Ground-Rocket, the fiery Lances, and the Saucissons descendent. For the Water-Globes or Balls, double Rockets, and single Rockets; and of these in their particular Orders, to make them, and such other Matters as may occur relating to Fire-works.

But before I enter particularly on them, it will not be amiss to give the Unlearned Instructions for making his Moulds for Rockets, *\_&c.\_*

This Mould must be of a substantial piece of Wood, well season'd, and not subject to split or warp; and first the Caliber or Bore of it, being an Inch in Diameter; the Mould must be six Inches long, and Breech an Inch and half; the Broach that enters into the Choaking part, three Inches and a half long, and in Thickness a quarter of an Inch. The Rowler on which you wrap the Paper or Paste board, being three quarters of an Inch Diameter, and the Rammer somewhat less, that it may easily pass and re-pass, made hollow to receive the Broach; for the Cartoush Coffin must be filled with the Materials, the Broach being in.

If the Bore be two Inches Diameter, the Rocket must be twelve Inches in Length: If an inch and a half in Bore, then nine Inches Long, and so proportionably to any other Diameter. The Cartoush or Case must be either strong Paper or fine Paste-board, choaked within an Inch and a quarter of the Top, rowled on the Rowler with a thin Paste, to keep the

Doublings the higher together, that it may have the greater force and higher flight. Having thus far considered your Mould and Cartoush or Case, I proceed to the Composition and filling part, &c.

*A Sky-Rocket, how to make it, &c.*

In the Composition of your filling Materials be very cautious that you exceed not the just Proportion, for which I shall give Directions to be a Standard in this case, *viz.* Having beat a Pound of Powder very fine, and sifted it through a Lawn Sieve that no whole Corns remain in it; do the like by two Ounces of Charcole; then sift them together, so that they may mix well, which done, fill a small Rocket with this Mixture, and if it break in Mounting before it come to the supposed height, or burns out too fierce, then is there too much Powder, and more fine sifted Charcole must be added; but if there be too much Charcole in the Composition, then upon tryal it will not ascend, or very little.

Observe in charging your Rocket, at every quarter of an ounce of Ingredients or thereabouts, you ram it down very hard, forcing your Rammer with a wooden Mallet, or some weighty piece of Wood, but no Iron or Stone, for fear any Sparkles of Fire fly out and take your Combustible Matter; so fill it by degrees: If you design neither to place Stars, Quills, or small Rockets on its Head, you may put in about an Inch and a half of dry Powder for the Bounce, but if you are to place the fore-mention'd things on the Head of a great Rocket, you must close down the Paper or Paste-board very hard, and prick two or three holes with a Bodkin, that it may give fire to them when it Expires, placing a large Cartoush or Paste-board on the head of the Rocket, into which you must put the Stars or small Rockets, Paper-Serpents, or Quill-Serpents; of which I shall speak more hereafter.

Note further, That if you would have your Rocket sparkle much, you must put some grosly bruised Salt peter into the Composition; but then it must not lie long before it be let off, for fear it give and damp the Powder. If you would have it leave a blue Stream, as it ascends, put fine beaten and sifted Sulphur into it, but of neither of these more than a third part of Charcole; and in this manner greater and lesser Rockets are made, but the lesser must have more Powder and less Charcole than the greater, by a fifth part in six.

*Golden Rain, and Golden Hair.*

For Golden Rain, or streams of fire, that will, when at height, descend in the Air like Rain: Take large Goose-Quills, take only the hollow Quill as long as may be, fill it with beaten Powder and Charcole; as for the Air Rocket only add a little Powder of Sulphur. Being hard filled to a quarter of an Inch, stop that with wet Powder, called Wild-fire; place as many as you think convenient on the Head of a great Rocket, pasted on in a Rowl of Paper, so that it may not fall off till the Rocket bursts, there being a little dry Powder in it to force the end when the stream of fire ceases, at which time they taking, will appear like a shower of Fire of a golden Colour, spreading themselves in the Air, and then tending directly downwards. This is to be considered when you stand directly, or something near under them; but if you are at some distance, then they will appear to you like the Blazing Tail of a Comet or Golden Hair.

*Silver Stars, How to make them.*

To make Stars that will expand in Flame, and appear like natural Stars in the Firmament for a time: Take half a Pound of Salt-peter, the like quantity of Brimstone, finely beaten together, sifted and mingled with a quarter of a Pound of Gunpowder so ordered: Then wrap up the Composition in Linnen Rags or fine Paper, to the quantity of a Walnut, bind them with small Thread, and prick holes in the Rag or Paper with a Bodkin, and place six or ten of them on the Head of a great Rocket, as you did the Quills, and when the Rocket expires, they take fire and spread into a Flame, hovering in the Air like Stars, and descend leisurely till the matter is spent that gives them light.

*Red fiery Colour'd Stars, How to make them.*

Take in this Case half a Pound of Powder, and double the quantity of Salt-peter; as much fine flower of Brimstone as Powder, wet them with fair Water and Oyl of Petrolum till they will stick together like Pellets; then make them up somewhat less than the former, and rowl them in sifted dry Powder, then let them harden, by drying in the Sun or Air, and place them on a great Rocket, as you did the other Stars, and you will perceive them when the Rocket is at the height, fall, like Bodies or Globes of Fire, in the manner as if real Stars were shooting or falling from the Sky, for by reason of their wetness or density they cannot expand into Flame, which occasions them by the pressure of their weight to descend with greater Impetuosity till they waste and vanish into Air, \_&c.\_

*Another sort of Stars that give great Reports in the Air, as if Armies were fighting.*

Here you must observe to place six, seven, or eight small Rockets on the Head of a great one, filled only with dry Powder, but indifferently rammed, and on the ends of them holes being prick'd through, place any of the sorts of Stars, or a mixture, as your fancy leads you; and when the small Rockets go off like Thunder in the Air, the Stars will take fire, so that the Noise will seem to the Spectators as if it proceeded from them, because they will be seen on fire before the Sound of the Reports can be heard.

*To make Paste-board Mortars for Balloons.*

These stately Prospects of Fire are to be carried into the Air by the force of Powder, by the help of Mortars; and therefore the making of the Mortars are in the first place to be considered.

Take a Rowler of Wood, about 12 Inches Diameter, and three Foot and a half in Length, wet strong Paste-board, and rowl upon it as close as may be, glewing the Paste-board between each Rowling; then being about five Inches thick, bind over it strong pitch'd Rope, though indifferent small: Then choak the Breech of it, which must be beyond the length of the Rowler, with a strong Cord; pitch or glue it over that the Powder may not force its vent that way, and so when the Mortar is well dry'd, draw out the Rowler, and make it as even as can be; bore a Touch-hole two Inches from the Breech, that it may enter into the hollow of the Mortar, and set it by for use.

*To make Balloons, the rarity of Fire-works.*

Take strong Paper, or Paste-board, rowl it on a 12 Inch Rowler, near as thick as 'tis long, then with a strong small Cord choke it at one end only, leaving a Port-fire, which is a place to put in a Quill of Wild-fire, that will last till being shot out of the Mortar it comes to its height; then next to that put on an Ounce and a half of loose Powder, and place in it as many small Rockets and Stars as it will hold; so choak up the other end quite. You may also put into it little quills of Wild-fire, then being closed up, only a Port-fire remaining, which made of a Quill of Wild-fire, as is said, or Stopple, to make which in the close of this Head I shall Instruct you, Charge the Mortar, being set Sloaping upwards with half a Pound of corn Powder, and it will by giving fire at the priming holes, send the Balloon up into the Air a prodigious height, and when it comes to the dry Powder, that will break the Balloon; and then the Stars and Rockets in it taking fire, will scatter abroad in various curious Figures delightful to the Spectators; and as they are Cunningly placed, they will represent Crowns, Cyphers, Characters, Dates of the Year, \_&c.\_

*The Airy or flying Saucisson, How to make it.*

This curious Fire-work must be made in the Composition matter for filling mostly of corned Powder, putting before it when you fill the Cartoush or Case as much fine sifted Powder and Charcole as composed for the Rocket, will carry it to its height; leave a hole for the Port-fire in the choaking as big as a Goose-Quill will enter filling it with Dust-Powder and Charcole, and so close up the open end, by turning in the Paper or Paste-board corner-wise, either glewing or waxing it down.

*Paste-board Guns to cast the Saucissons into the Air, How to make them.*

To make these kind of Guns, Take a Rowler, some what less than for the Balloon, Rowel on it your Paste-board, and cord it over with strong Packthread, making their Touch-holes at the bottom, because they must be placed upright on a Plank or Board in a Row fixed into the Plank or Board in holes cut proportionable to them, and lashed fast to Staples above and beneath with strong Cords, and being charged with a quarter of a Pound of Powder, fire by Match or otherways, given to the Touch-hole underneath the Plank, when the Saucisson is lightly put in with the Neck or Port-fire downward, so that it may touch the Powder; and this will serve for Use a considerable time.

*Saucissons for the Earth or Water, To make them.*

Make your Cartoushes or Cases about 9 Inches long, and an Inch in the Diameter of the Calliber, by Rowling Paper or thin Paste-board on a wooden Rowler; choak the ends only, leaving at one end a passage to thrust in a Goose-Quill filled with Dust-Powder and Charcole well mixed, at a Port-fire, Glue them over, or use small Cord glued or pitched to strengthen the Case that it burst not unseasonably by the force of the Composition, with which you must fill them when you have choaked; only at the Port-fire end, the Composition being about 2 Inches, the same as the former, the rest corned Powder, having primed and fixed them on a Plank in a Row about a foot distance, lay a train of Stouple, and they will fire gradually, flying about on the Earth or the Water, according as you place them, giving reports like a Volley of Muskets.

This Stouple is useful for Trains; and Port-fire is no more than Cotton-wool well dressed in water and Gun-powder dried in the Sun, or in a clean Swept warm Oven, that it may come somewhat near Tinder, but more swift and fiercer in its fire when it has Taken.

*Fire-Boxes, To make them.*

Take a great Cartoush or Case made, as for the Balloon, croud it full of small Rockets or Serpents, with the choaked part downward, prime them with Stouple or Wild-fire; fix it firm on a Pole, make a priming Hole in the side towards the lower end, and run in a Quill of fine beaten Powder, and they will fly out (the upper end being left open) one by one as swift as may, or if you scatter loose Powder they will fly out several together with a prodigious Noise, and breaking, imitating a deal of Thunder.

*Firey Lances, How to make them.*

These are usually for running on the Water making there a very pleasant Pass-time: Their cartoush or Cases are made like the small Rocket, with thin Paste-board glued and rowled up on a wooden Rowler about 9 Inches long: If you would have it carry a long fiery Tail on the Water, the Composition must be 2 Ounces of Charcole, half a Pound of Brimstone, half a Pound of Powder, and half a Pound of Salt-peter, or proportionable for so many as you make, bruised finely and Sifted; but if you would have it burn bright like a Torch, put only four Ounces of Powder to the fore-named quantity of Brimstone and Salt-peter, without any Charcole-dust, tying to each Line a Rod in the same nature as to the Sky-Rocket; but not of that largeness; and they will float about a long time, making a strange shew in a dark Night, their ends being so placed on a frame when you give fire, that they may leap out of them selves one, two, or three, at a time, or as you design them, by putting more or less Stouple for Port-fires; scatter a very small quantity of loose Powder underneath.

*To make the appearance of Trees and Fountains of Fire.*

This is done by placing many little Rockets on the Head of a great one, by passing their slender Rods through its large Cartoush; and if they take fire whilst the Rocket is vigorously Ascending, they will spring up like Branches or fiery

Trees; but if they go off just as the Rocket is spent, and Descending, they will appear like a Fountain of Fire.

*Girondels or Fire-wheels, How to make them.*

Take a Wheel of light Wood, like the circle of a Spinning-wheel, on which the Band is placed; tie small Rockets round it in the nature of a Band, so fast that they cannot fly off, and so Head to Tail, that the first fired when it bursts may give fire to the next, whose force will carry the Wheel (which must be placed on a strong Pin in the Axeltree) round so fast that although but one Rocket go off at a time, it will seem all on fire, and so continue whilst all are gradually Spent; and this especially at the Angles of great Fire-works are very Ornamental.

*Ground-Rockets, and the best way of Making Serpents.*

The Mould of the Ground-Rocket may be made in all particulars like that for the Sky-Rocket, but less in Length and Circumference, six, seven, or eight Inches being a warrantable Length; rowl on the Cartoush or Case to a moderate thickness; choak it at one end, fill it, the Broach being in as the Sky-rocket; with this composition.

Put but an ounce of Charcole to a Pound of Powder, and about half an Ounce of Salt-peter; beat, mingle and sift them finely; put in about a quarter of an ounce between every Raming till it is full with in an Inch with corned Powder, Lightly Raming it, leaving only so much room as may choak it at that end, cutting then off what hangs over, and leaving it with a picked end; being thus finished, prime it with a little wet Powder, and lay it a drying till you dispose of it for your pass-time.

The Serpent is a kind of a small Rocket; To make them therefore well, make a Case of strong white Paper, about six Inches and a half, the Rowler being about the thickness of a small Arrow, it must have a Head and a Broach proportionable, being Rowled up hard, past the Edg that turns over; choak it with a strong Pack-thread, and fill it with a Composition of six ounces of Powder to one of Charcole, both beaten finely, sifted and well mingled; put in a little and little at time in, and every time you put any in, Ram it down hard till within an Inch full; then put in corned Powder, press it down gently, and with the end of your Rammer force down the end that stands a little above; so that it may cover the Powder, and then Seal it down with Wax; prime with Dust-Powder, and a little Flower of Brimstone, and with your Match having a good Coal on it, give fire as you see occasion.

*Fiery Globes or Comets, to make them.*

Take half a Pound of Powder, two ounces of Brimstone, an ounce of Salt-peter, bruise these Grosly, and wet them; Aqua-Vitae and Oyl of Petroleum, that they may be moulded like a Paste, that so they may be made up into Balls, as big as ordinary Wash-Balls; then dry them very hard, and wrap them up in Cerecloaths made of Brimstone, Rosin, and Turpentine, in which make a little whole, and prime with Wild-fire: Put the Ball then into a Sling, and the Wild-fire being Touched, throw it up as high as you can into the Air, and when the body of the Ball fires, it will appear to the Beholders like a fiery Globe, with a Stream or Blaze, like as if a Comet or Blazing Star were Ascending or Descending, according to its height or Declination,

*To try the goodness of Powder, that you may know its strength.*

Observe whether it be well dryed and corned, which you have taken notice of, and approved; lay a few Corns scattered on a sheet of white Paper, and fire them; when if they leave a black and sooty mark behind them, with a noisom smell, and sindg the Paper, then is that Powder gross and earthy, and will fail your Expectation, if you use it in your Fire-works: But if in the sprinkling and firing there appear few or no marks, or those of a clear bluish Colour, then it is airy and light, well made, full of fire, and fit for Service; half a Pound of it having more strength than a Pound of the

other.

And thus Reader, have I given you an Insight into the making Fire-works, \_&c.\_ Such as are very pleasing, and now used on occasions in all Christian Countries, in making which, by a little you may soon be perfect.

*St. George and the Dragon fighting &c. Also Mermaids, Whales, &c.*

Form your Figures of Paste-board, Strengthen'd with Wicker, small Sticks within pasted to the Board to keep it hollow, tight, and bearing out; and place a hollow Trunk in the Body for a large Line to pass through, and likewise for a smaller to draw them too, and from each other, that they may the better seem in Combats, which must be fattened at the *Dragons* Breast, and let one end of the Cord be tied, which must pass through the Body of *St. George*, turning about a Pully at the other end, and fastning it to his Back, and tye another at his Breast, which must pass through the Body of the *Dragon*, or a Trunk at his Back; and so returning about a Pully at that end, it must be drawn streight, and fastened to the *Dragons* Tail; so that as you turn that Wheel, they will run furiously at each other, and as you please you may make them retreat and meet again, Soaping the Line to make them slip the easier; at the *Dragons* Tail, in his Mouth and Eyes you must fix Serpents, or small Rockets, which being fired at their setting out, will cause a dreadful sight in a dark Night.

Thus a Mermaid, or a Whale, may be made to float on the Water, but then the Figure must be fixed on a convenient piece of Board, with two fire Wheels fixed on an Axle, run through the poised part of the Body, by the force of which it moves in a swift Line in the Water; the Wheels must have little Rockets or Serpents tyed round them, as the Girondel before mentioned.

*A Fire-Drake on a Line.*

Having made the Figure of Paste-board to the proper Form of a Dragon with Paste-board and Wicker, as has been taught before, make a hollow Trunk through the Body of it for a great Line to pass through, and fasten small Lines to draw it too and from you at the breast and Tail of the Drake; put into the Eyes, Mouth and Tail of it Rockets so fixed, that they cannot fly out, as you may put Wild-fire Rowled up hard and long in Paper: Then fire that in the Eyes and Mouth first, and draw it with Pullies from one end of the Line to the other; then that in the Tail, and draw it back, and it will seem as retreating from danger, with fire coming out of the Belly of it.

*A Burning Castle and Dragon on the Water.*

Make the Dragon of Paste-board and Wicker, as before; The bottom of the Castle of Light Wood, and the work of Paste-board with Paper, Turrets and Battlements of a foot height, in the Portal of the Castle fasten a Line that it may come level with the Water and therefore some part of the Castle must be under Water; this Line must be fastened to the other side of the Water, or in the Water, if it be broad, and admit not the former on a Pole or Stake knocked down, and pass in a hollow Trunk through the Belly of a Dragon, that being in the Castle, may upon firing the Rockets, placed advantageously in the Tail, Eyes and Mouth, come out of the Castle and move on the Line; to meet which, you may at the other end of the Line, in the same manner, prepare a Neptune in a Chariot, or riding on a Sea-horse, with a burning Trident, or a Whale with a Rocket or Wild-fire in his Mouth; which if it ly low, by spouting out, will make the Water fly about, as if it spouted Fire and Water out of its Mouth; then by a Train fire, some little Paste-board Guns in the Castle, which if the Composition of the Train be made of Wild-fire, or Stouple, will go off by degrees, and coming to a Train of Brimstone, Rosin and Powder, make the whole frame expire in a terrible blaze.

*A Wheel of Fire-works to run backwards and forwards on the Ground.*

Procure a pair of Wheels, being of Light Wood, like that of a Spinning Wheel, fasten them on an Axel-tree, and place Rockets round them, as bands are fastened round a Wheel, and so primed at Tail and Head, that when one Expires the other may take fire, half of them placed with their Heads and Tails the contrary way to the first: So that when the first are spent, and the Wheels have run on plain Ground a great way, the other firing will turn them again, and bring them to the place where they first set out.

*A Fire that will burn in the Water, or Water-ball.*

Sow up a Case of Canvas, like that of a Foot-ball, but lesser, pitch or glue it over: Then take one Pound of Powder, eight ounces of Roch-alom, four ounces of live Sulphur, two ounces of Camphire, Linseed-oyl, and that of Petroleum, each an Ounce and half, an ounce of Oyl of Spike, with two ounces of Colophonium bruis'd and well mixed together, and stuff the Ball hard with it, with a Stick pitch or glue it over again, binding it with Marline on Pitch, on that leave two Vents or Port-fires, set it on fire, trundle it on the Water, and it will burn under it.

*The exactest Military Discipline for the Exercise of Foot and Horse, as in Use at this day, at Home and Abroad, in all the Words of Command, &c.*

To be well disciplin'd and train'd up in Military Affairs, has been the study and pride of all Warlike Nations, whereby they have acquired to themselves Fame and Riches, by being able to defend themselves against Invaders, and gain Conquests Abroad; but above all other, for many hundred Years past the *English* have excelled in this, being much helped by their natural Courage. But since I only at this time intended to write to the Learner, to train him up in his Exercise, by which means his own Industry and Experience may lead him forth to greater matters. I shall not enumerate the many brave Men, who from mean Conditions have rais'd themselves by Arms, to the highest pitch of Honour and Preferment; but shew our Youth what they are to do and observe in their first Training, as to the Words of Command, to order their Arms in their various Postures with Dexterity. And first of Foot Exercise, I shall speak of the *Pike*, because it is the most Ancient, to Train which, many, who are now great Commanders, have taken it as an Honour.

*The Exercise of the Pike\_, by word of Command, \_ &c.*

1. =Pikes take: Advance your Pikes.=

To do this, as the first thing required, move in a direct Line with your *Pike* upward, with your Left-hand near your Side, your Right-hand almost as high as you can reach, keeping your Left by a Depression, as low as you can, your Fingers being strait out; and so raise the *Pike* till the Butt-end come to your Hand, then place it between your Breast and Shoulder, keeping the Butt-end close, that it may be the more steady and upright.

2. =To the Front.=

To do this, put your Left-hand on your *Pike*, even with the Top of your Shoulder, keeping your Fingers strait, and bring your *Pike* right before you with a swift Motion; drawing your Right-heel into your Left-instep, and so keep the *Pike* strait.

3. =Charge.=

Here you must fall back with your Right-leg, placing the Heel of your Left foot against the middle of your Right, and bring down your *Pike* with a quick Motion, support it with your Left-Elbow, and charge Breast high; and upon yielding your Body forward, bend your Left-knee to fix your self firmer, holding the Butt end of your *Pike* in the Palm of your Right-hand, your Left-Toe pointing in a Line with the Spear of the *Pike*, your Feet set at a moderate distance: Then bring

it down somewhat beneath your Breast, be cautious of clattering, and when it is charged, close it to your Breast.

4. =To the Right four times.=

Here turn your Left-toe to the Right, then make your Left-heel come up to your Right-instep with a sudden Motion, Recovering your *Pike* strait before you, and having turn'd, fall back with your Right-leg, and Charge as before.

5. =To the Right about.=

Now by turning your Left-toe, bring it to the Right about, bringing up your Right-heel; your *Pike* being recovered, Charge with much swiftness.

6. =As you were.=

To do this, by turning to the *Left about*, bring up your Left toe; so bringing your *Pike* recovered, observe that your Left hand be never higher than your Mouth, your Feet placed in order, and when turn'd, you must fall back with your Right-leg and Charge, bringing your *Pike* strait up without any clattering.

7. =To the Left four times.=

8. =To the Left about.=

9. =As you were.=

10. =Advance your Pike.=

These must be done, as has been shewed in the Right, only making your Observation of Eight Left Motions, &c. And the better to do this, bring your Right-heel to your Left-instep; your *Pike* being before you, fall out with your Right-foot, and so bring your *Pike* to your Right-Thigh.

11. =Shoulder your Pike.=

Here extend your Fingers on the Left-hand, and lay it on the *Pike* level with your Shoulder; make your Right-heel come up even with your Left-instep, your *Pike* right before you, fall back with your Right-leg, and as far as may be put back your Right-arm, keeping your *Pike* about half a Foot from your Side, your Eye fixed on the Spear directly to the Rear, your *Pike* sloped: Then forsake it with your Left-hand, and bring in your Right-leg, laying your *Pike* on your Right-Shoulder, closing your Elbow to your Body, the Butt of your *Pike* being about half a Foot from the Ground, in the middle of the distance.

12. =Charge to the Front.=

In doing this, fall back with your Right-leg, keeping as much as may be your Arm back, and the Spear exactly to the Rear, sloaping the *Pike* to the same height as Shouldering; then bring with your Left-hand the Butt-end backwards, turning the Head with your Right; so quit it with that Hand, then taking hold on the Butt-end, Charge Breast high, keeping the Palm of your Hand open against the Butt-end, your Left-Elbow under the *Pike*, and your Left-toe in Line with the Spear; and when you Charge it must be directly forward, your Left-heel being just against the middle of your Right.

13. =Shoulder as you were.=

Here raise your *Pike* with both Hands, so quit it with the Right, and with the Left turn the Head backwards, the Spear even with the Rear; so with your Right-hand seize it again as high as you can reach with little straining, and stand with it from your Body aslope; bring up your Right-leg, and then forsake your *Pike* with your Left-hand, and lay it on your Shoulder, ever keeping the Spear in a direct Point to the Rear, not crossing your Fellows.

14. =Charge to the Right.=

In this Case fall back with your Right-Arm and Leg, the Spear being kept in the Rear sloping at the height of Shouldering; then turn your Left-Toe to the Right, suffering the Right to fall behind the Left-foot; so that the middle of your Right-foot may be over against your Left-heel; then bring up your *Pike* in this Action, and turn backwards the Butt-end by your Right-side; then pressing it in your Right palm, Charge.

15. =Shoulder as you were.=

Make your Left-toe come to the Left, and the middle of your Right-foot come also against your Left-heel, with your *Pike* up; and then turn the Head to the Right, (that is) directly to the Rear, doing it at one Motion: So take hold of your *Pike* with your Right-hand, and keep it sloped with both Hands a little distance from your Body; as in Shouldering, at what time bring up your Right-leg, and lay your *Pike* on your Shoulder.

16. =Charge to the Right about.=

In this Case give back with your Hand and Leg, then stand with your *Pike* a little distant from your Side, and turning your Left-toe to the Right about, bring the Butt end of your *Pike* to the Right-side, falling back with your Right-leg and Charge, keeping the Spear all the while to the Rear a Shouldering height; and when you are to Face to the Right about, level your *Pike* and Charge.

17. =As you were.=

In this, turn your Left-toe to the Left about, advancing your Right-foot a moderate Step, that the middle of it may stand against your Left-heel; then with your Left-hand bring the Butt-end by your Left-side, taking notice the Spear be exactly with the Rear a Shouldering height; then lay on your Right-hand as high as you can easily reach, and stand with it in Form; after which, bring up your Right-leg, and Shoulder.

18. =Charge to the Left.=

Here fall back with your Left-arm and Leg, as in the former Chargings: Turn the Left-toe and the Butt-end of your *Pike* with your Left-hand to the Right, after which, bring up your Left-leg, and Charge.

19. =As you were.=

Raise the Spear with both your Hands, turn the Left-toe to the Right, and so fall back with your Left-leg and Arm, keeping your *Pike* from your Side, the Spear to the Rear; then bring up your Left-leg, and Shoulder.

20. =Charge to the Left about.=

Here fall with your Arm and Leg back, bringing the *Pike* over your Head with both your Hands, the Spear directly to the Rear at a Shouldering height: Turn your Left-toe to the Left about, then bring up your Right-toe, that the middle may come with your Left-heel, and Charge.

21. =Port.=

Observe here, as in Charging in the Front; being wary that you sink not the Spear of your *Pike*, rest it between the Thumb and Fore-finger, keeping your Elbow close to your side.

22. =Comport.=

As far as may be bring your Left-hand backward, at the same time stretching out the Right, make thereupon a step forward with the Right-foot, grasping fast the *Pike* as high as you can reach with the Right-hand, not tossing the Spear too high; then forsake it with your Left-hand, and bring back your Right-leg even with your Left; then close it to your Side, keeping the Spear the height of your Head.

23. =Charge to the front.=

Here extend your Right-arm, advancing at the same time your Right-leg, drawing back your Left-hand as far as may be; and bringing your *Pike* forward, give a step back with your Right-leg, and take hold of the Butt with your Right-hand; then Charge; and in all Chargings observe it be done Breast high.

24. =Fire.=

Herein face to the Right about, suffering the Spear of your *Pike* to fall behind, you; after which, quit your Right-hand from the Butt-end, without any motion of the Left, and be cautious not to strike upon the Spear.

25. =Charge as you were.=

Here turn to the Left about, place the Butt-end in the Palm of your Right-hand, and Charge, the Spear being kept an even height.

26. =Advance your Pike.=

In this Exercise bring your Right-heel to your Left-Instep, your *Pike* directly before you to the Recovery; and so fall out with your Right-foot that it may come even with your Left, and so bring the *Pike* to your Right thigh.

27. =Order your Pikes.=

Raise your Left-hand, so that it may come even with the upper part of your Shoulder, place it on your *Pike*, stretching out your Fingers; then sinking your Left-hand, raise your Right; and then raise the *Pike*, that when the Butt-end your Right-hand may be against your Eye; keep the *Pike* near your Head by clapping the Butt-end to the Latchet of your Shoe; and here all the Butt-ends of as many as are exercised must fall to the Ground at one and the same time.

28. =Pikes to you Inside Order.=

Place the Butt-end on the Inside your Right-foot to the middle, not moving your foot, but only your *Pike*.

29. =Lay down your Pikes.=

As many as exercise in this case, must step altogether with their Right-legs; stoop together with a very Quick Motion, and Lay their *Pikes* down very strait with their Right-hands.

30. =Quit your Pikes.=

Fall back with your Left-leg, bringing it even with your Right: Then quit your *Pike* absolutely, and rise up with a quick Motion.

31. =Handle your Pikes.=

Here you must step forward in a quick Motion with your Left-leg, and then as many as exercise must stoop together, and extend their Right-hands as far as they can reach, and then grasp the *Pike*.

32. =Order you Pikes.=

With your Right-hand raise the *Pike*, and step back with your Left Leg, with a swift Motion, clapping the Butt-end of the *Pike* to facilitate the raising of it on the Inside of your Right-foot about the middle.

33. =Pikes to your outside Order.=

In this Exercise place the Butt-end of your *Pike* on the out-side of your foot, not moving your Foot, but the *Pike*.

34. =Advance your Pike.=

This must be done, as the fore-going; and thus much for the Exercise of the *Pike* in particular by it self, till I come to speak of its Exercise conjunctly with the *Musquet*, in the general Exercising a Company or Battalion.

*The words of Command in the Exercise of the Musquet, and how they are to be Observed and Performed.*

When you enter on this Exercise, be sure to keep your Footing firm, your Feet at a moderate distance; that at all Times, and on all Occasions, you may retain your full Strength. Observe moreover to keep the Right heel firm, and set the Right foot steady, and then attend to the Words of Command, which you are summoned to do by this Expression of the Commander, *viz. Musketers, have a Care of the Exercise, and carry your Arms well.* After which, the proper Words of Command follow in their Order.

1. =Lay your Right-hand on your Musket.=

Here the Lock being uppermost, turn the Barrel towards you, and extending your Fingers, lay your Right-hand directly behind the Lock; so close the Butt end to your Shoulder, suffering the *Musket* to be in all parts of an equal height.

2. =Poise your Musket.=

In doing this, you must hold it with a hard Grasp, facing to the Right, and turning with a quick Motion on your Left-heel, your *Musket* kept directly before you the height of it, between your Shoulders; your Right elbow on your Side, keeping your feet at a moderate distance, that when you turn about, your Left-toe may stand to the Front, and your Right-toe as you Face to the Left; let your Left-heel be against the middle of your Right-foot; and by such means you will be in a

resting posture.

3. =Rest your Musket.=

Here slide your *Musket* down to your Left-hand bearing your Arm as low as possible without stooping, and so receive your *Musket* where the Scowrer enters into the Stock, touching with your hand no part of the Barrel, keeping it about half a Foot from your side sloping, your Right-hand, with your Fingers, extended being behind the Lock.

4. =Cock your Musket.=

Place the Right-Thumb and your Finger behind the Trigger, so clap your *Musket* against your Thigh, and Cock; keeping it that it slip not your Thumb, now removed steady on the Head of the Cock.

5. =Guard your Musket.=

Bring it with a very swift Motion strait before you, to recover your Left-hand even with your mouth, about half a foot distance from it, not suffering your *Musket* to sink, nor stooping your Body, observing in bringing up the *Musket* before, which is a recovering, that the Right-heel be brought to the Left-Instep, your *Musket* being perpendicular.

6. =Present.=

Here fall back with your Right-leg, that the middle of the Right foot may be against the Left-heel; cause the Butt-end to rise to your Shoulder, fixing it firm, and keep your Right elbow even with the height of the Piece, being in a readiness with the fourth Finger of your Right-hand to pull the Trigger, bowing the Left-knee keeping the Right firm and steady, and so level your *Musket* Breast high.

7. =Fire.=

Keep here an exact Motion in drawing the Trigger, every one drawing at once, so that the whole Fire of a Company or Battalion may be as of one report: Keep your Body steady, and your *Musket* hard against your Shoulder after you have fired, till the next Word of Command is given, viz.

8. =Recover your Arms.=

Here let the Butt-end sink in both your Hands, and bringing it strait before you, keep your right Hand under the Cock and the Left even with your Mouth.

9. =Half bend your Musket.=

Fall back with your Right-leg, and let the *Musket* at once rest, placing the Right-thumb upon the Cock, and the Fingers of that hand behind the Trigger; then closing it to your Thigh, half bend the Cock, and keep it rested with your Fingers extended.

10. =Clean the Pan.=

Do this with the ball of your Thumb, pressed into the Pan, keeping your Fingers of the Right-hand behind the Lock.

11. =Handle your Primer.=

Take the little end between your Finger and Thumb, turning the other end to the back of your Hand, your Arm bearing backwards.

12. =Prime.=

Level your Piece, and strike your bruised Powder into the Pan half full, or some what more, keeping your Left-toe to the Front.

13. =Shut your Pan.=

This do by using your two first Fingers, casting back your Primer and bringing up your Right-heel to your Left-instep, your *Musket* strait up before you, as in the recovery, with the Barrel towards you; do it with a quick Motion with the Thumb of your Right-hand on the top of the Steel, Levelling your Left with your Mouth.

14. =Blow off the loose Corns.=

Bring your Mouth within four Inches of the Pan, give a strong Blast without declining your Head, casting out your Arm, and suffering the *Musket* to sink from its former Posture.

15. =Cast about and Charge.=

Advance your right Leg, turn the Barrel of your *Musket* downwards, bring it to your Left-side a little backward, with your Left-hand, not touching the Barrel with your Fingers; place the Toes of your Right foot to the Front and the Right-heel against the middle of the Left-foot, ballancing your *Musket* in the Left hand, the Muzzle to the proper Front, in an equal height, half a Foot from you, joining your Right-hand to the Muzzle, your Thumb extended to the side of the Barrel.

16. =Handle your Charger.=

Gripe fast your Bandilier or Charger, hold it even with the Muzzle of the *Musket* underneath, about an Inch distant.

17. =Open your Charger with your Teeth.=

In this Case, bring it up to your Mouth without declining your Head, then bring your Charger within an Inch of your Muzzle, about an Inch from it, covering your Chargers Mouth with the ball of your Thumb.

18. =Charge with Powder.=

Pat the Powder into the Barrel with a quick Motion, and put the Charger underneath as before.

19. =Draw forth your Scowrer.=

In this let fall your Charger, and upon turning your Hand, draw forth your Scowrer at three Motions, holding it Level the height of your Forehead, with an extended Arm, as if you designed to dart it.

20. =Shorten it to an Inch.=

Turn the great end of your Scowrer towards you, sinking it till within an Inch of your Hand, rest it some what below your Right-breast, bearing forward a little.

21. =Charge with Bullet.=

Take the Bullet out of your Mouth with your Right-hand, put it into the Barrel with a swift Motion, holding the big end of your Scowrer near the Muzzle of your Musket.

22. =Ram down Powder and Ball.=

Grasp full with your Thumb and Fore-finger from the Muzzle, your Thumb on the Top of the Scowrer reserving a handful in your Hand.

23. =Withdraw your Scowrer.=

Your Hand, Thumb and Fore-finger turned towards the Muzzle, clear your Scowrer at three Motions, and hold it up even with your Forehead, extending your Arm as if you were about to dart it.

24. =Shorten it to an Handful.=

Turn the Butt-end of your Scowrer towards you; sink it till within an Inch of the End, letting it rest against your Body a little below your Right-breast, the Scowrer sloping.

25. =Return your Scowrer.=

Put it up in its proper place; grasp the Muzzle of your *Musket* with your Right-hand, extending your Thumb upon the Scowrer, keep it half a foot distant from your Side.

26. =Poise your Musket.=

Here before you bring up your *Musket* with your Left-hand, Grasp it under the Cock with your Right, falling with your Right-leg to your Left: Keep it Poised against your Nose, and when faced to the Front, let your Right-elbow rest upon your Body.

27. =Shoulder your Musket.=

In this do as has been taught in the like case before.

28. =Order your Musket.=

Sink a little your Right-hand, and take hold on the Stock on the top of the Scowrer with your Left-hand, then suffer that Hand to sink, and take hold on the Muzzle with the Right-hand, letting the Butt-end easily sink near the Ground; then let it after a little Pause come down: As many as Exercise grounding them together, then close to the Right-foot, and place the Butt-end about the middle of it, your Right-hand an Inch below the Muzzle, the Lock being outward.

29. =Lay down your Musket.=

Turning it with the Back upwards, step forwards with your Left-leg, so with your Right-hand place it on the Ground, that it may lye with the rest in a strait Line; This some call grounding a *Musket*.

30. =Quit your Musket.=

Here stand upright with a quick Motion, rising with a falling back of your Left-leg to your Right.

31. =Handle your Musket.=

With your Left-leg step forward, and lay your Right hand on the Muzzle.

32. =Order your Musket.=

Raise the Muzzle, and fall back with your Left-leg to your Right, turning the Lock outwards by the middle of your Foot.

And thus much for the Exercise of the *Musket* by it self, which may be much advantageous to young Trainers, who have occasion to be called or sent out upon Duty in the City or Country and Country Militia of the *Trained Bands*, or for any other who is desirous to be knowing in, and entering upon Military Affairs, from whence I shall proceed to the brief Exercise of the *Pike* and *Musket*, jointly, as they are Exercised in Companies, Battalions, \_&c.\_

*The Exercise of Pike and Musket jointly.*

We now supposing the *Muskets* shouldered, and the *Pikes* advanced; the Word next is,

1. =Musketiers, make ready.=

Hereupon you must perform all the Postures and Motions together, till you stand Cock'd and guarded with your *Musket* before you; and for the better Security your Thumb on the Cock; whereupon the *Pikes* are to be recovered before the *Pike-men*: The Butt-ends in the Palms of their Hands, and the Spear upright on their Left hands to the height of their Mouths, when the Commander gives the Word

=Charge.=

Then the *Muskets* and *Pikes* must be brought at once, by turning the Left-toe that way the Charge is made, and the Left-heel against the middle of the Right-foot in every Charge, charging directly forward; not at the first Charging, closing the *Pikes* to your Breasts; but in bringing down the *Pike*, charge a little way distant, and when they are brought down, then close them.

The *Charge* is, *To the Right* four times; then to the *Right about*, and so, *As you were*.

Then to the *Left Charge* four times; then to the *Left about*, and so, *As you were*.

Furthermore the *Pike-men* must turn as the *Musketiers*, bearing up their Right-heels to their Left-insteps, their Arms being extended as they turn; so that they bring their *Muskets* straight before them, carrying their Left-hands as high as their Mouths, bearing back their Arms; and when they Face, fall back with their Right-legs, not bringing down their Arms till the word *Charge* is given; and then it must be done with a decent quick Motion, not suffering the *Pikes* to clatter.

After this, the Words of Command are, *viz.*

=Recover your Arms.= =Half bend your Muskets.= =Poise your Muskets.= =Shoulder your Muskets.=

This Exercise is to be observ'd, as is before laid down in the Exercise of the *Musket*. The *Musketiars* upon this, being at Shoulder; and the *Pikes* that stood recovered falling out with their Right-legs, whereupon the *Pikes* are brought to their Thighs in their Advance. Then the next is.

=Poise your Muskets.=

Upon this, the *Pike-men* with their Left hands must grasp their *Pikes* over against their Shoulders, after which the Words are,

=Order your Arms.= =Pikes, to your inside Order.= =Lay down your Arms.= =Quit your Arms.= =To the Right about.= =March.=

You must observe these, as directed in the Exercise, only over and above, when you are clear of your Arms; you must disperse, and upon the beat of *Drum*, close hastily together with a Huzza, your Swords unsheathed, with their Points upwards. Then further observe the Words of Command, *viz.*

=Return your Swords.= =Handle your Arms.= =Order your Arms.= =Pikes, to your out-side Order.= =Advance.=

In ordering your Arms, observe you make a little stop before you let the Butt-ends come to the Ground; so that each one may bear you company, and they may fall together at once; and after they are laid down, and quitted, you must stand up together so suddenly, as all your Risings may appear as it were but one Motion.

When you March from your Arms, step Front and Rear at once, with the Left-feet Marching but a little distance.

Then lay your Right-hand on your Sword, taking hold of your Scabbard with your Left; and then drawing, hold your Swords upright before you; after you have held them there a while, bring them down at one Motion, and when by Command your Swords are returned, stand upright to your Arms, facing to your proper Front; and if any thing is to be further known, consider the Exercise of the *Pike* and *Musket* distinctly, and you will be informed to your Satisfaction.

#### *Of the Match-Lock.*

These Locks were formerly in more use than *Fire-Locks*, and at this day they are sometimes mixed among them; wherefore I shall speak somewhat relating to the Words of Command, that seem to differ from the *Fire-lock*, *viz.*

=1. Lay down your Match,= =2. Handle your Match,= =3. Blow your Match,= =4. Cock and try your Match,= =5. Return your Match.=

All these chiefly consist in keeping your Match in order, with a good hard and well lighted Coal, fastning it on Command, advantageous in your Skrew, blowing the Coal, and so by pulling the Trigger, trying your Pan with false Flashes, laying it down at Command, and by the same order taking it up again; shortning it to the Pan, that it may give true Fire, and upon firing, to return it, and recover the Coal, if it be shattered by the force of the Powder. You must observe also to keep your Match dry, that on occasion you may not be disappointed.

And this in brief is all materially relating to the *Match-Lock*; the other Postures of the *Musket* are all ready described, being sufficient to direct the Exercise; yet seeing many lay much stress on the Beat of *Drum*, Take that a long with you, as it relates to Exercise, and so I shall take Leave of the foot, and make a visit to the Horse.

*Exercise by Beat of Drum, relating to the Foot.*

There are usually observed in this, six Points, which are called Points of War, and are said to be semi-vocal; because by them the Soldiers understand what is to be done; and can distinguish their Duty and Exercise; and of these in their order.

1. *The Call*. This is to Summon the Soldiers together to their Arms, or upon any other occasion, as to hear Proclamation, or receive Directions, \_&c.\_ from the Officers, and are not without leave to Ramble, especially in time of War, beyond the hearing of it, under great Penalties.

2. *The Troop*. When the Soldiers hear this, they must Advance their *Pikes*, Shoulder their *Muskets*, and close their Ranks and Files to order, following their Leaders or Commanders to the place of Rendezvous, Quarters, or elsewhere.

3. *The March*. When you hear this, you must betake you to your open Orders in Ranks, Shoulder both *Musket* and *Pike*; and so as the *Drum* beats, you March slower or quicker.

4. *The Preparative*. Is to warn you to close your proportionable or due distance, when you are to prepare for Battle or Skirmish; and to see every thing be in order that may turn to advantage.

5. *The Battle*. This is by some called the Charge, or Signal to Charge the Enemy, and is beat in the beginning of the Fight to animate the Soldiers Courage.

6. *The Retreat*. This is beat when being over-powered, it is thought convenient to draw off and save a total Rout, or sometimes when an Enemy you suppose stronger than your self advances towards you to engage, but by Retreating you avoid him.

There are two more things on the *Drum*, somewhat to our purpose, *viz.*

1. *The Tatto or Tapto*. This is used in a Rounds and Garisons, to give notice to the Soldiers and Inhabitants when they ought to repair to their Quarters and Houses.

2. *Revalley*. Is to let them know when it is time to rise in the Morning, and attend on their Duty also. In Garisons, to let the People know when its safe to go abroad, the out Scouts being Relieved.

*The Exercise of Horse in Troops or Squadrons, &c.*

The Exercise of the Horse is various from that of the Foot, and therefore that I may not be wanting in what is necessary to the young Soldier in their Exercising in the County Troops, or those that may enter the present Service Abroad, I shall endeavour to give the Words of Command proper with their Explanation.

And first, when Troop or Squadron is drawn out to Exercise, I suppose their *Carbines* and *Pistols* loaden, and the Corporals passing through the Ranks to see they are all ready, upon which, observe the chief Officer Commands Silence, and gives the following Words of Command, *viz.*

1. =Lay your Right Hands on your Swords.= 2. =Draw your Swords.= 3. =Put your Swords in your Bridle-hand.= 4. =Lay your Hands on your Pistols.= 5. =Hold up your Hands. Give Fire.=

When you have fired, let not your Pistol-hand sink till the next Word of Command, *viz.*

6. =Return your Pistols.=

And this you must observe in Firing to the Left and Right; Then,

7. =Lay your Hands on your Carbines.= 8. =Advance your Carbines.= 9. =Cock your Carbines. Fire.= 10. =Let fall your Carbines.= 11. =Take your Swords from your Bridle-hands.=

These must be done with a swift and exact Motion, all as near as may be doing it at one and the same time.

If a Squadron of Horse is to Wheel to the Right, the Right-hand-man must not close to the Left, as has in ancient times been; for that many times disorders the Rank; but you must keep your Ground, suffering the Left to come about whilst you only turn your Horses Heads, observing your Left-hand-man.

*To close the File.*

*The Right Wing file stand.*

1. =Close your files.= 2. =To The Right.= 3. =To the Left as you were.= 4. =To the Left wing, and stand.= 5. =To the Left by files close the Squadron.= 6. =To the Right as you were.= 7. =The Right and Left Wing Files stand.= 8. =By half Ranks, close Files to the Right and Left.=

And by closing Files you may cleave or divide the Squadron.

*The Order of closing Ranks.*

1. =File-leader stand.= } { Or open on the Front,  
2. =By ranks close the= } { Or the first distances.  
=Squadron to the Front.= } {  
3. =On the Front as= } { And so be cautious in  
=you were.= } { observing each Motion.

*How doubling Ranks must be Ordered.*

1. =By half Files to the Right, double your Ranks to the Front.= 2. =File-leaders, advance your Ranks, File-leaders, take your Ground.=

And in this manner Command likewise to the Left, the Order being one and the same in the Words of Command. [Again,]

3. =The first half Files stand.= 4. =By half file-leaders on the Left-wing, double your Rank to the Front.=

Now to reduce this, take the following Method;

1. =Right-wing half Ranks, advance your Ranks.=
2. =Half File-leader take your Ground.=
3. =The first half File stand.=
4. =By half File-leaders on the Right and Left-wings, double your Ranks to the Front, Carocoling to the Right and Left. Then the last half File stand, and the first half file by Carocol in the Right and Left on the wings; then double our Ranks to the Rear.=

Here observe the first File must open the half Rank to the Right and Left, the first half File by Carocol. Then

=To the Right and Left double your Ranks to the Rear.=

Here observe the last half File must open the half Rank to the Right and Left.

As for the word *Carocol*, it signifies no more when you Wheel by it, than that it is made by the depth of the Flank of the Squadron, by which Order not the Files, but the Ranks make the Motion.

There is an other Word which some may not well understand at the first setting out, which is called *Controversion*; and this in Wheeling is performed by the Front of the Squadron, so that whilst the Rank makes the Motion, the File remains.

*Instructions for Wheeling, with the proper words of Command.*

When the Word is given, *viz. To the Right by Conversion*, understand that you must close your Right-leg to the Horse, your Knee touching that of your Right-hand-mans, and in like manner observe in the Word of Command to the Left; as when it is said, *Close to the Left*, then must the Leg be Closed.

By half Ranks and Conversion, divide the Squadron into two *Troops*.

If you would reduce the Squadron, the Word of Command is.

*By Controversion*: The Squadron into one Troop, else the Left-wing advance by Conversion.

When you Wheel by Carocol, observe the Word of Command as follows,

*The Right-wing to the Left by Carocol, Face about to the Rear*: Or it may be done by half Ranks in this manner,

By Quarter Ranks, and by Carocol, divide the Squadron into three Troops.

Then if you would reduce them, order Quarter Ranks and Troops into Squadrons.

If the Volt, Face or facing about be required, observe thus,

*Face about to the Right: Face to the Right by Controversion; Face about by Carocol to the Right: Face about to the Left by half Files: Face about to the Right and Left.*

And thus much may serve for Wheeling.

*The manner of Filing off.*

In this case observe, To File by Ranks on the Right-wing, from the Squadron,

*File off by Ranks, on the Left-Wing, from the Squadron on the Right,*

*File off by three Files from the Squadron, the Left-Wing:* And this is found the most Expedient way, though some have used to File off by Ranks.

*In Hay, what Order is to be considered in drawing up.*

Do this, by half Ranks to the Right: *To the Right and Left drawing in Hay: To the Front.* And if it requires to be reduced again, then proceed by Carocol, viz.

*To the Right and Left as you were.*

*By half Ranks, and by Carocol to the Right and Left.*

Then draw up in *Hay* to the Rear.

In Reduction the Command is;

*To the Front as you were.*

*By half Ranks to the Right and Left, and draw up in Hay.*

Reduction by Carocol.

*To the Right draw up in Hay.*

Reduction by Carocol.

*To the Left as you were.*

*Of doublings.*

Doublings are very useful, especially in strengthening any Party, that needs Succour in the Battle; and is to be noted under these general Heads.

1. Doubling of length, Front and Rear. 2. Doubling of Depth, both Flanks.

But in the particular, they are numbered six, that is to say, first of Ranks, when every Rank doubles into the odd, and if it so fall out, that the odd Ranks are to double, then must the Body Face to the Rear, without any Word of Command expected.

3. Half Files. 4. Bringers up. Here they are held to double when the Rear is doubled into the Front. 5. In doubling the Rear observe it done, when the half Files double the Rear. 6. Here take notice that doubling of half Ranks must be by

one Rank doubling the other.

*The Noble Science of Defence, in all its Useful Particulars, for Defending and Offending, with the Rapier or final Sword; after the exactest Method now in Use.*

This Science, if well understood, as to the fining and using it, is not only a noble Exercise, but of great importance to the saving our lives on emergent Occasions, if it extend not to Vain-glory and Presumption, by too much relying on our Skill, to carry us into quarrels, which we may reasonably, and without loss of Honour or Reputation avoid. Wherefore I have thought it convenient to lay down such Rules as may enable the learner to proceed in the Practice.

The first thing to be considered in this Case, is, the Sword it self, understanding only in this the small Sword or Rapier, which is divided into two Parts, *viz.* The Hilt and the Blade.

The Hilt is again divided into three Parts, *viz.* the Pommel or Ball at the far end, sometimes Round and sometimes Oval in Shape. This keeps the Hilt fast, by being well riveted, and by its poise makes the Sword well mounted, or light before the Hand. The next is that part on which you grasp your Hand, commonly called the Handle: and then the Shell, which is that part of the Hilt next the Blade, to preserve your Hand (if you are any thing weary in managing it) from a Thrust or Blow.

The Blade is divided into two Parts only. The first next to the Hilt, being termed the strong Part or Fort. The other, which is the extream, is termed the Feeble, or they are otherways termed the Prime, and the Second. The strong Fort or Prime of the Blade, is measured from the Shell to the middle of the Blade, and being the strongest, is made use of in Parying, or to put by Thrusts or Blows. The Feeble, weak or second part, is accounted from the Middle to the Point, and is properly made use of in Offending or giving Thrusts or Blows; and thus much may serve for the Description of the Sword: Now I proceed to the Explanation of the Terms, fit to be known by a Practitioner.

*A Guard.*

This is a proper Posture you must place your self in, for the better defending your self from the Thrusts or Blows of those you Fence with, or defend your self from.

*To Parie.*

Observe that this is to put by a Blow or Thrust, that it may not touch you, but be cast off without hurt or danger.

*Quart.*

Here you must hold the Nails of your Sword-hand upwards, with a steady Arm; and then it is said to be held in quart.

*Terce.*

This is the contrary to the former, for the Nails of your Hand must be held downwards; and then the Sword is held in *Terce*.

*Within the Sword.*

This is that part of your Body, (which having your Right-side towards your Adversary) is between your Sword and Left-breast.

*Within the Sword.*

This is the part of the Body, that (when you hold your Sword towards your Left-side) is above it the breadth of your Body.

*The Approach or Advance.*

This is done, when being out of your Adversaries reach, or at a pretty distance from him; you make your Approach or Advance towards him.

*To Retire or Retreat.*

This is when you are within your Adversaries reach, that you get put of it by stepping or Jumping backwards; which you must observe to do on a strait Line.

*Measure.*

This is only a distance between you and your Adversary, which must be cautiously and exactly observed when he is Thrusting at you; so that you may be without his measure or reach, and that taking the Advantage of this, it may be so, that when you Thrust your Thrusts may be home.

*To break Measure.*

Observe here, just as your Adversary is Thrusting at you, at his full Elonge, he may come short of you, because you are, or escape out of his Measure, or reach, and so break his Measure, of which I shall say somewhat more hereafter.

*To Elonge.*

This is to Stretch forward your Right Arm and Leg, and keep a close Left-foot; and this you do when you give in a Thrust, and when you do it, you are said to make an Elonge.

*Respost.*

This is when you give in a Thrust before you recover your Body, receiving a Thrust after your Adversary hath Paried your Sword. Then is it said to be a Thrust on the Respost or back of the Parade, which is the surest and safest you can give.

*Feinting or Falsifying.*

This is a dodging or deceiving your Adversary, making him believe you give back in earnest, and make an offer to Thrust in one place when you really design to do it in another.

*Beating.*

This is no other than striking the Feeble of your Adversaries Sword with the Edg and Fort of yours, either with your Right-hand only, or the help of your Left, joyned to the Blade, about a foot from the Hilt; and so you will cause the Beat to have the greater Spring or Force.

*Battery.*

The difference from Beating in this, is only Striking with the Edg of the Feeble, upon the Edg of the Feeble of your Adversaries Sword, though Beating secures his Sword a great deal better than Battery.

*Binding.*

This method is taken to secure your Adversaries Sword, with eight or ten Inches of yours upon five or six Inches of his.

*Caveating or Disengaging.*

Here you must, if you can, flip your Adversaries Sword, when you perceive him about to bind or secure yours.

*To take Time.*

In taking Time, you must observe never to Thrust, but when you see a fair Opportunity, or otherwise it is the Thrusting at your Adversary when he is making the Feint, or the flipping of him, when you perceive him about to Bind or Bear your Sword.

*Counter Temps.*

This is when you Thrust without a good Opportunity, or when you Thrust, at the same time your Adversary do's the like.

*Quarting on the Strait Line.*

This is done by carrying your Head and Shoulders very much back from your Adversaries Sword, and are giving in a Thrust within it, and that each of you at that time receive a Thrust.

*Quarting of the strait Line, called de Quarting.*

Here you must Observe to throw in your Left-foot, and Body backwards off the strait Line, towards your Adversary, keeping your Right-foot firm.

*Volting.*

This is a leaping by your Adversaries Left-side quite out of his reach or measure, which on many emergent occasions is very proper.

These Terms a Practitioner must be knowing in before he proceeds to the other Lessons, or Adventures on sharp, especially in earnest; from whence I proceed to the next thing materially to be considered, which is the

*Holding of the Sword.*

In doing this according to Art, and to the most advantage, Hold your Thumb on the broad side of the Handle, and your Fingers quite round it; hold it in this manner firm and fair; so that your Adversary, with the least sudden beat or twist, may not force it out of your hand, which the hazard in holding it loosely may occasion to your damage.

*Of keeping a Guard.*

The Guards are in general but two; The one in *Quart* and the other in *Terce*; but again the *Quart* Guard is subdivided into two, viz. The *Quart* with the strait Point, and the *Quart* with the Point sloping near to the Ground.

The *Terce* is so likewise divided, that is, the *Terce* with the Point higher than the Hilt, and the *Terce* with the Point lower than the Hilt. There is yet another Guard, that requires you to hold your Sword with both your Hands; and of these in their order.

*Of the Quart Guard, with the strait Point.*

You have two ways with this Guard to defend your self, either by Parying or using Contraries to what your Adversary plays, as I shall more fully shew you when I come to discourse of the five Parades; however here observe in the strait Guard, which is most in use, to keep a thin Body, which is done by shewing your Right-side to your Adversary, managing your feet in a strait Line from him; so that for your Right he cannot see your Left-leg, yet set them not too wide, for that will make your Elong the shorter; nor too close, for that will hinder the firmness of standing; and let the Point of your Right foot be turned somewhat outwards from the strait Line, but the broad side of your Left must look towards your Adversary. You are also to sink with your Thighs your Left-knee, a little more bent than your Right, which may be done by your leaning somewhat back on your Left-thigh; when you present your Sword, you must hold it with your Nails upwards, as has been directed in *Quart*. The Hilt of your Sword must be as High as your Right-pap, keeping your Arm a little bent, for the better and easier pursuing your Adversary; or for the quicker giving in a Thrust: The Point must be towards your Adversaries Right-side, two or three Inches lower than the Hilt, your Left-hand held up as high as your Left-ear, about half a Foot from it, the Palm directly against your Adversaries Face, your Fingers pointing as it were towards him.

*The Quart-guard, with the sloping Point.*

In this Guard you must stand much straiter than in the former, the Point of your Sword sloping within half a Foot of the Ground, your Hilt as low as your Wast, your Arm bended, and the Nails of your Sword-hand between *Terce* and *Quart*; Here you are also to make use of your Left-hand, and therefore the more readily to do it, you must advance your Left Shoulder almost as far forward as your Right, keeping your Belly in as much as may be, so that it stand well, and your Breast out, your Left-hand as high as the side of your Head, though about half a Foot from it. This is a very open Guard, yet to those that know not how to pursue it, it is much Surprising. And you may pursue this;

First, by raising up or gathering your Adversaries Sword.

Secondly, by striking at his Sword, and making half Thrusts at the Body, by which he will be doubtful when you intend to give in your Thrust, and finding an Opportunity give it home; and ever when you pursue this Guard, let your Left-hand be in a readiness to Parie your Opponents Thrust, if he Thrust just as you are Thrusting, which is the main defence on this Guard.

Thirdly you may give a stroak at his Left-hand; after you give a beat at his sword, and see if by so doing, you can force him to betake himself to another Guard.

Fourthly, You may Volt, and in your so doing, give him the Thrust, which being clearly done, will mainly surprize him.

*The-Terce-guard, with the Point higher than the Hilt.*

In this you must hold the Nails of your Sword-hand downwards, as in Terce, and your Hand lower than in the Quart-Guard, with a strait Point, presenting the Point of your Sword towards your Adversaries Left-shoulder; if he be a tall Man; but if Short, then to his Left-eye, keeping your Arm somewhat bent, for the better persuing: Lean therefore a little forward with your Body, and make use of your Left-hand for a Parade, holding it somewhat lower than in the former Guard. The rest of your Body being kept, as in the Quart-Guard, with the strait Point.

This Guard may be pursued either with Striking, Binding, Volting, or Passing, for a Feint on this Guard will signifie little or nothing if your Adversary understand it; for as in no Guard, he is to answer Feints, least of all in this, the Right defence being to secure your self without your Sword, which is done by presenting your Sword to the Left-shoulder of your Adversary, or as said, his Eye, so that your Body be quite covered without your Sword.

*The Terce-Guard, with the Point lower than the Hilt.*

Here you must in this bow your Head, holding up your Arm high, so that if you come to give a Thrust, your Head may be, as it were, under it, your Nails being in Quart till you make your Thrust, and then change them into Terce; your Feet must be kept at their due distance, and not as at a full Elong; your Sword must be presented towards your Adversaries Left-side, and you must make use of your Left-hand for the Parade, and it is to be pursued and defended, as the forgoing Terce-Guard, only in defending it, you must not make so much use of your Left-hand, but more of your Sword.

*The Guard of Both Hands.*

This is a Guard, that I find not any proper Name for, though it is sometimes used as very necessary, how ever, as to the holding your Sword in this Guard, keep your Body exactly in the Posture of the Quart-Guard with the strait Point; but joyn your Left-hand to your Sword, about eight or ten Inches from the Hilt, the Blade being held between your foremost Finger and Thumb, secure your self within your Sword, as soon as you present it, viz. Present the Point towards your Adversaries Right-thigh, with your Point sloping towards the Ground a little; for to pursue this Guard, you must endeavour to take away your Adversaries Left-hand by striking at it, and immediately after the stroak, proffer a Thrust at his Body, that he may be doubtful when you really intend to give in your Thrust; and indeed the pursuit is much like that of the Quart-Guard, with the sloping Point, and thus much for the Five sorts of Guards.

*Of the severall Parades.*

The Parades are generally Two, but are sub-divided as the Guard, and those two are the Parade in Quart, and the Parade in Terce, which are as is said, divided again into the Parade in Quart, with the Point a little higher than the Hilt. The Parade in Quart, with the Point sloping towards your Adversaries Right-thigh, and as though without it.

2. The Parade in Terce, with the Point a little higher than the Hilt, and the Parade in Terce, with the Point sloping towards your Adversaries Thigh on the Left-side.

There is yet an other Parade of some use, and used by many Fencing Masters, which may be properly termed Counter-Caveating Parade; by reason what ever Lesson your Adversary makes use of, or upon what side so ever he Thrusts, if you make use of this Parade, as you ought, you will undoubtedly meet with his Sword, and the easier cross his purpose, than by any of the former; and of these I shall give proper Directions,

1. The Quart Parade, or the Parade within the Sword, is so called, because in putting by the Thrust, you do it on the inside your Sword, or on that side the Nails of your Hand are next.
2. The next is called the Terce Parade, or the Parade without the Sword; for here, contrary to the former, you put by the Thrust upon that side which is without the Sword, and as the other is termed the Quart, for as much as it is within your Sword, or on that side your Nails look to; so this is called Terce because it is without your Sword, or on that side the back of your Hand is to. Observe a little more, *viz.* when you are to hold your Hand or Nails in Terce, that you hold your Nails quite downward; And now to Parie these Five several ways.

You must do the first Parade in Quart, with the Point somewhat higher than the Hilt, *viz.* When you are standing to your Guard, if your Adversary offers to give a home Thrust on that side his Sword lieth, which I presume to be within your Sword, without disengaging and is the Simplest and plainest Thrust that can be given with the small Sword; yet frequently it surprizes a Man, I say, when so it is, that when you perceive your Adversary offer to give a home Thrust, which observe by keeping your Eye steady on the Hilt of his Sword; you must then immediately turn your Wrist with so small a Motion of the Arm, that it can scarcely be perceived, to your left-side; and by that means you may put by his Sword, with the Fort of yours upon the Left-side, keeping the Point of your Sword after the Parade towards his Right-shoulder; you may in putting by your Adversaries Sword use a little beat or Spring towards the Ground, by which you will more certainly disappoint him immediately bringing your Sword to its right posture again, and by, this way of Parying you may have the luck to Spring or Beat your Adversaries Sword out of his Hand.

The second Parade in Quart is with the Point sloping towards your Adversaries Right-thigh, and as tho' without it, in this manner;

When you perceive your Adversary is thrusting with your Sword, turn the Nails of your Sword-hand in Quart, with a full stretched Arm, and your Hand as high as your Face, and when you do this, slope your Point to the lowness of your Adversaries Thigh; and by that means, with the Fort of your Sword, on the Feeble of his, put by his Thrust, always observing to Parie with the Fort of your Sword, and not the Feeble, lest your Adversary having the stronger Arm, force upon you the Thrust in spite of all you can do.

The first Parade in Terce, or without the sword, the Point a little higher than the Hilt, must be thus managed, *viz.* Perceiving your Adversary giving in the Thrust without your Sword; take notice immediately to turn your Wrist with some small motion of the Arm, as in the first Parie in Quart, till your Nails, be in Terce, and so Parie his Thrust, Remembring in this to keep the Point of your Sword, after you have Paried him towards your Adversaries Left-shoulder, as in the first Parade in Quart, you are to keep it towards his Right.

This Parade is most effectually done with a Spring, to put by the Sword or gain an advantage of disarming your Adversary.

The second Parade in Terce, is called that within the Sword bearing a sloping Point towards your Adversaries Thigh, and as though within it. This observe to do when you perceive your Adversary giving in his Thrust without, or below your Sword, as it were at your Arm-pit, immediately letting the Point of your Sword sink as low as his Thigh, turning your Nails quite round to your Right-side, until they are from you, keeping your Hand as high as your Head, and so put by the Thrust on your Right-side; and when you are Parading, let your Head be close as if it were under your Arm; and this preserves your Face from your Adversaries scattering or Counter-Temps Thrusts.

Thus having shewn you the Defensive part, I shall now proceed to the Offensive, or how you may offend your Adversary when necessity requires it; but before I directly enter upon it, let me speak some thing of the Counter-caveating Parade; though some there are who refuse to use it, yet it is the safest of all.

*The Counter caveating Parade, &c.*

When you observe your Adversaries Thrust coming home within your Sword, then immediately slope your Point, and bring it up again with a quick Motion on the other side of your Adversaries, and Parie his Thrust without your Sword, that he intended, to give within your Sword, holding your Nails neither in Terce nor in Quart, but so hold them as when you presented your Sword; and observe further to do this, Parade with a Spring, and if you perceive he is about to give in his Thrust without your Sword, instantly slope your Point, and bring it up again with a quick Motion upon the inside of his Sword, and so Parie his Thrust, that was to be given without your Sword, within your Sword, and if you do this very quick you will rarely be hit with a home Thrust; and in this Parade there is great advantage, because by it all Feints, which in other Parades cannot be so well noted or shunned, are by this baffled and Confounded.

Lessons Offensive. 1. *Of Approaching or Advancing.*

Observe here; (when you are standing to your Guard, and your Adversary without your measure, so that without Approaching you cannot reach him) that you lift your Right-foot about a Foot Forward, and presently let your Left-foot follow close by the Ground, your Left-knee a little bowed, taking notice at the end of every step, that your Feet be at the same equal distance as when you first presented your Sword, or if in any thing you vary, let it be in bringing them something nearer; and so your Elong will come as much nearer to your Adversary as you brought your Left-foot nearer to your Right: Always then remember to redouble this Step, or any other that is to be used on this Occasion till you think your Adversary is within your measure. This step must be always made on plain Ground, lest you Trip and fall, which is very dangerous; but if it be on rugged uneven Ground, there is another suitable to it, called the Double Step, after this manner;

In the first place throw your Left-foot before your Right, (which may be done, by raising your Body a little on your Right-foot) about a Foot, then bring your Right-foot forward again, as far before your Left, as when you presented your Sword; these two Motions must be done immediately after the other, or else doing of this Step will appear ungraceful; and here you must keep a thin Body as possible, because the throwing your Left foot before your Right, lays your Body open, and so redouble this step, as the former, according to the distance you are from your Adversary, till you approach within his measure.

Lesson 2. *Of Retiring.*

This may be done three ways, first with the single Step, the same way you approach with it, only whereas in approaching with the single Step you lift your Right-foot first, here you must lift your Left-foot first, and the rest observe, as in the Approach with the single Step.

The second is, that with the double Step, and is done the same way as in the Advance, only in approaching you throw your Left-foot before Right, when in retiring you must throw your Right-foot backward behind your Left; and the rest is done as in Advancing with the double Step.

The third is done by a sudden jump backwards on the strait Line, with both your Feet in the Air at once, but you must lift your Right-foot first, and after your jump is done, stand to your Guard again, unless you find occasion to redouble your jump to be farther out of reach.

Lesson 3. *Of giving in the Thrust.*

To Thrust or make an Elong, observe (when you stand to your Guard, and your Adversary be within your Measure) that your Sword be as you please, either within or without your Adversaries Sword, and suppose within, then stretch out your

Right-arm, and Step forward with your Right-foot as far as may be, keeping the Point strait forwards, and let the Motion of your Arm begin a thought before you move your Foot, so that the Thrust may be given home before your Adversary can hear your Foot touch the Ground; and when you are at your full stretch, keep your Left-hand stretched, and ever observe to keep a close Left-foot, which must be done by keeping your Left-heel and broad side of your Foot close to the Ground, without any drawing it after you, for keeping a close Foot is one of the chiefest things to be observed in this Science. When you give in your Thrust throw your Left-hand behind you, or so place it on your Left-side, that your Sword and both your Arms may make a strait Line from your Adversary. This must be when you design not to make use of your Left-hand for a Parade, but if you do, then in the very time of giving in your Thrust, throw your Left-arm forward as far as you can, without putting the rest of your Body into disorder, turning the Palm from you, by turning your Thumb down, and your little Fingers up, and so Parie your Adversaries Thrust, if you find he will Thrust, upon the same time you make your Thrust, always remembering when you Thrust within the Sword, to do it with your Nails in Quart or upwards, and Quart well your Hand and Shoulder; but when a Thrust is made without the Sword, then give it in with your Nails in Terce or downwards, and keep your Hilt much lower than your Point, and your Head as clear as may be from you Adversaries Sword.

Take notice in all Lessons in which you do not first secure or bind your Adversaries Sword, that you are to Thrust close by the Feeble of his Sword, with the Fort of yours. But there is a difference when you first secure your Adversaries Sword, for after your securing or binding, you quit his Sword, and give a strait home Thrust, without touching it, after it is bound.

In these Rules there is great advantage, as in the Quarting of your Hand, when you Thrust within, the Sword, preserves them from your Adversaries Counter-Temps Thrusts in the Face; so likewise does your Thrusting close by the Feeble of the Sword, and keeping your Hilt lower than the Point, when you Thrust without the Sword, as also the holding of your Head to the contrary side your Adversaries Sword is on, preserve you from Counter-Temps, ever observing as a general Rule; to keep your Head on the contrary side of your Adversaries Sword, on what side soever you Thrust, for this will frequently preserve your Face from being hit.

#### Lesson 4. *Of Caveating or Disengaging.*

In this case, when your Sword is presented within your Adversaries Sword, and you would have it without (keeping your Nails in Quart) slope your Point so low that you may bring it up under the out-side of his. This must be done with the Wrist, and not any Motion of the Arm, because when you Disengage, if the Arm move, your body would be too much discovered; so that your Adversary would have an advantage to give in his Thrust, which he could not do if only your Wrist moved, and this must be done with a sudden Motion; and by this you may learn to slip your Adversaries Sword at pleasure.

#### Lesson 5. *Feinting or Falsifying*

Of these, there are several kinds, and the first retreat on is *the Ordinary single Feint*; When you are on your Guard, and within your Adversaries Sword, disengage and make your Feint without, which you must do with a beat of your Right-foot against the Ground, just as you disengage, and your Sword on the out-side of your Adversaries, and immediately after, if you perceive him answer your Feint, and offer to Parie, disengage again, and give him the Thrust within the Sword.

#### Lesson 6. *The Double Feint.*

There is a difference between this and the single Feint; for in the single one you must make two Motions, *viz.* With the first you make your Feint, and with the next you give in your Thrust, unless you make your Feint on that side your Sword

lyeth, which may be done without disengaging, and is the simplest of all others in all single Feints, it must be given in upon the side your Sword was before you made your Feint; But in the double Feint you are to make three Motions, and the Thrust (unless when you make your first Motion on that side your Sword was presented) is given in on the other side, and not on the side the Sword was just before you began to make your Feint; and to play this, there are two ways, viz. When you are within Measure, you must play it one way, and without Measure another way.

As to the first, your Sword being presented within your Adversaries Sword, then disengage and make your first Motion without his Sword, to stand a Thought on it to try whether he will answer you, by offering to proceed to the Parade; if he do not answer, it is useless, but if he do, then presently make your second Motion within his Sword, and your third Motion without it, by giving the Thrust; both these Motions must be done with admirable quickness; at every Motion give a beat with your Foot, and disengage; turning your Nails in Quart.

If you are without distance, make a Motion to see if he will answer your Feint, and if he do begin again, make your first Motion, as within distance, approaching at the same time, and so your second and third.

There is a contrary to these, that is to be observed when your Adversary makes use of them against you, Then you must make use either of the Counter-caveating Parade, or keep your Sword Point immoveable towards his Face that opposes you, your Arm as much stretched out as possible; and when you do so you must recover your Body, by drawing your Right foot close to your Left, stand as it were on Tip-toe, and if for all this your Adversary give a home Thrust, then you must Counter-temps him in the Face, and Parie his Thrust with your Left-hand; or if you perceive him make variety of Feints, then upon every one of them make a half Thrust, which will oblige him to betake himself to the Parade, and so when you please you may take the pursuit, or when he makes variety of Feints, give a plain home Thrust, as smart as may be, and endeavour to defend your self from Counter-temps with your Left-hand, and to prevent them, it is always in this Case best when you give a Thrust, to use your Left-hand.

#### Lesson 7. *The Single Feint at the Head.*

Being within distance you may present your Sword within or without your Opponents Sword, making a Feint or Motion at his Face, if your Sword be presented without, by a little stretching out your Right-Arm, your Nails in Quart, and when you make the Motion, give a little beat with your Right-foot, and if the Feint be answered, then immediately give in your Thrust at his Arm-pit your Head under your Sword-arm, your Left-hand held before you, with the Palm of it looking towards your Right-side, and that part of your Arm, from the Points of your Fingers to your Elbow, must stand in a manner strait upwards, which posture you must ever observe when you give in this Thrust, because in doing it, it defends you from the Thrust of your Adversary, if it be above, and without your Sword; and you may at the same time make a Motion at his Face.

#### Lesson 8. *Of the double Feint at the Head.*

Being within distance, make your first Motion or Feint, as before, at the Face, your second Motion low without your Adversaries Sword, towards his belly; and with the third, give a Thrust without, and above his Sword, your Nails in Quart, marking every motion with your Head, Hands and Feet; and when you make your second Motion, hold your Hand as in the single Feint, and when you give in your Thrust above Sword, you must Quart your Head well, because you must give it in with your Nails in Quart; and by this means your Body will be kept secure within your Sword, when in Terce it would ly open, especially to Counter-temps.

There is a Parying the contrary, either with the Counter-caveating Parade, or by answering every Motion, by what means you will fall to Parie your Adversaries with the first Parade in Terce.

Lesson 9. *Containing the manner of the Feint at the Head on the True Parade.*

The contrary to the second Parade is this, and to do it you must make your Motion at your Adversaries Face, and if you imagine he intends to Parie you with the second Counter-caveating Parade, make round his Sword, as it were going a circle about it, and so give a Thrust at his Arm-pit, and with your Left-hand avoid Counter-temps, and being within distance, approach with your first Motion, and in so doing you Caveat his Sword and shun his Parade, or if your Adversary follows your Sword, you may make two or three circles till you find a fit time to let in your Thrust.

Lesson 10. *Of the Low Feint.*

When you intend to proceed in this, you must have your Sword without your Adversaries and when it is so, make directly the Second Motion of the double Feint at the Head, and give in the Thrust above, and when you are without distance, make your approach with the Feint, or first Motion; and make in your Thrust with the second. And this may be Paryed, by answering every Motion, or using the Counter-caveating Parade.

The contrary to it, is, when your Adversary is making his low Feint, to take time, and give in the Thrust above his Sword, your Nails in Quart.

Lesson 11. *Of Battery.*

This is a kind of a Beat from whence it derives its name, and therefore when you play it you must present your Sword either without or within your Adversaries, if within, and he within your Measure, then keep your Sword half a Foot from his, and when you intend to play, Strike a small stroak on the Edg, and Feeble of your Sword on the Edg, and Feeble of his, and at the same Moment give a Beat with your Foot, which will surprize your Adversary, if not well skilled; if it does not, nor that he answers you by offering to Parie, give a strait home Thrust at his Right-Pap, as you give in a plain Thrust within the Sword, moving the Sword only with your Wrist, and thereby keeping your Body close. If your Adversary offers to answer your stroak, and go to the Parade, then your best way is to slip him, and give in a Thrust without, and above the Sword, or when you perceive him going to Parade, then suddenly slip and make a double Feint on the other side, and Thrust on that side you gave the Beat.

In the contrary of this Parie, with the Counter-caveating Parade, or meet his stroak, and make a half Thrust, which will force him to the Parade; and so you may pursue.

Lesson 12. *Of Volt Coupe.*

In this observe to present your Sword within your Adversaries, he being within your Measure; then make a Feint at the Face your Nails in Quart, and upon this give a Beat with your Foot, and carry your Hand well Quarted, and if by offering to Parie, he answers this, and that high, then Thrust at the Belly, your Nails in Terce, and keep your Left-hand as a Guard from Counter-temps; if by Parying low, you are disappointed of this advantage, then after you have made your Feint, instead of a Thrust in the Belly, slip his Parade, and give the Thrust without, and above the Sword; and when you are within distance approach with the first Motion: If your Sword be presented without your Adversaries, you must first then disengage.

The contrary to this is either to Parie his Sword with the second Parade in Quart, or to take time and give your Thrust the way he was to give it in upon you, at the instant he makes his Motion at your Face, or you may pass without his Thrust.

Lesson 13. *Of Binding your Adversaries Sword.*

This is the securest Play, and chiefest Mistery in the Art of Fencing, wherefore to do it after you have presented your Sword, either within or without your Adversaries, on a sudden over-lap six or seven Inches of his with eight or ten of yours; and this is sufficient to secure it; but this must be always done with the Edg of the Sword, whether you present it within or without, and immediately after you have bound it, give a Thrust strait home. In this case, always observing to keep a close Left-foot, also to give a Beat with your Foot, and to bind with a Spring, viz. Press your Sword almost to the Ground, but stay not with it, but immediately bring it up again and then give the Thrust; and this prevents Counter-temps, and the best Parade against it is, the Counter caveating Parade, and if your Adversary flips your Sword, you must endeavour to bind him within or without the Sword again. You may also put upon him the double or single Feint, or having bound your Sword without, you may give in your Thrust, as in playing the single Feint at the Head.

Lesson 14. *Of the Flancanade.*

To do this, when you have presented within your Adversaries Sword, over-lap it with 12 Inches of yours, within eight of his, and give in the Thrust on his Right-flank, on the other side of the Sword, and beneath it your Nails side-ways, throwing forward your Left-hand and turning the Palm from you to keep off Counter-temps in the Belly, and in Thrusting let your Hilt be lower than the Point, which secures his Sword; and note when you lap over to do it with the flat, and not with the Edg as when you bind.

And thus much may serve for an introduction to the learner in the Science of Defence, and therefore for other Lessons, not here set down, I refer him to a Master.

*Of HAWKING.*

*Of Hawks there are two sorts.*

The Long-Winged Hawks.

*Faulcon and Tiercle-gentle, Gerfaulcon and Jerkin. Saker and Sakaret. Lanner and Lanneret. Barbary Falcon. Merlin and Jack. Hobby and Jack.*

The Short Winged Hawks.

*Eagle and Iron. Goshawk and Tiercle. Sparrow-Hawk and Musket.*

There are others too of inferiour sort, as,

*Ring-Tail. Raven and Buzzard. Forked Kite. Hen-driver, &c.*

And as the Age of these *Hawks* is, so we name them, as

The first Year a *Soarage*.

The second Year an *Intermewer*.

The third Year a *White Hawk*.

The fourth Year a *Hawk of the first Coat*.

Thus much for their Names, now we come to speak of the Flights of these *Hawks*; which are these,

The *Faulcon-Gentle*, for *Partridge* or *Mallard*. *Gerfaulcon*, will fly at the *Herne*. *Saker*, at the *Crane* or *Bittern*. *Lanner*, at the *Partridge*, *Pheasant* or *Choofe Barbary Faulcon*, at the *Partridge* only. *Merlin* and *Hobby*, at the *Lark*, or any small Bird. *Goshawk* and *Tiercle*, at the *Partridge*, or *Hare*. *Sparrow-Hawk*, at the *Partridge* or *Black-Bird*.

And the

*Musket*, at the *Bush*.

Your *Hawk* watch, and keep from Sleep, continually carrying him upon your Fist, familiarly stroak him with a Wing of some Dead Fowl, or the like, and play with him; Accustom to gaze, and look in his Face with a Loving, Smiling, Gentle Countenance; and that will make him acquainted, and familiar with Men.

Having made him familiar, the next thing is to *Bring him to the Lure*, (which the *Faulconer* makes of Feathers and Leather, much like a Fowl, which he casts into the Air, and calls the *Hawk* to) which is after this manner. Set your *Hawk* on the Perch, unhood him and shew him some Meat within your Fist, call him by *Chirping*, *Whistling*, or the like, till he comes, then Feed him with it; if he comes not, let him Fast, and be sharp set: Short-winged *Hawks* are properly said to be called, not *Lured*. Make him bold, and acquainted with Men, Dogs, and Horses, and let him be eager and sharp-set, before you shew him the *Lure*, knowing his *Luring* Hours; and let both sides of the *Lure*, be garnished with warm and bloody Meat; let him likewise know your Voice well; so that being well acquainted with Voice, and *Lure*, the Hearing of the one, or sight of the other, makes him Obedient; which you must reward by Feeding, or punish by Fasting. But before *Luring* (or any Flight) it is requisite to Bathe your *Hawk* in some quiet and still shallow Brook, or for want of that in a Large Bason, shallow Tub, or the like, lest being at liberty, you lose your *Hawk*, (whose Nature requires such Bathing) and make him range. Now to make him know his *Lure*, is thus: Give your *Hawk* to another, and having loosned in readiness his Hood-strings, and fastened a *Pullet* to the *Lure*, go a little distance, cast it half the length of the string about your Head, still *Luring* with your Voice, unhood your *Hawk*, and throw it a little way from him; if he stoop and seize, let his plum the *Pullet*, and feed on it upon the *Lure*: Then take him and Meat on your Fist, Hood him and give him the Tiring of the Wing, or Foot of the said *Pullet*.

Having Manned and *Lured* your *Hawk* before you bring him to his Flight, one thing is to be observed and done, called in the *Faulconers* *Dialect*, *Enseaming*, which is to cleanse him from Fat, Grease, and Glut, know by his round Thighs, and full Meutings; and thus you may do it: In the Morning when you feed him, give him a bit or two of Hot-meat, and at Night very little or nothing. Then feed him Morning and Evening with a *Rook*, wash't twice till the Pinions be tender; then give a Casting of Feathers as his Nature will bear; and once in two or three dayes give him a Hens-neck well joynted and washt: Then a quick Train *Pigeon* every Morning; and after by these and his own Exercise, he has broken and dissolved the Grease, give him three or four *Pellets* of the Root of *Sallandine*, as big as a Garden Pease, steeped in the Sirup of *Roses*; and you have done this part of your Duty.

To Enter your *Hawks*, for *Partridge* or Fowl, Lay an old Field *Partridge* in a Hole, covered with something, and fasten to it a small *Creance* (*i.e.* a Fine small long Line of strong and even-wound Packthread fastned to the *Hawks* Leash when first *Lured*), and uncoupling your ranging Spaniels, pluck off the Covering of the Train *Partridge* and let it go, and the *Hawk* after it; and as soon as he has slain it, reward him well with it. And thus to make him fly at Fowl, feed him well with the Train of the Fowl you would have; doing afterwards as above.

The Fault of *Hawks* differ according to their Nature and Make. Long-Winged *Hawks* faults are thus helped. If he used to take stand, flying at the River, or in Champaign Fields, shun flying near Trees or Covert, or otherwise, let several Persons have Trains, and as he offers to stand, let him that's next cast out his Train, and he killing it reward him. And indeed you ought never to be without some live Bird or Fowl in your Bag, as *Pigeon*, *Duck*, *Mallard*, &c. If he be Froward and Coy; when he Kills, reward him not as usually, but slide some other Meat under him and let him take his

pleasure on it; giving him some Feathers to make him scour and cast. If he be *Wild*, look not inward; but mind Check, (*i.e.* other Game, as Crows, &c. that fly cross him) then lure him back, and stooping to it, reward him presently.

The faults of Short-winged *Hawks* thus are helped. Sometimes the *Goshawk* and *Sparrow-Hawks*, will neither kill, nor fly the Game to Mark, but will turn Tail to it: Then encourage your Dogs to Hunt, cast a Train *Partridge* before your *Hawk*, make him seize it, and feed well upon it.

If a Hawk take a Tree, and will not fly at all, feed him then upon quick Birds, and make him foot them, and in the plain Champaign Fields unhood him, and rising up and down awhile let one cast out a Field *Partridge* before him, let him fly at it, and footing it, feed on it. If they be too fond of a Man, that after a stroke or two will not fly, be seldom familiar with him, and reward him not as he comes so improperly: Otherwise reward him well.

As for *Mewing* of *Hawks*, the best time for Long-winged *Hawks* is about the middle of *April*, and *March* for the Short-winged *Hawks*. There are two kinds of *Mewings*. 1. *At the stock or stone*; so called from its being low upon the Ground, free from Noise, Vermin or ill Air. 2. *At large*; so called from being in a high Room, with open Windows towards the *North* or *North-East*. The former is accounted the best *Mewing*. The Faulconer, before he *Mews* his *Hawks*, see if they have *Lice*, to Pepper and Scower them too. The best time to draw the Field *Hawk* from the *Mew*, is in *June*, and he will be ready to fly in *August*; the *Hawks* for the River in *August*, will be ready in *September*.

#### *Cures for Hawks Diseases.*

The Faulconer ought diligently to observe the Complexions of his *Hawks Castings* and *Mewtings*, to judge of their Maladies, an assured sign of knowing whether they are sick or distempered in this. Take your *Hawk*, turning up her Train, if you see her Tuel or Fundament swelleth, or looketh red; Or, if her Eyes or Ears be of a fiery Complexion, it is an infallible sign of her being not well and in good health; and then Scouring is necessary first; which is done by *Aloes Cicatrine*, about the quantity of a Pea wrapt up in her Meat; and this avoids Grease, and kills Worms too.

*For the Cataract*: Take one Scruple of washt *Aloes* finely beaten, and two Scruples of *Sugar-candy*, mix these together, and with a Quill blow it three or four times a day into your *Hawks* Eye.

*Pantus* or *Asthma*: Pour the Oyl of sweet *Almonds* into a Chickens Gut, well washt, and give it the *Hawk*: Or, scower him with *Sallandine*-Pellets, and Oyl of *Roses*, and then wash his meat in the Decoction of *Coltsfoot*.

*Filanders* or *Worms*: To prevent them, seeing your *Hawk* low and poor, give her once a month a Clove of *Garlick*. To cure or kill them; take half a dozen Cloves of *Garlick*, boil them very tender in Milk, dry the Milk out of them; put them into a Spoonful of the best Oyl of *Olives*, and having steeped them all Night, give them both to your *Hawk*, when she has cast, in the morning: feed him not till two hours after, and then with warm meat, and keep him warm all that day.

*Lice*: Mail your *Hawk* in some Woollen Cloth, put between his Head and Hood a little Wool, and take a Pipe of Tobacco, put the little end in at the Tream, blow the smoak, and the *Lice* that escape killing, will creep into the Cloth: *Probatum*.

*Formica*: Take a little of the Gall of a Bull, and beating it with *Aloes*, anoint the Beak of the *Hawk*, Morning and Evening,

*Frounce*: Take the Powder of *Allume*, reduced to a Salve with strong Wine Vinegar, and wash her mouth with it; then take Juice of *Lolium* and *Raddish*, mixt with Salt, and anoint the Sore.

*Apoplex*: Gather the Herb *Asterion*, wash your Hawks meat with the Juice thereof when you feed him.

*Wounds*: Take the Juice of *English Tobacco*, or *Mouse-ears*, after you have sticht it up with a little Lint, bathe the place.

### Of BOWLING.

The first and greatest Cunning to be observed in *Bowling*, is the right chusing your Bowl, which must be suitable to the Grounds you design to run on, thus: For *close Alleys*, your best choice is the *Flat Bowl*: 2. For *open Grounds* of Advantage, the *Round-byassed-bowl*. 3. For *Green Swarths*, that are plain and level, the Bowl that is *Round as a Ball*.

The next thing requires your Care is, the chusing out your Ground, and preventing the Windings, Hangings, and many turning Advantages of the same, whether it be in open wide places, as Bares & Bowling-greens, or in close Bowling-alleys.

Lastly, Have your Judgment about you to observe and distinguish the Risings, Fallings and Advantages of the Places where you Bowl: Have your Wits about you to avoid being rookt of your Money: And have your Understanding about you, to know your best Time and Opportunity for this Recreation; and finally a studious Care of your Words and Passions, and then Bowl away, and you may deserve, *Well have you bowled indeed*.

But methinks I cannot conclude here, without admiring how aptly a Bowling-green is by the Divine *Quarles* characterized, in the following Verses, thus,

*Brave Pastime, Readers, to consume that day, Which without Pastime flies too swift away! See how they labour, as if Day and Night Were both too short to serve their loose Delight? See how their curved Bodies wreath, and skrue Such Antick Shapes as Proteus never knew: One rapps an Oath, another deals a Curse, He never better bowl'd, this never worse; One rubs his itchless Elbow, shrugs and laughs, The t'other bends his Beetle-brows, and chafes; Sometimes they whoop, sometimes the Stygian cryes, Send their black Santo's to the blushing Skies: Thus mingling Humours in a mad Confusion They make bad premisses and worse Conclusion.*

Thus much for Bowling.

### Of TENNIS.

This Recreation is of the Same Date for its Antiquity of Invention with Bowling, and for the Violence of its Exercise to be preferred before it. This Sport indeed is of so universal an Acceptance, that Majesty it self is pleased to design it its Recommendation, by tracking its laborious steps; and Princes and Lords admire it too for the most proper Recreation, to suit with Innocence, and true Nobility. Here the Body is briskly exercised more than ordinary, and inured in Agility and Nimbleness; this renders the Limbs flexible and mettlesom, and adapts them for the most Vigorous Enterprize.

*Tennis* and *Baloon* are sports which are play'd almost with the same Instruments; and therefore may be under one and the same Head: The first is a Pastime, used in close or open Courts, by striking a little Round Ball to and fro, either with the Palms of the hands (and then is called *Pila palmaria* in Latin) or else a *Racket*, made for the purpose, round with Net or Cat-gut, with a Handle: The other a strong and moving Sport in the open Fields with a great Ball of a double leather filled with Wind, and so driven to and fro with the strength of a Mans Arm, armed in a Brace of Wood. And thus much shall suffice to speak of the *Baloon* and *Tennis*; only let me desire you, let not this or any other Pastime disturb your Minds; divert you from the diligent and careful Prosecution of your lawful Business; or invite you to throw away your Time and Money too lavishly and idley; nor engage you in any Passion; that so you may not offend God, dislike your

Neighbour, nor incommode your Self and Family in your Well-being and Felicity; and then you may recreate your self without Fear: And in this Recreation observe the ensuing Morality of

The =Tennis-Court=.

*When as the Hand at Tennis Plays,  
And Men to Gaming fall,  
Love is the Court, Hope is the House,  
And Favour serves the Ball,*

*This Ball it self is due Desert,  
The Line that measure shows  
Is Reason whereon Judgment looks  
Where Players win and lose.*

*The Tutties are Deceitful Shifts,  
The Stoppers, Jealousy,  
Which hath Sir Argus hundred Eyes,  
Wherewith to watch and pry.*

*The Fault whereon Fifteen is lost,  
Is Want of Wit and Sense,  
And he that brings the Racket in  
Is Double Diligence.*

*But now the Racket is Free-will,  
Which makes the Ball rebound,  
And Noble Beauty is the Choice,  
And of each Game the Ground.*

*Then Racket strikes the Ball away,  
And there is Over-sight,  
A Bandy ho! the People cry,  
And so the Ball takes flight.*

*Now at the length Good-liking proves  
Content to be their Gain:  
Thus in the Tennis-Court, Love is  
A Pleasure mixt with Pain.*

*Of RINGING.*

Whosoever would become an accurate Master of this excellent Art and Pleasure, and is very desirous to be esteemed an Elaborate and Ingenious Ringer, and be enrolled amongst that Honoured Society of =College Youths=; I must beg leave to instruct him before he enters the Bell-free, in these ensuing short Rules; which he must strictly observe, viz.

1. That as all *Musick* consists in these six plain *Notes*, *La Sol Fa Mi Re Ut*; so in *Ringing*, a Peal of Bells is Tuned according to these Principles of *Musick*: For as each *Bell* takes its *Denomination* from the *Note* it *Sounds*, by its being

flatter or deeper, as, *First*, or Treble, *second, third, fourth, &c.* as they are in number to *ten* or *twelve* Bells, the last being called the *Tenor*; So must they successively strike one after another both *Fore-stroke* and *Back-stroke*, in a due Musical time or Equi-distance, to render their Harmony the more Pleasant, and to make the Young Practitioner the better informed to observe the *Life of Musick*, and indeed of true Ringing, *Time*; and therefore is called, *Round-ringing*.

2. As in Musick, so in Ringing there are three *Concords*, so called from their Melodious Harmony and Agreement, which Principally are these; *Thirds*, viz. 1 3, 2 4, *&c.* *Fifths* 1 5, 2 6, *&c.* *Eights* 1 8, 2 9, 3 10, *&c.* and these are the more pleasant according to the Number of Bells they are struck on, and as they are struck, whether separately or mutually. From hence *Changes* are made, which is only a Changing place of one *Note* with another, so variously, as Musick may be heard a thousand ways of Harmony; which being so obvious to common Observation, I shall not go about to demonstrate; for that if two may be varied two ways, surely by the Rule of *Multiplication*, a Man may easily learn how many times 6, 7, 8, 9, 10, or 12 Bells Notes may be varied; which will run almost *ad infinitum*.

3. For the better observing the Ringing of *Changes* or *Rounds*, these three things are to be noted.

1. *The Raising true in Peal.*

2. *Ringing at a low Compass*; and

3. *Ceasing in true Peal*; all which three are the most essential Parts to render a Practitioner *Excellent*.

1. For *Raising a Peal of Bells true*, the modern and best Practice recommends the *swiftest and quickest possible*, every one taking Assistance to raise his Bell, as its going requires: the *lesser* Bells as *Treble*, *&c.* being by main strength *held down* in their first Sway (or pull) to get time for the striking of the rest of larger Compass; and so continued to be strong pulled till Frame-high, and then may be slackned: The bigger, as *Tenor*, *&c.* must be pincht or checkt overhead, that the Notes may be hard to strike roundly and handsomely. Observe that all the Notes strike round at one Pull: I do not mean the first; but 'tis according to the Bigness and Weightiness of your Bells: However in raising a Peal, do not let one Bell strike before the rest, or miss when the rest do; this is contrary to the Strict Rules of *true Ringing*: And this is called *Round-ringing*. Now if you design to raise a Peal of Bells for *Changes*, you ought to raise them to a Set-pull, as the most proper for commanding the Notes, and he who is not well skilled to manage his Bell at a Set-pull, will be apt to drop or overturn it, be in a Wood, and fruitlessly toil and moil himself. Therefore in practising the Setting of a Bell, cast your Eye about the other Bell-Ropes, during your managing your own, that you may accustom your self to manage it according to the *Change*.

2. For *Ringing at a low Compass*, is thus observed: By keeping a due *punctum* or beat of time, in the successive striking one after another of every Bell; the best Ringer being set to the *Treble*, that may guide and direct the rest of the Notes in their due Measure.

3. For *Ceasing a Peal of Bells*; let them fall gradually from a set Peal, checking them only at Sally, till the low Compass renders it useless; and when so low, that for want of Compass, they can scarce strike at Back-stroak; then let the *Treble-Ringer* stamp, as a Signal, to notify, that the next time they come to strike at the Fore-stroke, to check them down, to hinder their striking the Back-stroke; yet Fore-stroke continued, till brought to a neat and graceful Chime, which may be the *Finis* to that Peal.

Thus much in short, for *Raising*, *Round-ringing*, and *Ceasing a Peal* of Bells; I come next to lead you forth into that spacious Field of Variety of *Changes*, and present you with Instructions that may be merely necessary, for the right Understanding the several kinds of them.

Now in *Ringin Changes*, two of our best Senses, are to be employed, *viz.* The Ear, and the Eye: The Ear, hearing when to make a *Change*; and the Eye directing the Bell in making it: The Bells being the Object of the Former, and the Bell-ropes the Object of the Latter: And to render both the Eye and Ear Useful in *Ringin Changes*, these Five things are throughly to be Understood.

*First*, Endeavour to distinguish the *Notes* of a *Peal of Bells*, one from another while *Ringin*.

*Secondly*, Learn to apprehend the places of the *Notes*.

*Thirdly*, Understand the Precedency of *Notes*.

*Fourthly*, How to make a *Change* in *Ringin*.

*Fifthly*, and *Lastly*, How to Practice the four fore-going Notions, in General.

1. *To know the Notes of a Peal of Bells asunder* (which is easy in *Round-Ringin*) in *Changes* is thus: Get the skill of Tuning them with your *Voice*, by imitating their *Notes* while *Ringin*. Or if you are acquainted, either by your self or Friend, with some *Singing-Master*, or one who has skill in *Singing*, get him to instruct you in the true Pitch of any *Note*, and aid your distinguishing them; otherwise you may be puzzled in this, to know which is *Treble*, which *Second*, &c. as in 532641, *&c.*

2. To know the places of the *Notes*, is no way better to be apprehended than thus: The Practitioner ought to form an *Idea* in his Head of the place of each *Note*, whether in a direct *Line*, or *Obliquely*; and representing them by a *Figure* in his Mind, see (as it were) by the Eye of the Understanding, each stroke of the *Bell*, as the *Treble*, 1. *Second* 2. *Third* 3. *&c.* so that as the *Ear* is to direct him, when to make the *Change*, so a right Apprehension of the *Motion* and *Places* of the *Notes*, ought to be a means to guide his *Ear*.

3. The Precedency of *Notes*, is of a very obvious Demonstration; thus: In *Ringin Changes* the Fore and Back-stroke, successively following one another, are properly said to *Lye behind* one another, according to their places of striking. Or in short, in 12345, the *Note* that leads either at Fore or Back-stroke, is said to *Lye before* the rest, and the last to be behind, As the 2 is said to lye behind the 1, so it lyeth before the 3, as the 3 lyeth behind 2, so it lyeth before the 4. And so of as many as are *Rung*.

4. The manner of making a *Change*, is very common, and needs no particular, but general Rule; That it is made by moving one *Note* into anothers place, Up and Down, as Occasion requires; but usually made by two *Notes* standing one next the other, as hereafter may be observed.

*Lastly*, In your *Ringin Changes*, these two things (in which consists the practick part of this Art) are to be rightly considered, *First*, Readily to know which two *Bells* are to make the succeeding *Change*. And *Secondly*, to consider (if you are concerned in it) what *Bell* you are to follow in making it. To understand which the more perfectly, you must imprint in your Memory, the Method of the *Changes* prick'd in *Figures*, and to be expert likewise in setting them down divers ways, and making any *Figure* a *Hunt* at Pleasure; and thus without pausing or hesitating to consider the Course, you may throughly understand the Methods; the Four preceding Observations being first perfectly understood.

There are two ways of *Ringin Changes*, *viz.* By *Walking* them, as the Artists stile it; or by *Whole Pulls* or *Half-pulls*: *Walking* is, when in one *Change* the *Bells* go round, *Four*, *Six*, or *Eight* times; which is a most incomparable way to improve a Young Practitioner, by giving him time to consider, which two *Bells* do make the next succeeding *Change*, and in making it, what *Bell* each is to follow; so that by this means (by his Industry) he may be capable of *Ringin* at

*Whole pulls*; which is, when the *Bells* go round in a *Change* at Fore and Back-stroke; and a *New Change* is made every time they are pulled down at Sally: This was an Ancient Practice, but is now laid aside, since we have learnt a more advantageous way of hanging our *Bells*, that we can manage a *Bell* with more ease at a *Set-pull* than formerly: So that Ringing at *Half-Pulls* is now the modern general Practice; that is, when one *Change* is made at Fore-stroke, another at Back-stroke, \_&c.\_

He that Rings the slowest *Hunt*, ought to notify the *extream Changes*; which is, when the Leading *Bell* is pulling down, that he might make the *Change* next before the extreme, he ought to say, *Extreme*. By this means, betwixt the Warning and the Extreme there will be one compleat *Change*.

#### *Of Changes, &c.*

There are *two kinds of Changes*, viz. *Plain Changes*, and *Cross-peals*; which Terms do denote the *Nature* of them; for as the first is stiled *Plain*, so are its methods easy; and as the second is called *Cross*, so are its Methods cross and intricate: The First have a general Method, in which all the Notes (except Three) have a direct *Hunting-Course*, moving gradually under each other, plainly and uniformly: *Plain* are likewise termed *single Changes*, because there is but one single Change made in the striking all the Notes round, either at Fore or Back-stroke. But the Second is *various*, each *Peal* differing in its Course from all others; and in *Cross-peals as many changes may be made as the Notes will permit*. In short, as to *Plain-changes*, I shall not dilate on them here, it being so *plainly* understood by every one that lately have rung a *Bell* in peal; all therefore I shall add is this, that any two Notes that strike next together may make a *Change*, which may be done either *single or double*, as you list. The *single*, by changing two Notes; and the *double*, by changing Four, *i.e.* Two to make one Change and two another; which is however called *One double Change*, and not two Changes; because tis made in striking the Notes of the *Bells* once round.

#### *Of Cross-peals.*

Or in these *Cross-peals* we must Observe the *prime Movement*, which sets the whole Frame a going, and that is called the *Hunt*, which hath *one constant Uniform Motion throughout the Peal*, and different from that of the other Notes; and indeed by this the whole Course of the Peal is Steered. This keeps a continual motion through the other Notes, *i.e.* from leading, to strike behind, and from thence again to Lead; which is called one *compleat Course*.

Some Peals upon *five Bells* consist of single Courses, wherein are ten Changes, and twelve Courses make the Peal. Others upon five consist of double Courses, wherein are twenty Changes to every Course, and six Courses in the Peal.

Upon *six Bells* there are likewise *single and double Courses*, viz. Twelve Changes in every single Course, as in *Grandsire-bob, &c.* and Twenty-four Changes in every double Course, as in *College Bobs*, that being the first Change of every Course, wherein the *Hunt* leaves Leading: In short, judiciously observe the first Course of any *Cross-peal*, and you will soon see the general Method of the whole Peal: All Courses in Cross-Peals agreeing in these following three Respects. First, *In the Motion of the Hunt*. Secondly *In the motion of the rest of the Notes*: And Thirdly, *In making the Changes*. Which three things being well (to omit Instance of Demonstration) and narrowly observed, will be very helpful both in pricking and ringing Courses; the first and third for directing you in Pricking them, and the first and second in Ringing them.

There is one Difficulty to be removed e're I can come to prick down those Peals I design to be the Subject of the Discourse of this *Epitome*, and that is, *How to make the first Changes at the beginning of each Peal*; I mean to make the *Second, Third, Fourth, &c. whole Hunts*; and this In short is thus directed: In any *Cross-peal* the *whole Hunt* may move either up or down at the beginning; and the Motion of the *whole Hunt*, in the first Course of each of the following Peals will direct the first Motion of any *Cross-Hunt*, and by Consequence of making the first Changes in that Peal. Taking

along with you this Observation.

That whensoever the first Change of any Peal happens to be *single*, it must be made at the back-stroke, to prevent *cutting Compass*, and the like when a double Change happens first in a Peal of *Triples and doubles*: But when it happens, that the first Change is made at the Back-stroke, then Consequently the Bells at the end of the Peal will come round at a Fore-stroke Change.

I shall omit speaking to any of the several Peals on *four or five Bells*; for that in my opinion little *Musick* is heard, though much *Practical Observation* is made, from them; and therefore shall begin with *Grandsire-bob*, as having mentioned it but just before in my general View I made of *Cross-peals*.

*Grandsire Bob.*

*Bob* Changes take their Name from this; *viz.* When the *Treble* leads in the *Second* and *Third*, and the *Fifth* and *Sixth's* places, then they are called *Bob-changes*. In Ringing which you are to observe these Rules, *viz.*

Whatsoever Bells you follow when you *Hunt up*, the same Bells in the same order you must follow in *Hunting down*; as in the Changes here prickt, where the *Treble* hunting up *First* follows *Second*, then *Fourth*, and then *Sixth*; when it comes behind, *First* follows *Second*, in hunting down *Fourth*; and when hunting up follows *Sixth* in the same Order: The like may be observed in Ringing any other Bell, with this Difference betwixt the whole Hunt and the rest, *viz.* Every time the Whole hunt leaves the *Treble's* place, and hunts up, it followeth different Bells, from what it did at its first hunting up.

In the ensuing Peal here prickt are *Eighteen-score* Changes, wanting one. It may be Rung with any *Hunts*, and begin the Changes *Triple* and *Double*: You may make your extream at the first, second, or third *single Bob*; or the first, second, or third time, that the half and *Quarter-hunts* dodge behind; the *single* must be made behind in either of these.

```
123456 | bob. | 134256 | 143265 | 126435
----- | 156423 | 312465 | 142356 | -----
214365 | 514632 | 321645 | ----- | 162345
241635 | 541362 | 236154 | 124536 | 163254
426153 | 453126 | 263514 | 125463 | -----
462513 | 435216 | 625341 | ----- | 136524
645231 | 342561 | 652431 | 152643 | 135642
654321 | 324651 | 564213 | 156234 | -----
563412 | 236415 | 546123 | ----- | 153462
536142 | 263145 | 451632 | 165324 | bob.
351624 | 621354 | 415362 | 163542 | 135426
315264 | 612345 | 143526 | ----- | -----
132546 | 165243 | bob. | 136452 | 153246
135264 | 162534 | 134562 | bob. | 152364
312546 | 615243 | 315426 | 163425 | -----
321456 | 651423 | 351246 | ----- | 125634
234165 | 564132 | 532164 | 136245 | 126543
243615 | 546312 | 523614 | 132654 | -----
426351 | 453621 | 256341 | ----- | 162453
462531 | 435261 | 265431 | 123564 | 164235
645213 | 342516 | 624513 | 125346 | -----
654123 | 324156 | 642153 | ----- | 146325
```

561432 | 231465 | 461235 | 152436 | bob.  
 516342 | 213645 | 416325 | 154263 | 164352  
 153624 | 126354 | 143652 | ----- | -----  
 156342 | 123645 | bob. | 145623 | 146532  
 513624 | 216354 | 134625 | bob. | bob.  
 531264 | 261534 | 316452 | 154632 | 164523  
 352145 | 625143 | 361542 | ----- | -----  
 325416 | 652413 | 635124 | 145362 | 146253  
 234561 | 564231 | 653214 | bob. | 142635  
 243651 | 546321 | 562341 | 154326 | -----  
 426315 | 453612 | 526431 | ----- | 124365  
 462135 | 435162 | 254613 | 145236 | -----  
 641253 | 341526 | 245163 | 142563 | 123456  
 614523 | 314256 | 421536 | ----- | =====  
 165432 | 132465 | 412356 | 124653 |

Thus much for the *Grandsire-bob*; I shall next collect what *London Peals* I think most Harmonious, and agreeable, without troubling my self to go to *Oxford*, or *Nottingham*, or *Redding*, to enquire after their different Methods of Peals, as indeed needless; and my reason is this: Because I think the same Rules for *Peals* that are suitable to our *London Genius*, may challenge likewise an Acceptance amongst other *Cities*; provided their *Steeple*s are furnished with as many, and as good *Bells*, and their *Belfree*'s with as ingenious and elaborate *Ringers* as here in *London*.

I shall begin then with *Peals upon six Bells*, and herein in order, measure out the Delights on *Peals* from *Six* to *Eight Bells*, and setting out early, present you with

*The Morning Exercise.*

*Doubles* and *singles*. The whole *Hunt* is the *Treble*, which Hunteth up into the *Second*, *Third*, and *Fourth* places, lying twice in each; and then lyeth still in the *Sixth* place, having dodged behind, and makes another, and then *Hunts* down as it *Hunted* up, and then leads four times. Observing the manner of its Pricking, and its Practice, may excuse any further defining it.

123456 |  
 ----- | 265143 | 163425 | 125643 | 143256  
 213465 | 265134 | ----- | 125634 | 134265  
 213456 | 265143 | 165243 | ----- | 134256  
 231465 | 261534 | 165234 | 124365 | -----  
 231456 | 216543 | 156243 | 124356 | 136524  
 234165 | 216534 | 156234 | 142365 | 136542  
 234156 | 126543 | ----- | 142356 | bob.  
 243516 | 126534 | 154326 | ----- | 135624  
 243561 | 162543 | 154362 | 146532 | 135642  
 245316 | 162534 | bob. | 146523 | -----  
 245361 | ----- | 153426 | bob. | 132465  
 254631 | 164352 | 153462 | 145632 | 132456  
 254613 | 164325 | ----- | 145623 | 123465  
 256431 | bob. | 152643 | ----- | 123456  
 256413 | 163452 | 152634 | 143265 | -----

This will go a 120 *Changes*, and by making *Bobs*, 240, 360, 270.

*A Cure for Melancholy.*

*Doubles and Singles.*

I should think it needless to explain the method of prick'd *Peals*, and give a large Definition of them, when their plain Demonstration might be sufficient; However, as the Old *Phrase* is, *Because 'tis usual*, something shall be said of this too.

The *Treble* is the whole *Hunt*, as in the former, and leads four times, and lyeth behind as many, and twice in every other place; the two *Bells* in the 3d. and 4th. places continue dodging, when the *Treble* moves out of the 4th. place, until it comes down there again, and then the two hindmost dodge, till the *Treble* displaceth them; who maketh every double *Change*, except when it lieth behind, and then the double is on the four first, and on the four last when it leads. Every single (except when the *Treble* lies there) is in the 5th. and 6th. places; or if possessed by the *Treble*, then in the 3d. and 4th. places: Every *Bell* (except the *Treble*) lies four times in the Second place: But enough; a word is enough to the Wise. See it here Deciphered.

```
123456 |
----- | 452136 | 165432 | 126534 | 156432
213465 | 452163 | ----- | 126543 | bob.
213456 | 451236 | 143652 | ----- | 165423
231465 | 451263 | 143625 | 154263 | 165432
231456 | 415236 | bob. | 154236 | -----
234165 | 415263 | 134652 | 152463 | 132654
234156 | 145236 | 134625 | 152436 | 132645
243516 | 145263 | ----- | ----- | 136254
245316 | 142536 | 162345 | 143526 | 136245
243561 | 142563 | 162354 | 143562 | -----
245361 | ----- | 163245 | bob. | 124365
423561 | 156423 | 163254 | 134526 | 124356
425361 | 156432 | ----- | 134562 | 123465
423516 | bob. | 125634 | ----- | 123456
425316 | 165423 | 125643 | 156423 | -----
```

This will go *Six-score Changes*, but by making *bobs*, it will go 240, 360, or 720. The *Bob* is a double *Change* at the leading of the *Treble*, in which the *Bell* in the 4th. place lyeth still.

London Nightingale.

*Doubles and Singles.*

The Whole-hunt is the *Treble*, who lyeth four times before, and as many behind, and twice in every other place: The two hind *Bells* continue dodging, when the *Treble* moves down out of the *Fifth* place, till he comes there again, the *Bell* in the *Fourth* place lying still all the while: When the two hind *Bells* aforesaid leave dodging, then the two *First Bells* take their dodging places, till dispossessed again, by the return of the said Hind *Bells* to their dodging; and then they Cease.

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123456 |
----- | 425316 | 162534 | 142365 | 164532
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213465 | 452136 | ----- | 124356 | bob.  
 213456 | 452163 | 153624 | 124365 | 165423  
 231465 | 451236 | 153642 | ----- | 165432  
 231456 | 451263 | bob. | 136245 | -----  
 234165 | 415236 | 156324 | 136254 | 143652  
 234156 | 415263 | 156342 | 163245 | 143625  
 243516 | 145236 | ----- | 163254 | bob.  
 423516 | 145263 | 134562 | ----- | 146352  
 243561 | 154236 | 134526 | 125634 | 146325  
 243561 | 154263 | bob. | 125643 | -----  
 423561 | ----- | 135462 | 152634 | 132465  
 245361 | 126543 | 135426 | 152643 | 132456  
 425361 | 126534 | ----- | ----- | 123465  
 245316 | 162543 | 142356 | 164523 | 123456

This will go 120, and by making *Bobs*, 240, 360, or 720.

*College Bobs.*

In this *Bob*, when the *Treble* leaves the two *Hind Bells*, they dodge till it comes there again, and till the *Treble* gives way for the dodging again of the said two *Hind Bell*, the two *First Bells* dodge, but after Cease dodging, when the two *Hind Bells* dodge.

123456 |  
 ----- | 243651 | 421635 | 152364 | 165324  
 214365 | 426315 | 246153 | 135246 | bob.  
 124356 | 462135 | 241635 | 153246 | 156342  
 213465 | 641253 | 426153 | ----- | -----  
 231456 | 642135 | 462513 | 126543 | 132546  
 324165 | 461253 | \_&c.\_ | 125634 | 135264  
 321456 | 416235 | 165432 | ----- | -----  
 234165 | 142653 | bob. | 164235 | 124365  
 243615 | 412635 | 156423 | 162453 | 123456  
 426351 | 146253 | ----- | ----- | -----  
 246315 | 142635 | 143526 | 143652 |  
 423651 | 416253 | bob. | bob. |  
 246351 | 146235 | 134562 | 134625 |  
 423615 | 412653 | ----- | ----- |

*Another.*

Here, every *Bell*, when it comes to lead, makes a dodge before, then after one *Change*, it lyeth still; after it has made another dodge, it moves up into the 4th. place, where twice it lyeth still; and down again; except the *Treble* happens to dodge with it in the 4th. place, then it hunts up behind. When the *Treble* moves down out of the 3d. place, the two *Bells* in the 3d. and 4th. place continue there, till the *Treble* comes up thither again, the two hind *Bells* dodging in the mean time.

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123456 |
----- | 265314 | 132564 | 135426 | 164352
214365 | 625341 | 315246 | ----- | -----
124356 | 263514 | 351426 | 153246 | 146532
213465 | 236154 | 534162 | 152364 | bob.
231645 | 321645 | 351462 | ----- | 164523
326145 | 236145 | 534126 | 125634 | -----
231654 | 321654 | _&c._ | 126543 | 146253
326154 | 312564 | 153624 | ----- | 142635
362415 | 135246 | bob. | 162453 | -----
634251 | 315264 | 135642 | 164235 | 124365
364215 | 132546 | ----- | ----- | 123456
632451 | 135264 | 153462 | 146325 | -----
623541 | 312546 | bob. | bob. |

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Both these *bobs* will go *One Hundred and Twenty Changes*, and by making of *bobs*, they will go, 240, 360, or 720. And thus with little Variation, there are other *bobs* may be made after the same manner, and afford as Admirable Musick, as possibly can be made on *Bells*. I shall therefore hasten to finish this days Work, only first present you with this one more called,

The City Delight:

*Doubles and Singles.*

The whole *Hunt* is the *Treble*, and lieth as before in the *Nightingale*: When the *Treble* moves out of the *3d.* place, the *Singles* are made in the *2d.* and *3d.* place, till the *Treble* repossesses his *3d.* place, and then behind, till it moves up again out of the *3d.* place. The two hind *Bells* dodge, when the *Treble* moves out of the *4th.* place, till he returns again; the *Bell* in the *4th.* place lying still all the while.

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123456 | 264351 | 154362 | 162534 | 143265
----- | 265413 | bob. | 162543 | 143256
213465 | 256413 | 153426 | 126534 | 134265
213456 | 265143 | 153462 | 126543 | 134256
231465 | 256143 | ----- | ----- | -----
231456 | 251634 | 156234 | 124365 | 135642
234165 | 251643 | 156243 | 124356 | 135624
234156 | 215634 | 165234 | 142365 | bob.
243156 | 215643 | 165243 | 142356 | 136542
234615 | 125634 | ----- | ----- | 136524
243615 | 125643 | 164352 | 145623 | -----
243615 | 152634 | 164325 | 145632 | 132465
246351 | 152643 | bob. | bob. | 132456
264351 | ----- | 163452 | 146523 | 123465
246531 | 154326 | 163425 | 146532 | 123456
| ----- |

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This will go as many *Changes* as the last mentioned, by making *Bobs*. And here I will shut up this days Peal upon Six *Bells* with

The Evening Delight.

*Doubles and Singles.*

The Whole *Hunt* is the *Treble*, and lyes as before specified, with this exception only: That it dodges in the *2d.* and *3d.* places, every time it *Hunts* up, and down. Observe when *Treble* goes to lead, and leaves of leading, the *Bells* in the *3d.* and *4th* places lye still, *&c.* Note the pricking this *Peal*.

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123456 |
----- | 254163 | 164235 | 145326 | 156324
213465 | 245163 | ----- | 154326 | bob.
231465 | 241536 | 162453 | ----- | 165342
213645 | 214536 | 126453 | 153462 | 156342
231645 | 241356 | bob. | 135462 | -----
236154 | 214356 | 162435 | 153642 | 153624
263154 | 124365 | 126435 | 135642 | 135624
236514 | 142365 | ----- | ----- | 153264
263514 | 124635 | 124653 | 136524 | 135264
265314 | 142635 | 142653 | 163524 | -----
256341 | ----- | 124563 | bob. | 132546
265431 | 146253 | 142563 | 136542 | 123546
256431 | 164235 | ----- | 163542 | 132456
254613 | bob. | 145236 | ----- | 123456
245163 | 146253 | 154236 | 165324 | -----
```

This *Peal* will go 120 *Changes*, and by making *Bobs*, as many as above.

Note that in all the foregoing *Peals* upon *Six Bells*, the *Bobs* are double *Changes*, and made always at the leadings of the *Whole-Hunt*. He that Rings the *Half-Hunt*, may best call *Bob* in all *Peals*.

I come now to the *Changes* upon *Seven Bells*, which though the seldom Practice of them might excuse my omitting them; yet, because I promised to say somewhat of them, I shall be as good as my Word, (the Character of an Honest man) and present you with a couple of Examples, and then proceed to *Peals* upon *Eight*: But this I must crave leave to premise, That Variety of *Changes* may be prick'd upon *Seven Bells*, as *Triples*, and *Doubles*, *Triples Doubles*, and *Single Doubles*, &c. and the same Methods may be prick'd upon *Seven*, as may be upon *Five*, the true difference of Proportion being observed; but to proceed.

*Dodging Triples.*

*Triples* and *Doubles*, and indeed all *Peals* upon *Six*, may likewise go upon *Seven Bells*, thus,

```
1234567 |
----- |
2143576 | 4523671 | 3514276
2415367 | 5432761 | 3152467
4251376 | 4523716 | 1325476
4523167 | 5432176 | 1352746
5432617 | 5341267 |
```

Plain Triples.

```

1234567 |
----- |
2143657 | 6745231 | 3517264
2416375 | 7654321 | 3152746
4261735 | 7563412 | 1325476
4627153 | 5736142 |
6472513 | 5371624 |

```

In this all the Bells have a Hunting *Course*.

*College Triples*, dodging before, and behind,

```

1234567 |
----- |
2143576 | 2467315 | 4176235
2415367 | 4276135 | 4712653
4251376 | 2471653 | 7421635
2453167 | 4217635 | 4726153
4235617 | 4126753 | 7462513
2436571 | 1462735 | 4765231
4263751 | 1467253 |

```

This Peal thus prick't, will go, 84 *Changes*, and the *Treble* leading, and the *Half Hunt* lying next it, and a parting *Change* (which is a double on the four middlemost of the Six hind *Bells*) being made, it will go 420, and by making *Bobs* 5040.

Thus much shall suffice for *Peals* upon Seven *Bells*, I proceed to *Changes* upon *Eight*.

*Peals of Eight Bells.*

Without amusing our selves with what Notes are most *Musical*, to *lye behind*, we will come to the matter of Fact; for those Methods of *Peals* that are prick'd on *six*, may be the same upon *Eight*, Observing only, that *Triples* and *Doubles* upon *Six*, must be *Quadruples*, and *Triples* upon *Eight*.

The Imperial Bob.

*Quadruples* and *Triples*.

The *Treble* hath a dodging *Course*, the two first, and two last *Bells* always dodge, till hindered by the *Treble*, the two next to these, lying still one *Change*, dodge the next, till the *Treble* hinders them too, Those in the 5th. and 6th. places dodge (the *Treble* being behind) and those in the 3d. and 4th. places likewise dodge (the *Treble* being before) and so till hindered by the *Treble*.

```

12345678 |
----- | 42361875 | 16847253 | 14283675
21436587 | 24368157 | 16482735 | -----
12346578 | 42631875 | ----- | 18645273

```

21436587		24613857		18765432		18462537
24136578		42168375		bob.		-----
42315687		24618357		17864523		16587432
24135678		42163857		-----		bob.
42316587		41268357		16573824		15684732
24361578		14623875		bob.		-----
42635187		41263857		15678342		18753624
24631578		14628375		-----		bob.
42365187		14263857		17352648		17856342
24635817		41628375		17536284		-----
42368571		14268357		-----		15372846
24365817		41623875		13274586		15738264
42638571		46128357		13725468		-----
24365871		64213875		-----		13254768
42638517		46123857		12438765		13527486
24635871		64218375		12347856		-----
42368517		46281357		-----		12436587
24638157		_&c._		14826357		12345678
-----						

By this method the Peal will go 224 Changes, and by making of *Bobs* it will go 448, 672, 1344. The *Bob* is a *Triple Change* at the leading of the *Treble*, wherein the Bell in the *Fourth* place lies still.

The next that comes to our Observation, and answers to what we first hinted at in the beginning of this discourse of *Peals* upon *Eight Bells*, I mean *Precedency in Title*, is the

Bob Major.

*Plain Quadruples and Triples.*

In this all the *Bells* have a direct *Hunting Course*, until the *Treble* leads, and then the six hindmost *Bells* dodge.

12345678						
-----						
21436587		86745231		35172846		
24163857		87654321		31527486		
42618375		78563412		13254768		
46281735		75836142		31527486		
64827153		57381624				
68472513		53718264				

By this method this will go 112. And by making *Bobs*, 224, 336, or 672. The *Bob* is a *Triple Change*, as in the foregoing *Imperial* is specified. By making two *Extreams*, it will go 1344, and with four *Extreams*, 2688.

All *Peals* upon Six Bells, wherein half the Changes are *Triples*, will go upon *Eight* according to the method before-going, thus; If it be a Peal upon Six consisting of 360, or 720 Changes, then there must be five *Hunts* in the Ringing of it upon *Eight*, the *Treble* being the first, 2 the Second, \_&c.\_

College Bob Major.

*Quadruples and Triples.*

There is four ways of pricking these. The first hath single Dodging behind, and is thus Peal'd.

The First.

```
12345678 |
----- |
21436587 | 56348271 | 78136524
24163578 | 53684721 | 71863542
42615387 | 35867412 | 17685324
46251378 | 38576142 | 16758342
64523187 | 83751624 |
65432817 | 87315642 |
```

The Second.

This hath Single Dodging before and behind, thus prickt.

```
12345678 |
----- |
21436587 | 42358671 | 42173865
24163578 | 24385761 | 41237856
42615387 | 42837516 | 14328765
24651378 | 24873156 | 13482756
42563187 | 42781365 |
24536817 | 24718356 |
```

The Third.

This hath double Dodging behind, thus Prickt.

```
12345678
----- |
21436587 | 63548271 | 78153624
24135678 | 65384721 | 71856342
42316587 | 56837412 | 17583624
43261578 | 58673142 | 15786342
34625187 | 85761324 |
36452817 | 87216342 |
```

The Fourth.

This hath double Dodging before and behind both, thus.

```

12345678
----- |
21436587 | 42638571 | 42167358
24135678 | 24368751 | 41263785
42316587 | 42637815 | 14627358
24361578 | 24367185 | 16423785
42635187 | 42631758 |
24365817 | 24613785 |

```

These may be prick't several other ways, but that I Omit here for Brevities sake; The *Dodging* is without Intermission, except an hinderence comes by the *Treble*; as likewise between two Bells, until *Treble* parts the Fray. The *Bobs* are *Triple Changes*, as the *Treble* leads; in the *1st. 2d. and 6th.* the Bell in the *4th.* place lies still at the *Bobs*, and in the *3d. 4th. and 5th.* that in the *2d.* place lies still.

Each of these will go 112 Changes, and by making *Bobs* 224, 336, or 672.

College Triples Dodging both before and behind.

This Peal is the same for *Bobs*, as the *Bob Major*, and will go as many Changes by making *Bobs*, or otherwise, as any of the foregoing Four, and is thus Peal'd.

```

12345678 |
----- |
21436587 | 42568371 | 42157836
24153678 | 24586731 | 41275863
42513687 | 42587613 | 14725836
24531678 | 24578163 | 17452863
42536187 | 42571836 |
24563817 | 24517863 |

```

The Wild-Goose Chase

*Triples.*

The Explanation shall follow the Peal; intending here to put an end to my *Epitome of the Art of Ringing*, and therefore shall first present you with this Prick't thus.

```

12345678 |
----- |
21536784 | 37625481 | 15327684
25163748 | 73265418 | 13572648
52613784 | 72356148 | 31752684
56231748 | 27531684 | 37125648
65327184 | 25713648 | 73215684
63572814 | 52173684 | 72351648
36758241 | 51237648 |

```

In this Change the 4th. Bell must first hunt up into the Seventh's place, and then the 4 and 8 always dodge behind throughout the Peal, unless when obstructed by the *Treble*. The Bell that moves up into the 6th. place, when the *Treble* moves thence down, lies still there, till displaced by the *Treble*; during which time the two hind Bells dodge, and the *five first* go a perfect *Hunting-course*: And when likewise the *Treble* moveth out of the 5th's. place the five first Bells go a *Hunting-course*, till it comes down there again: By this method it will go 80 changes, and by *Bobs* 160, 240, or 480. The *Bob* is made as in the foregoing Changes.

And here I thought to make an end of the *Art of Ringing*, but *Cynthius aurem vellit*, the young Practitioner, whose only Information is hereby aimed at, plucks me by the Sleeve, and tells me in the Ear, that tho' Peals upon six, as *Triples* and *Doubles*, &c. make excellent Musick upon Eight Bells, 4 8, 6 8, 4 1, or 1 8 lying behind: Or, *Triples* and *Doubles* upon the six middle Bells, the *Tenor* lying behind; yet for him who is not arrived to such a perfection of Skill, as to Ring these compleat Peals, the most proper and easy for him are *Set-changes*, which are founded on these *Grounds*.

First, *Placing the Bells Fifths*; thus the 4 must hunt up behind the 7, the 3 behind the 6, and the 2 behind the 5; or the one may Hunt down under the other, as the 5 under the 2, the 6 under 3, and 7 under 4: Or if you will, first let a *Single*, next a *Double*, and then a *Triple* Change be made on the middle *Bells*, all coming to the same effect; for then the Changes will lye *Fifths* thus: 1 5, 2 6, 3 7, 4 8. In the Peal four *Concords* are to be regarded, The first 1 5, the Second 2 6, the third 3 7, and the fourth 4 8.

These four *Concords* may go the Methods of any Changes upon four *Bells*; 1, 5 being taken for the *Treble*; 2, 6 for the *Second*; 3, 6 for the *Third*; and 4, 8 for the *Fourth*; and the *Concords* may Change places with one another, as you list. In which this Observation is highly necessary, that the two Notes of every *Concord* must constantly attend each other in their Motion; that is, whenever one of the two Notes moves, the other must follow it.

Or Secondly, *Place the Bells Thirds*; thus: The 6 4 and 2 must hunt up, or else the 3 5 7 down; or otherwise on the middlemost *Bells* let a *Triple*, *Double* or *Single* Change be made, are to one effect; and then the *Bells* will lye *Thirds* thus, 1 3. 5 7. 2 4. 6 8. Herein are four *Concords observable*; as in the former Peal, *viz.* 1 3. 5 7. 2 4. 6 8. These *Concords* may go the Methods of any Changes upon Four *Bells*, 1, 3 being taking for the *Treble*, 5, 7 for the *Second*; 2, 4 for the *Third*; and 6, 8 for the *Fourth*; moving in the same manner; as before shewed.

By these *Grounds* Variety of excellent and Musical Changes are to be Rung; any *Concord may be made a Hunt*, and to move up and down at the beginning.

In Ringing these *Set-changes*, the Note will lye sometimes *Fifths*, sometimes *Thirds* and both, and then to *Clam* them, is admirable Musick: Clamming is, when each *Concord* strike together; which being done true the 8 will strike as but four *Bells*, and make a Melodious Harmony. You may *Clam* two or three bouts, and then strike as many times Open, alternatively, one *Clam* one Pull, and Open the next, &c.

Vocal Musick: Or, *Plain and Easy Directions to Sing by Notes, wherein with a little Help, any one who is Musically given, may be perfected in a short time.*

Musick, especially Vocal, has been of such high Esteem in all Ages, that it is accounted no less than a Divine Science producing such Concordance, and Harmony, that it cheereth and rejoyceth the Hearts of Men, and is delightful to every Creature. It is certainly an Addition to the joy in Heaven, where the Saints and Angels sing Halleluja's and Songs of Praises before the Throne of God. St. *Austin* tells us, that it is the Gift of God to Men, as well as to Angels, and a Representation and Admonition of the sweet consent and Harmony which his Wisdom hath made in the Creation and Administration of the World. But not to Prologue on what everywhere so much commends it self, I shall Sum up what in that Nature is expedient in a few Verses, and so proceed to the Subject Matter, *viz.*

*Nature, which is the vast Creations Soul, That steady curious Agent in the whole, The Art of Heaven, the Order of this Frame Is only Musick in an other Name: And as some King Conquering what was his own Hath choice of various Titles to his Crown, So Harmony on this Score now, that then, Yet still is all that takes and governs Men: Beauty is but Composure, and we find Content is but the Concord of the Mind; Friendship the Unison of well tun'd Hearts, Honour the Chorus of the noblest Parts. And all the Worlds good on which we can reflect Is Musick to the Ear, or to the Intellect.*

There are to make up a Musical Harmony computed seven Notes; now in the easiest way expressed by the Seven letters of the Alphabet, viz. A. B. C. D. E. F. G. And If it so fall out, that a Voice or Musick gradually rise or fall more than Seven Notes; The subsequent 8th, 9th, or 10th, will in the same order proceed, bearing the like Relation each to the other, as the 1st. 2d. 3d, &c. to which they respectively are *Eights*. And so that from hence every Eighth Note, being in Nature alike, is called by the name of that to which it is in an Eighth; however above or below it; and for the better understanding the various Musical Compositions out of these Notes, Musicians have devised and make use of Lines and Characters, that as a Language they may be understood and Communicated by Book, for the Instruction of the unlearned: As in the following Introductory Example, you will perceive;

[Illustration: Music]

In this example, before I come nearer to particulars in general, observe first, that those Characters you observe at the beginning of the Lines, are termed Cliffs or Claves, Keys to open and signify what part or pitch of Voice, viz. the *Treble*, *Mean*, or *Basse* properly the Notes belong to; as likewise on what Line or Space the Seven letters expressing the Notes is placed. And then again, the five Lines and Spaces between them are useful, as Steps or Gradations whereon the degrees of Sound are to be expressed, or the Notes ascending and descending: Then Thirdly, the Characters placed on the five Lines, express the Notes themselves, or stand for them; and their difference in form, signify their quality, whether they be longer or shorter.

Your care must therefore be in this, and the Chapters following, to consider well in the first place, the *Gam-ut*, to learn the use of the Cliffs: Next to that, the Names of the Lines and Spaces, whereby you may readily know how to call a Note, as it stands on any of the Lines; and Thirdly, How you should Sing those Notes in right Tune, as well by degrees, as leaps; and last of all, to give each Note its due Quantity of Time.

This in general, being observed, and seriously weighed; that you may take a prospect of your task, I from it proceed to the *Gam-ut*, so far as I think necessary to my present design, which is to let you understand by it the use of the Cliffs, with the order and distances of the Notes, as the Parts in a Body lye together.

[Illustration: The Gamut or Scale of MUSIC]

The consistence of this Scale is of Eleven Lines, with the Intermediate Spaces, and contains the places of all the Notes that are made use of Ordinarily in Vocal Musick. In the first Column you will find placed the Old Notes, being set down, that you may see what they are. And in the Second Column you are shewed which of the Seven letters properly belongs to each Line and Space. The Third Column contains the Cliffs, or signed Keys, demonstrating how many degrees of Notes they are one above another, which once Circumspectly observed and known, the other degrees of Distance are with more ease computed. And here

Five of these Lines, with their Spaces, are usually sufficient for the pricking down any Tune, for which reason this Scale is divided into Three Parts or Staves, compassed in with Arched Lines; and of these the lowermost five are proper and belonging to the *Bass*, and are known by this mark [Symbol: Bass Clef] on the Line of *F*. usually, therefore called the *F. Fa-ut* Cliff or Key; because it opens to us the letters standing on the other Lines and Spaces, as in the ensuing Chapter

will appear. As for the uppermost five Lines, they contain the highest of the Notes, and so belong to the Treble or highest Part. The Key to which is marked in this manner, [Symbol: G clef] and sometimes *G S.* on the lower Line but one.

The middle part or Tenor, usually takes in two of the upper Treble Lines; also two of the Bass Lines, that in the middle only being proper to it self, known by this mark placed on it, [Symbol: Tenor Clef mark] for the Cliff or Key, its place being properly in the middle Line, however it is many times placed on one or other of the other Lines; and note which ever the Cliff stands on, that Line is the place of *C.* and accordingly the other Lines are to be reckoned: Sometimes likewise we find the *Bass Cliff* is removed to the middle Line, and upon such removal, that Line is *F,* &c. and tho' this manner of Shifting the *Cliff* is troublesome, yet Custom and Practice having made the knowing of them necessary, you ought to be very well understanding in the manner of them, if you would be well skilled in Vocal or Instrumental Musick.

#### *The Names of the Lines and Spaces.*

Having thus far plainly proceeded to Introduce the beginner or learner, I now lead a step further to the Names of the Lines and Spaces, which is a thing very Material in the beginning of learning. For in the *Gam-ut* having seen how the Notes lye together in a Body, it will be proper to know how you must take them into parts according to the several Cliffs, which are three in number, three beginning usually, as most common with the uppermost. And in these your first care will be to learn the Names of the Lines and Spaces, which are opened to you by the Cliff or Key; and these are in number Seven, expressed in the Seven letters, *A. B. C. D. E. F. G.* which for a more perfect Sounds sake, and other reasons to be given, you must pronounce or call *La, B, Ce, D, Lae, Fa, G.* and this *Fa* must be pronounced broad, *\_&c\_.*

These and the like Names the Notes receive for two Reasons; the first is, because the Voice is best sent forth in expressing some Syllable; as likewise that this number of Notes might be known by as many distinct Names, as for their places in the Cliffs: See the Plate following.

[Illustration: Music]

And it will be very necessary, that you should begin with and keep to one *Cliff* at the first, as it pleases you to chuse, or as either of the three best agrees with your Voice for a high or low Pitch.

Having gone through all the Rules, and being perfect in that, then it is fit you should proceed to the other. There is no need you should meddle or trouble your self with the *Tenor* or *C Cliff* because it keeps no certain place; you must observe however, before you go further, to be ready at naming the Lines and Spaces, so readily to tell, as soon as you look on them, what letter any Line or Space is called or named by.

As for the rest, the *Cliff* leads you to them, for beginning there, and Ascending, you will find the letters lying in Order, and in descending; it is only your naming them backwards.

The dash Lines, which you perceive above and below, are added only when the Notes Ascend above the *Staff,* or descend below it.

#### *Directions as to the Distances of one Note from another, as to Sound.*

In this case, the distances are not all equal, but that in the rising and falling of any Eight Notes, there are two lesser distances; and these are named *Semitones,* or the *Half Notes,* which must be well observed and known, in remarking their places in the *Staff* of Lines; and the better to have them in your Memory at all times take a rule from certain Rhimes

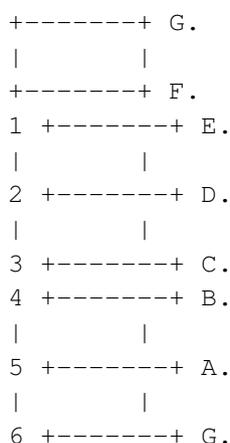
that point at their places, viz.

*In every octave there are half Notes two, Which do to us their proper places shew; One half Note you will find from B to Ce, The other half one lyes twixt Fa and Le.*

The *octave* mentioned as an Eighth, and this Rule denotes the ordinary places where you are to Sing the Half Notes, when there are no Flats or Sharps placed or set in the Lines, viz. between *B* and *Ce*, and twixt *Le* and *Fa*; these Flats and Sharps you will find thus marked [Symbol: for Flat] [Symbol: for Sharp] and when the *Semitones*, or *Half Notes* are shifted, they are known by them when they are found upon the Lines.

[Illustration: Music]

Observe, that in these Staves or Lines, you find the Notes Gradually Ascending, of which the Pairs marked with Arches are half a Note distant.



This Marginal Figure, shews to the Eye the distance of the Seven Notes one from another, the Letters Guiding or Directing to the Particulars, whereas you perceive *B*, *Ce*, and *La*, *Fa*, lying near unto the rest, so must their Sounds be nearer when you come to Tune your Voice in harmony, \_&c.\_ and the better to express with your Voice, and so observe the difference between half and whole distances of Notes; Sing often over these six Mona-Syllables, viz. *One*, *Two*, *Three*, *Four*, *Five*, *Six*, distinctly, as is to be observed in the Tune of Six Bells; and when you have done it many times, Sing only *One*, *Two*, *Three*, *Four*, and there stop, repeating three four by them selves for they are *Semitones* distant in Sound, and the rest are alone, or a whole Note distant each from the next; so that by a little Judicial Observation you will perceive the three and four Bells to be a lesser distant in Sound, than the other.

The Figures or Number 1, 2, 3, 4, 5, 6, in the foregoing Marginal Figures, shew the several distances to the Eye of the Six Notes where *Le* is the first, *D* the Second, \_&c.\_ and the third and fourth, are *Ce*, *B*, distant half a Note or Tune.

*Directions for the Tuning of Notes, &c.*

The properest and most easy way for Tuning your Notes rightly, must be considered either in following the Voice of one skilled in Musick, or Singing, or some such Tuned Instrument, as is accomodated with Frets or Keys, which are the readiest and only ways as yet made use of by Practitioners. That of a Matter being most common, but where none of these can be had by the party desirous to Learn, I shall lay down the following Directions, which will very much Instruct one that hath a Musical Ear, especially such a one as has heard, and can Sing the Notes of the Six Bells, of which, I

presume, there are few, whose Genius Leads them to the Science of Musick, are Ignorant.

Let me put then, Supposing that you can Sing, *One, Two, Three, Four, Five, Six*, right; then shall I by the help of these Notes, proceed to set you further in the right, and lead you to all the rest.

Consider well then, that beginning to Sing the first Note, let it stand on what Line or Space it will, you may Sing it with what Tune you think fit, either higher low, (as to the pitch of your Voice) but with this caution, that you reckon how many Notes you have above or below it, that your Voice in its pitch may be so managed as to reach them both without Squeaking or Grumbling, or any harsh or rough Indecency of Sound.

For applying which six Notes, observe this first Example;

Make your beginning with the first *Bar*, and with a high Voice Sing the *Six Notes* you view on the *Staff* divers times, calling them over by the Number, *viz. One, Two, Three, Four, Five, Six*, as in the foregoing Section; when that is done; Sing the same Notes by their Names, *viz. La, G, Fa, Le, D, Ce*, in the Tune of six Bells.

[Illustration: Music]

2. In the Second and third *Bars*, you must Sing the two first Notes of the six by themselves, forward and backward: Repeat all six in the fourth *Bar*, and in the fifth and sixth *Bars*, let the two last Notes be repeated, *viz. D, Ce*, forward and backward, and these Notes are a whole Tone distant, and by often repeating these Notes in the second, third fourth and fifth *Bars*, you will be better capable to know and distinguish their distance from the Letter.

[Illustration: Music]

In the Seventh *Bar* repeat the last three often over after all the six. First, down, *Le, D, Ce, Le, D, Ce, &c.* and then proceed backwards, as *Ce, D, Le, Ce, D, Le, &c.*

[Illustration: Music]

Observe in this Eighth *Bar* after all six often to repeat the four first, as, *La, G, Fa, Le*, and when you sing them particularly, observe the two Notes *Fa, Le*, by reason their distance is a *Semitone*; wherefore you must take notice in the Ninth *Bar* to Sing them by themselves so many times as you can conveniently fix them in your Memory, as to their distance, for in this you will find it somewhat difficult to Sing the half Notes true in their proper places.

[Illustration: Music]

Observe here in the tenth *Bar* to Sing the four first Notes in their order downwards and upwards, and in the Eleventh *Bar* you must first Sing the six Notes in their proper order: After this repeat the four last Notes, *viz. Fa, Le, D, Ce*, taking Notice to leave out the two first Notes, *viz. La, G*, continually observing to Mark the *Semitone* between *Fa, Le*, which two Notes you must Sing by themselves in the Twelfth *Bar*.

[Illustration: Music]

Take notice now further, that in the thirteenth *Bar* you Sing *Fa, Le, D, Ce*, down and up, as you find them pricked, and observe especially the three last, *viz. Fa, Le, Fa*, for this reason, *viz.* that it is a common close or ending of Tunes.

Also observe, if in any place you doubt you Sing right a repeated part of the six Notes, premised as are noted in the Eleventh and Thirteenth *Bars*: Let all the six Notes be Sung over again in order, and so proceed distinctly to try at the Parts themselves.

The Second Example.

[Illustration: Music]

You having now gone over the former Examples, must proceed by the same clue of Six Notes to descend three Gradations or Steps lower, *viz.* to *G*. which is to the Second Note of the first six, an *Octave* or Eighth.

First then, in the first *Bar* you must begin with a high pitch in your Voice, and so having Sung, as in the former Examples, *La, G, Fa, Le, D, Ce*, leave out *La*, and only Sing the Five last: Then repeat only three in the Second *Bar*, *viz.* the three last *La, D, Ce*, calling them now not by those names, but by that of *One, Two, Three*, and though the names are altered, you must not alter the Tune or Tone.

Having thus proceeded, observe in the third *Bar* to Sing the Six Notes from *Le*, to *G*, naming them as the Bells *One, Two, Three, Four, Five, Six*; In such a manner, that the three first of these be in Tune, the same with the three last of the former Six; after, as I said, you have Sung them as the Bells, *viz. One, Two, Three, Four, Five*, at least four or five times, then as often Sing them again by their proper Names, *viz. Le, D, Ce, B, La, G*.

Observe again, that in the fourth *Bar* you Sing the four first Notes, *La, D, Ce, B*, about four times over; after that repeat *Ce, B*, by themselves taking good notice of their distance or differences, which is a *Semitone* like to *Fa, Le* above, \_&c.\_

Consider once more, as to this Example, as to the fifth *Bar* after all the six are Sung by you, repeat the last four, *viz. Ce, B, La, G*, do it often over, keeping them up in the same Tone they had in all six, by which means *Ce* and *B* will be distant half a Note, whereupon Sing them backward, *viz. G, La, B, Ce*, and at the end repeat *D Ce*, as you did *Le Fa* at the thirteenth *Bar* before set down.

[Illustration: Music]

Observe further now in these Six *Bars*, that when you have Sung all six in order, Sing the three first *Le, D, Ce*, and there stop; then proceed to Sing those three over again in the same Tune, nor calling them *Le, D, Ce*, but *Three, Four, Five*; do it several times, and so proceed to the Seventh *Bar*, adding two Notes above, and Sing them on the five Bells, *viz. One, Two, Three, Four, Five*, three or four times; then call them by their names, *viz. G, Fa, Le, D, Ce*, then proceed to the Eighth *Bar*, and add to the other five *D, La, G*, to make up an *Octave*, keeping in your Mind the distances, as you Sing them in the former Examples; and by this means you have the whole *Octave* or Eight Notes from *G* to *G*, which must be practised down and up, and when you are perfect in it, so as to Sing your distances true with the *Semi-tones* in their right places, the following directions will lead you through the rest of the Notes to Sing any other *Octave*, beginning at any other Letter.

[Illustration: Music]

Begin at *Le* again in the Ninth *Bar*, and begin the six Notes, *viz. Le, D, Ce, B, La, G*, in proper order, that done, repeat the two last Notes, *viz. La, G*, by themselves: so proceed to the tenth *Bar*, and Sing *La, G, Fa, Le, D, Ce*, so that *La* and *G*, may be the same in Tune as you found them in the former Six; and if so be your Voice will not reach *Ce*, at the pitch you began the first *Bar*, then Sing as far as you can, or begin at *Le*, at the ninth *Bar* higher, Singing these three last *Bars* distinctly from the Foregoing.

[Illustration: Music]

In the Eleventh Bar you must Sing backward, your six last Notes, *viz. Ce, D, Le, Fa, G, La.* rising from *Ce*, to *La*, so going one step Backward to *G*, rise to *Ce*, as in the foregoing fifth Bar, which is an *Octave* to the lower *Ce*. And thus much may suffice for the Beginner to practice on, which, if well understood, will bring him in to Sing Notes in any Tune.

### *Of COCK-FIGHTING.*

Herein let us first observe the choice of a *Cock* of the Game, directed by these four Characters following: That he be:

1. Of a strong *Shape*, proud and upright, and for this the *Middle-sized*, neither too small or too large, is best, because most matchable, strong and nimble. His *Head* small like a *Sparrow-Hawks*; his *Eye* large and quick; *Back* strong crook't at the setting on, and coloured as the Plume of his Feathers; the *Beam of his Leg* very strong, and colour'd as his Plume; *Spurs* long, rough, and sharp, hooking inward.
2. Of a good *Colour*, and herein the Gray, Yellow, or Red Pyle, with a black Breast, are to be preferred; the Pyde rarely good, and the White and Dun never. A Scarlet Head is a demonstration of Courage, but a Pale and wan of Faintness.
3. Of *Courage true*, which you shall observe by his proud, stately, upright landing and walking, and his frequent Crowing in his Pen.
4. *Of a sharp and ready Heel*, which (in the Opinion of the best *Cock-masters*,) of high Estimation; a *Sharp-heel'd Cock*, tho' somewhat false, is better (as dispatching his business soonest) than a true *Cock* with a dull *Heel*.

For *Breeding*, the Best season is from the Moon's encrease in *February*, to her encrease in *March*. The *March* Bird is best. And now first get a *perfect Cock*, to a *perfect Hen*, as the best *Breeding*, and see the *Hen* be of an excellent Complexion (*i.e.*) rightly plumed, as black, brown, speckt, grey, grissel, or yellowish; tufted on her Crown, large bodied, well poked, and having Weapons, are Demonstrations of Excellency and Courage. Observe further her Comportment, if Friendly to her Chickens, and revengeful of Injuries from other Hens.

When the *Cock* and *Hen-Chickens*, (going till now promiscuously one with another) begin to quarrel and peck each other, part them and separate their Walks: And the best for a Fighting *Cock*, are private and undisturbed Walks, as, *Wind-mills*, *Water-mills*, *Grange-houses*, *Park-lodges*, &c. and their *Feeding-place* on soft Ground, or Boards; and have for his meet, *white Corn*, or *White-bread Tosts*, steeped in Drink, or Urine, is good, both to Scower, and Cool them. And do not debilitate and debauch his Courage and Strength, by having too many *Hens* to walk with; three *Hens* are enough for one *Cock*.

If before they be six Months Old, any of your *Chickens* Crow clear and loud, and unseasonable, then to the Pot or Spit with them, they are Cowards; the true *Cock* is long ere he gets his Voice, and when he has gotten it, keeps good and judicious Time in Crowing.

Next observe your *Roosting Perch*, for this makes or mairs a *Cock*; for forming of which, consult the best *Cock-masters* Feeding pens, and the Perches there, and accordingly proportion your own; take care that the Ground underneath the Perch be soft, for if it be rough and hard, in leaping down he will hurt his Feet, and make them Gouty and Knotty.

For the *Dieting*, and *Ordering* of your *Cock* for Battle, observe these Rules. Let your *Cock* be full two years Old, then in the latter end of *August*, take up and Pen him, (it being now *Cocking-time* till the end of *May*) and see that he be sound, hard feather'd, and full summed.

The first four days after Penning, Feed him with the Crumb of Old *Manchet* cut into square bits, thrice a day, and with the Coldest, and Sweetest Spring-water that can be had. And after you think by this time he is thoroughly purged of his *Corn, Worms, Gravel,* and other course Feeding, take him in the Morning out of the Pen, and let him *Sparr* with another *Cock* some time to heat and chafe their Bodies, break Fat and Glut, and fit them for Purgation; first having covered their Spurs with Hots of Leather, to hinder their Wounding and drawing Blood of one another.

After they have sufficiently *Sparred*, that they pant again, take them up, and remove their Hots, and prepare them for a Sweating Bout thus: Take *Butter,* and *Rosemary,* finely chopt, and *White-sugar-candy,* mixt together; and give them the quantity of a *Wallnut;* which will Scower, strengthen, and prolong Breath: Then having (purposely) deep *Straw Baskets,* fill them half way with *Straw,* put in your *Cock,* and cover him with *Straw* to the top; lay the lid close, and let him stove till the Evening. At Five a Clock take him out, and lick his Head and Eyes with your Tongue, then Pen him, and fill his Trough with *Manchet* and hot *Urine.*

After this, take a Gallon of *Wheat,* and *Oatmeal-flower,* and with *Ale,* half a score *Whites* of *Eggs,* and *Butter,* work it into a stiff *Past;* bake it into broad *Cakes,* and when four days Old, cut it into square Bits.

The Second day after *Sparring,* bring your *Cock* into a Green-close, and shew him in your Arms a *Dung-hill-cock,* then run from him, and allure him thus to follow, suffering him now and then to strike the *Dung-hill-Cock,* and so Chase him up and down for half an Hour, till he pants again; and thus Heated, carry him home, and scour him with half a Pound of *Fresh-butter,* beaten with the Leaves of the *Herb of Grace, Hysop,* and *Rosemary,* to the consistence of a *Salve,* and give him the quantity of a *Wallnut;* then *Stove,* and *Feed* him as above. And thus for the first Fortnight, Spar or Chase him every other day.

The second Fortnight, twice a Week will be enough to Chase or Spar your *Cock:* Observing that you Stove and Scour him, proportionable to his Heating.

The third and last Fortnight (for six Weeks is long enough) feed him as before, but do not Spar him, but Chase him moderately twice, or thrice, as before; then roll his aforesaid scouring in *Brown-sugar-candy,* to prevent his being Sick; rest him four days, and then to the Pit.

Now Gentlemen, Match your Cock carefully, or what you have hitherto done, is nothing. And here observe the Length, and Strength of Cocks. The Length is thus known: Gripe the Cock by the Waste, and make him shoot out his Legs, and in this Posture compare, *And have your Judgment about you.* The Strength is known by this Maxim, *The largest in the Garth, is the Strongest Cock.* The Dimension of the *Garth* is thus known: Gripe the *Cock* about from the joynts of your Thumb, to the Points of your great Finger, and you will find the Disadvantage, *The weak long Cock is the quickest easier Riser, and the short strong one, the surest Striker.*

Thus being well Matcht, accoutre him for the Pit. Clip his *Main* off close to his Neck, from his head to his shoulders. Clip his Tail close to his Rump, the Redder it appears the better. His wings sloping, with sharp Points; scrape smooth, and sharpen his Spurs; leave no feathers on his Crown; then moisten his head with Spittle.

The Battle done, search and suck your Cocks wounds, and wash them well with hot *Urine,* then give him a Roll of your best Scouring, and stove him for that Night. If he be swelled, the next morning, suck and bathe his Wounds again, and pounce them with the Powder of the Herb *Robert,* through a fine Bag; give him an handful of Bread in warm *Urine,* and stove him, till swelling be down. If he be hurt in his Eye, chew a little ground *Ivy,* and Spit the Juice in it; which is good for *Films, Haws, Warts, &c.* Or if he hath *veined* himself in his fight, by narrow striking, or other cross blows, when you have found the hurt, bind the soft Down of Hair to it, will cure it.

When you visit your wounded *Cocks*, a month or two after you have put them to their Walks, if you find about their heads any swollen Bunches, hard and blackish at one end, then there are unsound Cores undoubtedly in them; therefore open them, and with your Thumb crush them out, suck out the Corruption, and fill the holes with fresh Butter; and that will infallibly cure them.

*Cures for Distempers incident to the Cock or Chick of the Game.*

For *Lice*, being most common, I begin with; proceeding from corrup Meat, and want of Bathing, \_&c.\_ Take *Pepper* beaten to Powder, mix it with warm Water, and wash them with it.

For the *Roup*; a filthy swelling on the Rump, and very contagious to the whole body; the staring and turning back of the Feathers is its Symptom. Pull away the Feathers, open and thrust out the Core, and wash the Sore with Water and Salt, or Brine.

For the *Pip*; visit the mouth, and examine what hinders your *Cocks*, *Hen*, or *Chicks* feeding, and you'll find a white thin Scale on the Tip of the Tongue, which pull off with your Nail, and rubbing the Tongue with Salt, will cure it.

For the *Flux*; proceeding from eating too moist Meat, give them Pease-Bran scalded, will stop it.

For the *Stoppage of the Belly*, that they cannot mute; anoint their Vents, and give them either small bits of Bread or Corn, steep'd in *Urine* of Man.

And now I have one Word of Advice to him that is a Lover (or would be so) of this *Royal-Sport*: and then have done: *Come not to the Pit without Money in your Breeches, and a Judgment of Matches*; Done and Done is *Cock-Pit* Law, and if you venture beyond your Pocket, you must look well to it, or you may lose an Eye by the Battle.

*Of FOWLING.*

The *Ingenious Fowler*, like a Politick and sagacious Warriar, must first furnish and store himself with those several Stratagems and Engines, as suit with the diversities of *Occasion*, *i.e.* *Time*, *Place*, and *Game*; or else he cannot expect the *Conquest*.

And first of *Nets*, which must be made of the best Pack-thread; and for taking great *Fowl*, the Meshes must be large, two Inches at least from point to point, the larger the better; (provided the *Fowl* creep not through;) two Fathom deep, and six in length, is the best and most manageable Proportion; Verged with strong Cord on each side, and extended with long Poles at each end made on purpose. But for small *Water-fowl*, let your Nets be of the smallest and strongest Pack-thread, the Meshes so big, as for the great *Fowl*, about two or three foot deep: Line these on both sides with false Nets, every Mesh a foot and half Square. For the *Day-Net*, it must be made of fine Pack-thread, the Mesh an Inch square, three Fathom long, and one broad, and extended on Poles according to its Length, as aforesaid.

*Birdlime* is the next, and thus made. Pill the Bark of *Holly* from the Tree at *Midsummer*, fill a Vessel, and put to it running Water; boil it over the Fire till the Grey and White Bark rise from the Green; take it off the Fire, drain the Water well away, and separate the Barks; and take the Green, lay it on some moist floor and close place, and cover it with Weeds; let it lye a fortnight, and in that time it will rot, and turn to a Filthy slimy Substance: Then put it into a Morter, beat it well; take it out and wash it at some running stream, till the Foulness is gone: Then put it in a close Earthen pot; let it stand Four or Five days, look to its Purging, and scum it: When clean, put it into another Earthen Pot, and keep it close for Use.

Your *Setting-Dog* must be Elected and Train'd thus: He must be of exquisite Scent, and love naturally to hunt Feathers. The land Spaniel is best, being of good nimble size, and Courageous mettle, which you may know by his Breed; being of a good Ranger, *&c.*

The first lesson is, to make him *Crouch and lie down* close to the ground; its done by frequent laying him on the ground and crying *Lye close*; upon his doing well reward him with Bread; and on the contrary chastise him with Words, not Blows.

Next, *To creep to you with his Body and Head close upon the Ground* by saying, *Come nearer, Come nearer*, or the like Words; to understand and do it, entice him with shewing him Bread, or the like: Thrusting down any rising part of his Body or Head, and roughly threatning him; if he slight that, a good Jerk or two with a slash of Whip-cord will reclaim his Obstinacy. Repeat his Lessons, and encourage his well doing. And this you may exercise in the Fields as you walk, calling him from his busie Ranging to his Duty. And then teach him to follow you close at the heels in a Line or string, without straining.

By this time he is a Year old, now (the season fit) into the Field, and let him range, [obediently.] If he wantonly babble or causelesly open, correct him by biting soundly the Roots of his Ears, or Lashing. Assoon as you find he approaches the Haunt of the *Partridge*, known by his Whining, and willing, but not daring, to open, speak and bid him, *Take heed*: If notwithstanding this he rush in and Spring the *Partridge*, or opens, and so they escape, correct him severely. Then cast him off to another Haunt of a *Covy*, and if he mends his Error, and you take any by drawing your Net over them swiftly, reward him with the Heads, Necks, and Pinions.

As for the Water-Dog, the instructions above for the *Setter* will serve; only to fetch and bring by losing a Glove, or the like; keep a Strict Subjection in him, and Observance to your Commands.

The longest *Barrel is the best Fowling Piece*, Five and half, or six foot long, with an indifferent Bore, under an *Harquebuse*; and shooting with the Wind, and side-ways, or behind the Fowl, not in their Faces, is to be observed; having your Dog in Command not to stir till you have shot.

A *Stalking-Horse* for shelter, to avoid being seen by the shie Fowl, is an old Jade trained on purpose; but this being rare and troublesome, have recourse to Art, to take Canvas stuf and painted in the shape of a Horse grazing, and so light that you-may carry him on one hand (not too big:) Others do make them in the shape of *Ox, Cow*, for Variety; and *Stag, Trees, &c.*

The *great Fowl*, or those who divide the Foot, reside by shallow Rivers sides, Brooks and Plashes of Water; and in low and boggy places, and sedgie, Marish, rotten Grounds. They also delight in the dry parts of drowned Fens, overgrown with long Reeds, Rushes and Sedges; as likewise in half Fens drowned Moors, hollow Vales or Downs, Heaths, *&c.* Where obscurely they may lurk under the Shelter of Hedges, Hills, Bushes, *&c.*

The lesser, or Web footed, *Fowl*, always haunt drowned Fens, as likewise the main streams of Rivers not subject to Freeze, the deeper and broader, the better; (tho' of these the *Wild-Goose* and *Barnacle*, if they cannot sound the depth, and reach the Ouze, change their Residence for shallow places, and delight in Green Winter Corn, especially if the Lands ends have Water about them:) Small Fowl also frequent hugely little Brooks, Ponds, drowned Meadows, Pastures, Moors, Plashes, Meres, Loughs, and Lakes, stored with unfrequented Islands, Shrubs, *&c.*

*How to take all manner of Fowl or Birds.*

For taking the first (I mean the greater Fowl) with Nets, observe in general this: Come two hours before their feeding hours, Morning and Evening; and Spreading your Net on the Ground smooth and flat, stake the two lower ends firm, and let the upper ends be extended on the long Cord; of which the further end must be fastned to the Ground, three Fathoms from the Net, the Stake in a direct Line with the lower Verge of the Net; the other, ten or twelve fathom long, have in your hand at the aforesaid distance, and get some shelter of Art or Nature, to keep you from the curious and shy Eye of the Game; having your Net so ready that the least pull may do your work, strew'd over with Grass as it lies to hide it: A live *Hern*, or some other Fowl lately taken, according to what you seek for, will be very requisite for a Stale. And you will have sport from the Dawning, till the Sun is about an hour high; but no longer; and from Sun-set till Twilight; these being their feeding times.

For the small (Water) Fowl. Observe the Evening is best before Sun-set. Stake down your Nets on each side the River half a foot within the Water, the lower part so plumb'd as to sink no further; the upper Slantwise shoaling against, but not touching by two foot, the water, and the Strings which bear up this upper side fastned to small yielding sticks prickt in the Bank, that as the Fowl strike may ply to the Nets to intangle them. And thus lay your Nets (as many as you please) about twelve score one from another, as the River or Brook will afford. And doubt not your success. To expedite it however, a Gun Fired three or four times in the Fens and Plashes, a good distance from your Nets, will affright and Post them to your Snares; and so do at the Rivers, when you lay in the Fens.

Winter time is the most proper for taking all manner of Small Birds, as flocking then promiscuously together, *Larks*, *Lennets*, *Chaffinches*, *Goldfinches*, *Yellow-Hammers*, &c. with this *Bird-lime*, Put to a quarter of a Pound of *Bird-lime*, an ounce of fresh *Lard*, or *Capons-grease*, and let it gently melt together over the Fire, but not Boyl; then take a quantity of *Wheat-ears*, as you think your use shall require, and cut the straw about a foot long besides the Ears, and from the Ear lime the straw six Inches; the warmer it is, the less discernible it will be. Then to the Field adjacent, carrying a bag of Chaff, and thresh'd Ears, scatter them twenty Yards wide, and stick the lim'd ears (declining downwards) here, and there; Then traverse the Fields, disturb their Haunts, and they will repair to your Snare, and pecking at the Ears, finding they stick to them, mount; and the Lim'd straws, lapping under their Wings, dead their flight, they cannot be disengaged, but fall and be taken they must. Do not go near them, till they rise of their own accord, and let not five or six entangled lead you to Spoil your Game, and incur the loss of Five or Six dozen.

*Lime-Twigs*, is another Expedient for taking of great Fowl, being Rods that are long, small, strait, and pliable, the upper part apt to play to and fro; being besmeared with *Bird-lime* warm. Thus to be used, Observe the Haunts of the Fowl, have a Stale, (a living Fowl of the same kind you would take) and cross pricking your Rods, one into, and another against the Wind sloping, a foot distant one from the other; pin down your Stale, some distance from them, tying some small string to him, to pull and make him flutter to allure the Fowl down. If any be caught, do not run presently upon them, their fluttering will encrease your Game. A well taught *Spaniel* is not amiss to retake those that are entangled, and yet flutter away. Thus likewise for the Water; consult the Rivers depth, and let your Rods be proportionable; what is Lim'd of them being above the Water, and a *Mallard*, &c. as a Stale placed here and there, as aforesaid. You need not wait on them, but three times a day visit them, and see your Game; if you miss any Rods (therefore know their Number) some Fowl entangled is got away with it, into some Hole, \_&c.\_ and here your *Spaniel* will be serviceable to find him.

For *Small-birds*, a *Lime-bush* is best; thus, Cut down a great Bough of a *Birch*, or *Willow-tree*, trim it clean, and Lime it handsomely, within four Fingers of the bottom: Place this Bush so ordered, in some quick-set, or dead *Hedge*, in Spring time: In Harvest, or Summer, in *Groves*, *Bushes*, *Hedges*, *Fruit-trees*, *Flax*, and *Hemp-Lands*: In Winter, about *Houses*, *Hovells*, *Barns*, *Stacks*, &c. A *Bird-call* is here also necessary, or your own industrious skill in the Notes of several Birds.

And because Gentlemen who have Fish-ponds, wonder they lose so many Fish, and are apt to Censure sometimes undeservedly their Neighbours, when it is the insatiable *Hern*, that is the true cause: I shall next lay down the best and

most approved way of taking the great Fish-devouring *Hern*, whose Haunt having found, observe this Method to take him. Get three or four small *Roaches*, or *Dace*, take a strong Hook, (not too rank) with Wyre to it, and draw the Wyre just within the skin, from the side of the Gills, to the Tail of the said Fish, and he will live four or five days, (If dead the *Hern* will not touch it.) Then have a strong Line, of a dark Green-silk, twisted with Wyre, about three Yards long, tie a round stone of a pound to it, and lay three or four such hooks, but not too deep in the Water, out of the *Herns* wading; and two or three Nights will answer your Expectation.

*The several ways of taking Pheasants.*

You must learn and understand the several Notes of a Natural *Pheasant-Call*, and how usefully to apply them. In the Morning just before or at *Sun-rising*, call them to feed, and so at *Sun-setting*: In the Forenoon, and Afternoon, your Note must be to Cluck them together to Brood, or to chide them for straggling, or to notify some danger at hand.

Thus skilled in their Notes; and by the Darkness, Solitaryness, and strong undergrowth of the place assured of their Haunts, closely lodge yourself, and softly at first call; lest being near you, a loud Note affright them; and no Reply made, raise your Note gradually, to the highest; and if there be a *Pheasant* in hearing, he will answer you, in as loud a Note. Be sure it be Tunable. As soon as you are answered, creep nearer to it; if far off, and a single Fowl, as you call, and approach, so will the *Pheasant*. Having gotten sight of her, on the Ground, or Perch, cease calling, and with all silence possible, spread your Net conveniently, between the *Pheasant*, and you, one end of the Net fastned to the Ground, and the other end, hold by a long Line in your hand, by which you may pull it together, if strained; then call again, and as you see the *Pheasant* come under your Net, rise and shew your self, and affrighting her, she will mount, and so is taken. Thus if on the contrary you have divers Answers, from several *Corners*, of the *Coppice*, and you keep your place and not stir, they will come to your Call; and then having a pair of Nets, spread one on each side, and do as before. Your Nets, must be made of Green or Black double-twin'd Thread, the Mesh about an inch square, between Knot, and Knot, the whole Net about three Fathom long, and Seven foot broad, verged with strong small Cord on each side and ends, to lye hollow and compass-wise.

The next way of taking *Pheasant-Powts*, is by Driving, thus. Having found the Haunt of an *Eye of Pheasants*, known by the *Barrenness* of the Place, *Mutings* and loose Feathers, then in the little Pads and Wayes, like Sheep tracks, they have made, place your Nets (taking the Wind with you) a-cross these Paths hollow, loose and circularly, the nether part fixt to the Ground, and the upper side hollow, *&c.* as aforesaid: Then to their Haunt, and there call them together, if feathered; then with a Driver, an Instrument like that of *Cloath-dressers*, rake gently the Bushes and Boughs about you, the *Powts* will run, and stop and listen; then give another rake, and so you will drive them like sheep into your Nets: Observe in this *Secrecy*, *Time* and *Leisure*, or you spoil your Sport; *Secrecy* in concealing your self from being seen by them; and *Time* and *Leisure*, by not being too hasty.

Lastly for taking *Pheasants* with the *Lime-Bush*, or Rods, order these, as I have before prescribed; your Rods about twelve inches long, and your Bush containing not above eight Twigs, with a pretty long Handle, sharpned to stick in the Ground, or Bushes, Shrubs, *&c.* and let it be planted as near the *Pheasants pearching Branch*, as may be. Place your Rods on the Ground, near the Bush; for when some are taken below by they Rods, they will scare up the others to get on the Bushes to seek what's become of their Fellows, and there become your Prey themselves.

*For taking Partridge.*

You must first find the *Partridges* Haunt. Which is mostly in standing Corn-Fields, where they breed; as likewise in Stubble after the Corn is cut, especially Wheat-stubble till it is trodden, and then they repair to Barley-stubble, if fresh; and the Furrows amongst the Clots, Brambles and long Grass, are sometimes their lurking places, for Twenty and upward in a Covy. In the Winter in up-land Meadows, in the dead Grass or Fog under Hedges, among Mole-hills; or under the

Roots of Trees, &c. Various and uncertain are their Haunts. And tho' some by the Eye, by distinguishing their Colour from the Ground, others by the Ear, by hearing the Cock call earnestly the Hen, and the Hens answering, and chattering with Joy at meeting, do find *Partridge*; yet the best, easiest and safest way of finding them is (as you do the *Pheasant*) by the Call or Pipe: Notes seasonable, as before prescribed, and they will come near to you, and you may count their Numbers; and to your sport.

Surround your Covy, prepare your Nets, and pricking a stick fast in the ground, tye the one end to it, and let your Nets fall as you walk briskly round without stopping, and cover the *Partridge*; then rush in upon them to frighten them, and as they rise they are taken.

For taking them with *Bird-Lime*, thus: Call first near the *Haunt*; if answered, stick about your *Lime-straws*, a-cross in ranks at some distance from you; then call again, and as they approach you, they are intercepted by the Straws; and so your Prey. This way is used most successfully in Stubble-fields, from *August* to *September*: And Rods in Woods, Pastures, &c. as for the *Pheasant*.

The most pleasant way of taking Partridge is with a *Setting-Dog*, who having set them, use your Net; and by these Rules and Method, the *Rails*, *Quales*, *Moorpoots*, &c. are to be taken; and are for *Hawks* flight too. And here I must make an end of the most material part of *Fowling*.

#### Of FISHING.

It has been the Method of this whole Treatise, to divide the several distinct Heads of each Recreation into three Parts, to render the Observations and Rules the more plain and easy, for the prosecuting the Recreation we treat of.

1. *What* it is we pursue.
2. *Where* and *When* to find that we would delight our selves in.
3. *With what* proper *Mediums* or Measures we may obtain the desired Effects of our endeavours therein.

First then, *What* we pursue is Fish, distinguish'd according to their sundry kinds by these following Names.

The *Barbel*, *Bream*, *Bleak*, *Bulhead*, or *Millers-thumb*; *Chevin*, *Char*, *Chub*, *Carp*; *Dace*; *Dare*; *Ele*; *Flounder*; *Grayling*, *Gudgeon*, *Guiniad*; *Loach*; *Minnow*; *Pope* or *Pike*, *Pearch*; *Rud*, *Roach*; *Sticklebag* or *Bansticle*, *Salmon*, *Shad*, *Suant*; *Tench*, *Torcoth*, *Trout*, *Thwait*, and *Umber*. All these Alphabetically thus named are the different sorts of Fish, in taking which the Angler commonly exercises his Art. We come next, *Where* to find them.

1. To know the Haunts and Resorts of Fish, in which they are to be usually found, is the most Material thing the Angler ought to be instructed in, lest he vainly prepare *how to take* them, and preposterously seek *where to find* that he prepar'd for. To prevent which you are first to understand, That as the season of the Year is, so Fish change their places: In *Summer*, some keep near the top, others the bottom of the Waters. In *Winter*, all Fish in general resort to deep Waters. But more particularly,

The *Barbel*, *Roach*, *Dace*, and *Ruff*, covet most *Sandy*, *Gravelly Ground*, the deepest part of the River, and the shadows of *Trees*.

*Bream*, *Pike*, and *Chub* delight in a *Clay*, and *Owzie Ground*: The *Bream* chooseth the middle of the River, in a gentle, not too rapid Stream: The *Pike* preferreth still Waters, full of *Fry*, and absconding himself amongst *Bull-rushes*,

*Water-docks*, or under *Bushes*, that under these shelters he may more securely surprize and seize his Prey: The *Chub* too chooses the same Ground, large Rivers and Streams, and is rarely destitute of some Tree to cover and shade him.

*Carp*, *Tench* and *Eel*, frequent foul muddy still Waters. The greatest *Eels* lurk under stones, or Roots; the smallest ones are found in all sorts of Rivers or Soils: The *Carp* is for the deepest stillest part of Pond or River, and so is the *Tench*, and both delight in green Weeds.

*Pearch* delighteth in gentle Streams of a reasonable Depth, not too shallow; close by a hollow Bank is their common Sanctuary.

*Gudgeon* covets Sandy, Gravelly, Gentle Streams, and smaller Rivers; not so much abounding in Brooks. He bites best in Spring, till they spawn, and a little after till *Wasp* time.

The *Salmon* delights in large swift Rivers, which ebb and flow; and are there plentifully to be found: As likewise Rocky and Weedy Rivers. But in the latter end of the Year he is to be found high up in the Country, in swift and violent Cataracts, coming thither to spawn.

The *Trout* loves small swift purling Brooks or Rivers, that run upon Stones or Gravel, and in the swiftest deepest part of them, getteth behind some Stone-block and there feeds. He delights in a Point of a River where the Water comes Whirling like the Eddy, to catch what the Stream brings down, especially if he has the shade of a Tree: He hugely delights to lurk under some hollow Bank or Stone; seldom among Weeds.

*Shad*, *Thwait*, *Plaice*, *Peel*, *Mullet*, *Suant*, and *Flounder*, covet chiefly to be in or near the Salt or Brackish Waters, which ebb and flow: The last, *viz.* the *Flounder*, have been taken in fresh Rivers, as coveting Sand and Gravel, deep gentle streams, near Banks, *&c.*

Lastly the *Umber* affects Marly Clay Ground, clear and swift Streams, far from the Sea; the greatest Plenty of these Fish is found in *Darbyshire* and *Staffordshire*.

Thus much for the Haunts of Fish; I come next to know *When* is the most *seasonable time* to catch them; which before I speak to, let him that would become a compleat Angler, take this Rule. That he observe narrowly what Pond or River soever he Fisheth in, whether it be slimy, muddy, stony or gravelly, whether of a swift or slow Motion; as likewise that he know the Nature of each Fish, and what Baits are most proper for every kind: Not to let his Knowledge be circumscribed to one or two particular Rivers, whither he is invited to Angle and take his Observations by the Vicinity of his House; but to let his Knowledge be *general*, and consequently his Sport will be so too. His Ignorance otherwise will oblige him to be a Spectator in another River, when his Excellency is confined to that only experienced one in or near his own Parish or House. But to proceed,

II. To understand the best *Time when* to Angle in, We must first consider Affirmatively, when most *Seasonable*: Or, 2. Negatively, when *Unseasonable*.

1. *Seasonable* Angling is, when the Weather is calm, serene and clear; tho' the Cool cloudy Weather in Summer is to be preferred, provided the Wind blow not too boistrously, to hinder your easy Guiding your Tools; In the hottest Months the cooler the better.

2. When a Violent shower hath disturbed the Water and mudded it, then with a Red Worm, Angle in the Stream at the Ground.

3. A little before Fish spawn, when they repair to gravelly Fords to rub and loosen their full Bellies; they bite freely.
4. From Sun-rising till eight of the Clock in the Morning, and from four in the Afternoon till night for *Carp* and *Tench*. In *June* and *July*, *Carp*s shew themselves on the very rim of the Water, then Fish with a Lob-worm, as you would with a Natural Fly. But be sure to keep out of sight.
5. In *March*, *April*, and *September*, and all Winter, when the Air is clear, serene and warm. And after a shower of Rain, which hath only beaten the *Gnats*, and *Flies* into the River, without muddying. The two first mentioned Months with *May*, and part of *June*, are most proper for the *Fly*; Nine in the Morning, and Three a Clock in the Afternoon, is the best time; as likewise, when the *Gnats* play much in a warm Evening.
6. In a *Cloudy*, and *Windy* day, after a Moonshine clear Night, for the brightness of the Night (through fear) making them abstain from feeding, and the Gloominess of the Day emboldening and rendering them (through Hunger) sharp, and eager upon food, they bite then freely.
7. Lastly, at the opening of *Milldams* or *Sluces*, you will find *Trouts*, &c. come forth seeking food, brought down by the Water. We come next to demonstrate the time not proper, *i.e.*

2. *Unseasonable* Angling, in short is, when the Earth is parched, and scorched with Vehement Heat, and Drought; benumbed and frozen with Cold, Frost, and Snow; or refrigerated with Spring Hoar-Frosts; or blasted with the sharp, bitter, nipping, North, or East Winds: Or when blustering *Boreas* disorders your well guiding your Tackling; or the *Sheep-shearers Washings* glutted the Fish, and anticipated your Bait; when the withdrawing of your Sport, foretells a Storm, and advises you to some shelter; or Lastly, when the night proves Dark, and Cloudy, you need not trouble your self the next day, 'tis to no purpose, \_&c.\_

III. For providing *Stocks*, the best time is the Winter *Solstice*, when the Sap is in the Roots of Trees, and their Leaves gone. It is improper after *January*, the Sap then ascending into the Trunk, and expending it self over all the Branches. See that your Stocks be *Taper-grown*, and your Tops of the best *Ground-Hazle*, that can be had, smooth, slender, and strait, of an Ell long, pliant and bendings and yet of a strength, that a reasonable jerk cannot break it, but it will return to its first straightness; left otherwise you endanger your Line. Keep them two full years, before you use them; having preserved them from Worm-eating, or Rotting, by thrice a year rubbing, and chaffing them well with Butter (if sweet) or Linsed or Sallet-Oyl; and if Bored, Oyl poured into the Holes, and bathed four and twenty hours in it, and then thrown out again, will exceedingly preserve them.

The line, to make it neat, handsom and strong, twist the Hair you make it of *even*, having seen if the Hair be of an equal bigness; then steep your Line in Water, to see if the Hairs shrink, if so, you must twist them over again. The Colour of the Hair is best of *Sorrel*, *White* and *Grey*; *Sorrel* for muddy boggy Rivers, and the two last for clear Waters. Nor is the *Pale watery green* contemptible, died thus: Take a pint of strong *Ale*, half a pound of *Soot*, a little of the Juice of *Walnut-Leaves* and *Allum*; Boil these together in a Pipkin half an hour, take it off, and when 'tis cold, put in your Hair. In making your Line of Hair mix not Silk; but either all Hair, or all Silk; as likewise distinguish the Line for the Ground Angle, and that for the Fly-rod, the last must be stronger than the first; in that for the Artificial Fly, making the uppermost Link twenty Hairs long, less in the next, and so less till you come to the Fly. Lastly at each end of your Line make a Loop (called a *Bout*) the one larger, to fasten to, and take it from the top of your Rod, and the other Lesser to hang your Hook-line on.

Your Hook must be long in the shank, something Round in compass, the point strait and even, and bending in the shank. Set on your Hook with strong small Silk, laying your Hair on the inside of the Hook.

Your *Flote* challenges divers ways of making. Some using *Muscovy* Duck quills for still Waters. Others the best sound Cork without flaws or holes, bored through with a hot Iron, and a Quill of a fit proportion put into it; then pared into a pyramidal Form, or in the fashion of a small Pear, to what bigness you please, and ground smooth with Grindstone or Pumice; this is best for strong Streams.

In fine, *To plum the Ground*, get a *Carbine* Bullet bored through, and in a strong twist hanged on your *Hook* or Rod. To sharpen your *Hook*, carry a little *Whetstone*. To carry your several utensils without incommoding your Tackle, have several *Partitions* of Parchment. And in short the ingenious Angler will not be unprovided of his *Bob* and *Palmer*; his Boxes of all sizes for his *Hooks*, *Corks*, *Silk*, *Thread*, *Flies*, *Lead*, &c. His *Linning* and *Woollen Bait-bags*; His splinted *Osier light Pannier*; and lastly his *Landen Hook*, with a Screw at the end to screw it into the socket of a Pole, and stricken into the Fish, to draw it to Land: To which socket, a Hook to cut up the Weeds, and another to pull out Wood, may be fastned.

*Baits* are branched into three Kinds.

First, the *Life-baits*, which are all kind of *Worms*, *Redworm*, *Maggot*, *Dors*, *Frogs*, *Bobb*, *Brown-flies*, *Grasshoppers*, *Hornets*, *Wasps*, *Bees*, *Snails*, small *Roaches*, *Bleak*, *Gudgeon*, or *Loaches*.

Secondly, *Artificial living Baits*, of *Flies* of all sorts and shapes, made about your Hooks with Silk and Feathers, at all times seasonable, especially in blustering Weather.

Lastly, *dead Baits*, Pastes of all makings, Wasps dried or undried, clotted *Sheeps-blood*, *Cheese*, *Bramble-berries*, *Corn*, *Seed*, *Cherries*, &c. The two first good in *May*, *June* and *July*, the two next, in *April*; and the last in the Fall of the Leaf.

*Of Flies.*

Of *Natural* flies there are innumerable, and therefore it cannot be expected I can particularize all; but some of their names I shall nominate, viz. The *Dun-Fly*, *Red-fly*, *May-Fly*; *Tawny-Fly*, *Moor-Fly*, *Shell-Fly*, *Flag-Fly*, *Vine-Fly*, *Cloudy* or *Blackish-Fly*, *Canker-Flies*, *Bear-Flies*, *Caterpillars*, and thousands more, differing according to the Soils, Rivers or Plants.

*Artificial Flies*, are made by the Ingenious Angler, according to Art, in shape, colour and proportion like the Natural Fly, of *Fur*, *Wool*, *Silk*, *Feathers*, &c. To delineate which I must confess my self not so accurate and skilful a Painter, nor can any Pen-drawing, illustrate their Various Colours so, as to direct their Artificial Counterfeit; Nature will help him in this by Observation, curiously Flourishing their several Orient and bright Colours, after which they take their names, as before said: And therefore to furnish your self with both Natural and Artificial Flies, repair in the Morning to the River, and with a Rod beat the Bushes that hang over the Water, and take your Choice.

1. Observe to Angle with the Artificial Fly in Rivers disturbed somewhat by Rain, or in a Cloudy day, the Wind blowing gently: If the Wind be not so high, but you may well guide your Tackle, in plain Deeps is to be found the best Fish, and best Sport: If small Wind breeze, in swift streams is best Angling: Be sure to keep your Fly in perpetual slow Motion; and observe that the Weather suit the Colour of your Fly, as the light Colour'd in a Clear day, the Darkish in a dark, &c. As likewise according to the Waters Complexions, have your Fly suitable.
2. Let your Line be twice as long as your Rod: Keep as far as you can from the Waterside, the Sun on your back; In casting your Fly, let that fall first; your Line not touching the Water.

3. Have a nimble Eye, and active quick Hand to strike presently upon the rising of the Fish, lest finding his mistake he spew out the Hook.
4. In slow Rivers cast your Fly cross them, let it sink a little, draw it back gently, without breaking or circling the Water; let the Fly float with the Current, and you will not fail of excellent Sport.
5. Observe to let the Wings of your *Salmon-Flies* to be one behind another, whether two or four, and they and the Tail long, and of the finest gaudiest Colours you can choose.

*Lastly*, In clear Rivers a small Fly with slender Wings is best, and in muddied Rivers a Fly of a more than ordinary large Body.

Thus much for Flies, I come next to that I called *Dead-Baits*, and shall begin with the several Ways of making Pastes.

*Of Pastes.*

1. Beat in a Mortar the Leg of a Young *Coney* (Vulgarly called the *Almond*) or of a Whelp or Catling, and a quantity of Virgins Wax and Sheeps suet, till they are incorporated, and temper them with clarified *Honey* into Paste.
2. *Sheeps-Blood*, *Cheese*, fine *Manchet* and clarified *Honey* tempered as before.
3. *Sheeps-Kidney-suit*, *Cheese*, fine *Flower*, with clarified *Honey* tempered.
4. *Cherries*, *Sheeps-Blood*, *Saffron* and fine *Manchet* made into a Paste.
5. Beat into a Paste; the fattest Old *Cheese*, the strongest *Rennet* can be got, fine *Wheat-flower* and *Annis-seed* Water: If for a *Chub* you make the Paste, put a little rasty *Bacon*,

*Lastly*, *Mutton-Kidney-suit*, and *Turmerick* reduced to a fine Powder, the fattest Old *Cheese* and strongest *Rennet*, wrought to a Paste, adding *Turmerick* till the Paste be of a curious Yellow; and is excellent for *Chevin*.

Anoint your Bait with this Confection: Take the Oyl of *Aspray*, *Coculus India*, and *Assa-foetida* beaten, and mix with it as much Life-Honey; then dissolve them in the Oyl of *Polypody*, and keep it in a close Glass for your use. And that your Paste may not wash off your Hook, beat Cotten-Wool or Flax into it.

*Of keeping Baits.*

The *Red-Worm*, must be kept in a bag of Red Cloth, with a handful of chopt *Fennel*, mixt with half so much fresh, black and fertile Mould will scoure and preserve them: All other Worms, with the Leaves of Trees they are bred on, renewing them often in a day. Only the *Cad-bait*, *Bob* and *Canker*, &c. must be kept in the same things you find them.

The great *White Maggots*, keep them in Sheeps Tallow, or little bits of a beasts Liver; and to scour them, hang them warm in a bag of Blanketing with Sand.

The *Frogs* and *Grasshoppers*, in wet Moss and long Grass, frequently moistned; and when used, the Legs of the first, and the Wings of the other must be cut close off.

The *Flies*, use them as you take them. Only, the *Wasps*, *Hornets* and *Humble-Bee*, must be dried in an Oven, their heads dipt in Sheeps blood, and dried again, may be kept in a Box for use.

And now thus equipt let us walk to the Rivers side.

To begin then with the *Barbel*. The best time for Angling for this Fish is at the latter end of *May*, *June*, *July*, and beginning of *August*, in his Haunts aforementioned; and the best Bait (omitting others) is the well scoured *Lob-worm* (being of a curious cleanly Palate as well as shape) or Cheese steeped an hour or two in clarified Honey. He is a subtile Fish, extraordinary strong, and dogged to be dealt with, and therefore be sure to have your Rod and Line strong and long, or you may endanger to break it.

For the *Bream*. The most seasonable time to Angle is from St. *James* tide till *Bartholomew* tide. He spawneth in *June* or beginning of *July*; is easily taken, as falling on his side after one or two gentle turns, and so drawn easily to Land. The best Bait for him (most delightful to him) is the *Red-Worm* (found in Commons and Chalky Grounds after Rain) at the root of a great Dock, wrapt up in a round Clue. He loves also Paste, Flag-Worms, Wasps, Green-Flies, Butter-Flies and a Grass-hopper, without Legs.

Bait your Ground the Night before with gross-ground Malt, boiled and strained, and then in the morning with the Red-Worm, bait your Hook, and plumbing your Ground within half an Inch, Fish.

The *Bleak*, an eager Fish, is caught with all sorts of Worms bred on Trees or Herbs, also with *Flies*, *Cad-bait*, *Bobs*, *Paste*, *Sheeps-Blood*, *White Snails*, *Wasps*, *Gnats*, &c. In a warm clear day the small Fly at the rim of the Water is best; in a Cloudy day, *Gentles* or *Cad*-baits two foot in the Water.

The *Bull-head* or *Millers-Thumb*, being Childrens recreation, I shall speak little of them, only being serviceable for Baits, I shall only say he is easily taken with a small Worm, being lazy and simple, and will swallow any thing; and the *Minnow*, *Loach*, and *Bansticle* being of the same diet, I place here too.

The *Chevin*, loveth all sorts of Worms, *Flies*, *Cheese*, *Grain*, and *Black Worms*, their Bellies being slit, that the White may be seen: And very much delighteth in the Pith of an Oxes back, the tough outward skin being carefully taken off, without breaking the inward tender skin. In the Morning early angle for *Chevins*, with a *Snail*; in the heat of the day, with some other Bait; in the afternoon with the Fly; the great *Moth*, with a great Head, yellow Body, and whitish Wings, usually found in Gardens, about the Evening: The larger the *Chevin*, the sooner taken; loving his Bait larger, and variety on a Hook.

The *Char* is a *Lancashire* Fish, found in a *Mere*, called *Winander-Mere* in that Country, the largest in *England*.

For the *Chub*, called by some a *Chevin*, by others a *Villain*. Bait your Hook with a Grass-hopper, find the hole where he lies, accompanied in a hot-day, with twenty or more, floating almost on the very superficies of the Water; choose which you think best, and fairest, and drop your Hook some two foot before him, and he will bite at it greedily, and cannot break hold with his *Leather Mouth*; let him play and tire, lest you break your Line. If you cannot get a *Grass-hopper*, then any Worm, or Fly you will. In cold Weather, Fish for him near the bottom, and the *Humble-Bee* is the best Bait. Some appropriate Baits according to the Month, but I shall Omit that; The *Chub* (being best and in his Prime in the Winter) a Paste made of Cheese, and Turpentine, is the only Bait to take him.

The *Carp* is subtle, and full of Policy, will never bite in Cold Weather, but in Hot you cannot be too Early, or too Late. In *March*, he seldom refuseth the *Red-worm*, in *June* the *Cad* bait and the three next Months the *Grass-hopper*: Pastes that are sweet, of which I have spoken before, are very delightful to *Carp*s: And especially, if you Bait your ground two

or three dayes before you angle, with Pellets of course Paste, *Chickens-guts*, *Garbage*, &c. *Gentles* anointed, and a Piece of *Scarlet* dipt in *Honey*, put them on the Hook, is an approved way.

The *Dace*, *Dare*, *Rudd*, and *Roach*, being much of a kind, and feeding, I shall put together, and are easily taken with small Worms, *Bobs*, *Cad-baits*, *Flies*, *Sheeps-Blood*, all sorts of Worms bred on Trees or Herbs, *Paste*, *Wasps*, *Gnats*, *Lipberries*, &c. The Heads of the *Wasps*, being dipt in Blood, is good for *Dace*, and *Dare*; as is likewise the *Ant Fly*.

The *Eel*, takes great *Red-worms*, *Beef*, *Wasps*, *Guts of Fowl*, or *Fish*, *Menows*, or small *Roaches* are good Bait for Night Hooks; the Hooks being in the Mouth of the *Fish*. Now because this is very delightful to most, I shall prescribe three ways of taking them, as are most full of Pleasure. The first way is called; *Sniggling*, or *Brogging* for *Eels*, thus: Take a strong Line and Hook baited with a *Lob*, or *Garden-Worm*, and observing where *Eels* lurk in the day time, with a stick forked at the Top, gently put your Bait into the Hole, and if there be any *Eels* there, you will not fail of a Bite, of as large as can be had, but pull not too hard lest you spoyle all. The second is called *Bobbing*, which is thus done: Take some large well scoured *Lobs*, and with a Needle, run some strong twisted Silk through them, from end to end, so many as are enough to wrap about a Board near a dozen times; tie them fast with the two ends of the Silk to hang in so many Hanks; then fasten all to a strong Cord, and a handful above the worms fasten a Plumbet of three quarters of a pound, and your Cord to a strong Pole, and in muddy Waters, you may Fish, and find the *Eels* tug lustily, and when you think they have swallowed them, draw up your Line, and ashore with them. Lastly the *Eel-spear* made with four teeth, jagged on both sides, stricken into the Mud, on the bottom of a River, and if you chance to strike where they lye, you infallibly take.

There is likewise an assured way of taking *Eels*, thus done: Take some Bottles of Hay, mixt with green *Osiers* of *Willows*, Bait them with *Sheeps-Guts*, or other Beasts Garbage, sink them down in the middle, to the bottom of your Pond or by the Bank sides, having fastned a Cord to the Bottles, that you may twitch them up at your pleasure, and all the best *Eels* will resort to them.

The *Flounder*, *Shad*, *Thwait*, *Suant*, and *Mullet*, are taken with *Red-Worms* of all sorts, *Wasps*, and *Gentles*.

For the *Grayling*, you must head your Hook upon the shank, with a slender and narrow plate of Lead, that the Bait (a large Grass-hopper) may the more easily come over it; and at the point put a *Cad-bait*, and keep the Bait in continual motion; not forgetting to pull off the Grass-hoppers Wings.

The *Gudgeon*, takes the smallest Red-Worm, *Wasps*, *Gentles*, and *Cadbait*s. When you Fish for him, stir up the Sand or Gravel with a Pole, which will make them gather thither, and bite more eagerly.

The *Guiniad*, I shall remit speaking to, only mentioning it in course, being no where found, but in a place called *Pemble-Mere*, in which place they abound, as the River *Dee* does with *Salmon*.

The *Pope*, or *Ruff*, is excellent for a young Angler, bites greedily, and quantities may be taken, by Baiting the Ground with fat Earth, and your Hook with small Red-Worms.

The *Pike*, loveth all sorts of Baits (unless the Fly) *Gudgeon*, *Dace*, *Roaches* and *Loaches*; and young *Frogs* in Summer time, of which the yellowest is best.

The *Pearch*, taketh all sorts of Earth-worms, especially the *Lob-worm*, and *Brandling*, well scowred, *Bobs*, *Oak-worms*, *Dors*, *Gentles*, *Cole-wort-worms*, *Wasps*, *Cad-baits*, and *Menow*, or a little *Frog*, the Hook being fastned through the skin of his Leg, towards the upper part of it. Be sure you give the *Pearch* time enough to pouch his Bait, before you strike.

The *Salmon*, is taken best with *Lob-worms*, scented with the Oyl of Ivy Berries, or the Oyl of *Polypody*, of the *Oak* mixt with *Turpentine*: Or the well scowred Garden-worm, is an excellent Bait: The *Salmon*, bites best in *May*, *June*, and *July*, at three a Clock in the Afternoon, if the Water be clear, a little Wind stirring, especially near the Sea.

The *Tench*, is a great lover of large Red worms first dipt in Tar. As also all sorts of Paste, made up with strong scented Oyls, or Tar, or a Paste made up of Brown Bread, and Honey. He will bite too at a *Cad-worm*, *Lob-worm*, *Flag-worm*, green *Gentle*, *Cadbait*, *Marsh-worm*, or soft boil'd *Bread-grain*, &c.

The *Torcoth*, being before mentioned, I only let you know, that he is only found, in the Pool *Linperis* in *Carnarvon-shire*; and leave you to the *Welchmens* description, both of him and his Bait.

The *Trout*, is fattest, and in his prime in *May*, and is caught with all sorts of Worms, especially *Brandlings*, commonly found in an Old *Dung-hill*, *Cow-dung*, *Hogs-dung*, or *Tanners-bark*: Also with Flies, Natural and Artificial, with young *Frogs*, *Menow*, *Marsh*, *Dock*, or *Flag-worms*; all sorts of *Cadbait*, *Dors*, *Bobs*, *Palmers*, *Gentles*, *Wasps*, *Hornets*, &c. and with the *Caterpillar*, used according to the Rule before prescribed for the *Grayling*. Lastly

The *Umber*, is taken as the *Trout*, just now mentioned; And therefore now to your Sport: To assist your well effecting which, I have but this to add; Cast into your Haunts where you use to Fish, once in four or five days, soft boiled Corn (or oftner for Carp, and Tench) Also Garbage, Beasts Livers, chopt Worms, Grains steeped in Blood, to attract them to the place; and to keep them together, throw in half a handful of Grains or ground Malt: But in a stream, cast it above your Hook, that floating towards you you may draw the Fish thither.

*Sundry curious Baits for Fish.*

These grow on the Cuccow pints, or wak-Robin, and are found in dry ditches, overgrown with Brambles; they are about the bigness of Pease, and in *July* and *August*, are of a lovely transparent Red, and are excellent baits for Roaches, and Chubs; and for the first, two will serve, but for the latter, you may put four or five at a time on the Hook.

*Oat-Cakes with Cheese.*

Beat these together into a Paste, the Cheese being new, and stick them together, with a little Honey, letting the Paste Lye all Night in a wet Linnen Cloath, then fit it up in baits, and cover your Hook with it.

*To keep Baits for the Pike, or Night-hooks.*

For this, take a small Roach, Dace, Loach, Minnow, Smelt, small Trout, or Pearch, cutting off the Finns on the back, or small Eels well scoured in Wheat-Bran, which will keep them better and longer, taking a way the slime and watery substance, that causes them to rot or decay the sooner.

*Fishes Eyes.*

Take out the Eyes of such Fish as you catch, and put three or four of them on a Hook, and they will prove an excellent bait for most sorts of Fish.

*Fat Bacon.*

Cut this in little small Long snips, and especially at Snap, it is exceeding good to take a Chub or Pike, from the latter end of *August* to the beginning of *April*.

*The Pith of the Back-bone of a Sheep.*

Take out the Pith that runs through the Back-bone, and take off the Tough outward Skin, and leave the thin tender white Skin on, and bait with about half an Inch of it, and it takes a Chevin to admiration.

*Grain, Wheat, Malt.*

Bruise either of these finely, fry them in Honey, make them up into Pastes with Oyl of Peter; and either in Winter or Summer they take Chub, Roach, Dace or Bleak.

*How to bring Fish, if any in the Pond or River, to the place you desire.*

Boyl clean Barly in Water till it bursts, with Licorice, and a little Mummy; add some Honey and beat them together in a Mortar into a stiff Paste, and boyl about the quantity of a Wall-nut of this Paste with a quart of Barly till it grows Glutenous, and then lay it for a ground bait, and the Fish will flock about it from all parts.

*To make worms for Baits come out of the Ground.*

Boyl an Ounce of Verdigrise in a quart of strong Vinegar, and Sprinkle a little in places where you suspect Worms are, and they will Crawl out of the Ground.

*Another approved Bait.*

Take the Fat of a Heron, Mummy, and Galbanum; of each two drams, Scent them with a Grain of Musk, and make them up with two Ounces of *Aqua-vitae*, stir them over a gentle Fire in an Earthen Vessel till they become thick, and with this rub the Hook, and end of the Line, and the Scent of it will draw the Fish to it; you must also have at the same time a proper Bait on your Hook for such Fish as are in the place you Angle.

*The Artificial Cod or Cad Bait.*

Make the Body of yellow Bees-wax, and head of black Dubin and black Silk, or you may make the Body of yellow washed Leather, Shamey or Buff, and the head all of black Silk, and this is an Incomparable bait for Trout, Salmon or Smelts, and those that are natural are most Excellent baits for Trout, Grayling, Salmons, Tench, Roach, Chub, Dace, Carp, Tench, Ruff, Bream and Bleak; but then you must Fish with it in clear Water only.

*Rules and Considerations about Baits in general.*

Fish in general take all such baits freely, as nature at that season affords in or near the places where you Angle, for being used to them they are not afraid of any deceit, but take them as their common food. And for flies in this case, in a Morning or Evening, when you go to Angle beat the bushes about the Rivers or Ponds, and such Flies as you rouse there, Fish with, either Natural, or imitate them by Art; as also see what Worms or other Insects fit for baits stick on the Leaves, Grass, or are in the Water; and in this Observation you cannot miss of good Sport; and when you have struck gently the backway, draw a little, and be not too hasty to take up before the Fish has had her play and spent her strength lest she break your Tackle. If your Fish be large, you must use your Landing Net.

*To take Fish in the Night with a Light.*

This is an Admirable way to supply you with a sudden Dish, viz. Take a Glass in the form of a Urinal very deep, put as much Clay in the bottom of it as will sink the Mouth of it within an Inch of the Water, floating on pieces of Cork, tied about the Neck to keep it steadily upright, then place a Candle in it, by sticking it in the Clay-socket, anointing the out side of the Glass with Oyl of Asper. This Light will shine a great way in a still Water, so that the Fish being amazed at so unusual a Sight, will come out of their holes about it, and be detained with the scent of the Oyl so long, that with a Hoop-net you may take great store of them.

*Flies proper for every Month.*

*For February*, little red brow Palmer flies, the Plain Hackle, the Silver Hackle, the Gold Hackle, the great Dun, the great blew Dun, the dark brown.

*For March*, the little whirling Dun, the early bright Brown, the whitish Dun, the Thorn-tree fly, the blue Dun, the little black Gnat, the little bright Brown.

*For April*, the small bright Brown, the little dark brown, the great whirling Dun, the Violet Fly, the yellow Dun, the Horse-flesh-fly.

*For May*, the Dun-cout, the Green-drake, the Stone-fly, the black May fly, the little yellow May Fly, the Gray-drake, the Camlet fly, the Turkey Fly, the yellow Palmer, the black-flat Fly, the light-brown, the little Dun, the white Gnat, the Peacock Fly, the Cow-Lady, the Cowturd-fly.

*For June*, From the first to the 24th the Green Drake and Stone Fly, the Owl fly, the Barn fly, the purple Hackle, the purple Gold Hackle, the flesh Fly, the little flesh Fly, the Peacock fly, the Ant fly, the brown Gnat, the little black Gnat, the Green-Grasshopper, the Dun Grasshopper, the Brown Hackle.

*For July*, The Badger fly, the Orange fly, the little white Dun, the Wasp fly, the Black Hackle, the Shell fly, the black brown Dun.

*For August*. The late Ant fly, the Fern fly, the white Hackle, the Harry-long-Legs.

*For September*. The Cammel brown fly, the late Badger fly.

*For October*. The same Flies that were used in *March*.

*The best time to Angle in.*

1. If in the hot Months, cloudy Weather is best, when a small Gale stirs the Water.
2. When the Floods have carryed away the fish that sudden Showers Incumbered the Water withall, and the River and Pond retains its usual bounds, looking of a whitish Colour.
3. When a violent Shower has troubled or muddied the River, or a little before the Fish spawn, at what time they come into the sandy Ground to loosen their Bellies.
4. After Rains, when the Rivers keep their bounds, yet rise and run swiftly, for then they seek shelter in Creeks and little Rivulets running into the River.

5. Fish for Carp and Tench early, that is, before Sun rise, till Eight in the Morning, and from four in the Afternoon till after Sun set. In *March*, the beginning of *April*, and the latter end of *September* and all Winter, when there are no great Frosts, the Fish bite in the warm of the day, the wind being still; but in Summer Months, Morning and Evening is best.
6. Fish rise best at the Fly, after the shower has muddied or Clouded the Waters, and Fish with Flies in generally *March*, *April*, *May*, and the beginning of *June*, is the best for Trout; you may Angle in a clear star light Night, for they are then roaving about for prey; he bites best in muddy water, and the best time of Fishing for him is from 8 to 10 in the Morning, and from three till five in the Afternoon.
7. The Salmon Fishery is best in *May*, *June*, *July*, and *August*, from three in the Afternoon till Sun set, and in the Morning as before.
8. The Barble bites best early in the Morning, till Ten or Eleven in *May*, *June*, *July*, and the beginning of *August*.
9. The Pearch and Ruff bites best all day in cool Cloudy Weather.
10. The Carp and Tench bite early and late in the still parts of the River; *June*, *July*, and *August*; as likewise do the Chevin, whose chief bait is white Snails, and small Lamperies.
11. The Breem bites from Sun rise till nine or ten in the Morning in muddy Water, especially the Wind blowing hard, for the most part; keeping in the Middle of the Pond or River in *May*, *June*, *July*, and *August*.
12. Angle for the Pike in clear Water, when it is stirred by a gentle Gale in *July*, *August*, *September*, and *October*, and then he bites best about three in the Afternoon; but all the day in Winter, and in *April*, *May*, and the beginning of *June*, early in the Morning and late at Evening.
13. The Roach and Dace bite all the day long at the Top of the Water at flies natural, and Artificial, also at Grass-hoppers, and all sorts of Worms, if the Water be shady.
14. The Gudgeon bites best in *April*, till she has Spawned in *May*, or if the Weather be cold till Wasp time, and at the end of the year all day long, near to a gentle Stream. Observe when you Angle for her, to stir and rake the Ground, and the Bait will be taken the better.
15. The Flounder in *April* bites all day, *May*, *June*, and *July*, especially in swift Streams, yet he will bite, tho' not so freely in a still Deep.

#### *Of Fish-ponds.*

Grounds most fit and proper to be cast into a Pond, are those which are Marshy, or Boggy, or full of Springs, unfit for Grazing, or to be put to any profitable use besides. Of these the last, full of Springs, will yield the best Water; that which is Marshy will feed Fish; and what is Boggy is best for a Defence against Thieves.

First draw by small Trenches all the Springs into one place, and so drain the rest of the Ground; then mark out the Head of your Pond, and make it the highest part of the ground in the Eye, tho' it be the lowest in a Level: Cut the Trench of your Floodgate so, that when the Water is let out, it may have a swift fall: On each side of which Trench drive in stakes of Oak, Ash or Elm six foot long, and six Inches square; place these in Rows near four foot distance, as broad and wide from the *Floodgate* as you intend the Head of your Pond shall go: Dig it in as big and large a Compass as the Ground will permit; throw your Earth amongst the said stakes, and ram it down hard till you have covered the stakes: Drive in as

many new ones next the first stakes, and ram more Earth above them, with stakes above stakes till the head-sides be of a convenient height: Taking care, that the inside of your Banks be smooth, even, hard and strong, that the Current of the Water, may not wear off the Earth.

Having thus digged eight foot deep, that so it may carry six foot Water, pave the bottom and Banks of the Pond with Sods of *Flot-Grass*, laying them close together, pin them down with stakes and windings: This Grass is a great feeder of Fish, and grows naturally under Water. Stake to the bottom of one side of the Pond Bavens and Brush-Wood-Faggots, into which the Fish may cast their spawn. Lay Sods upon Sods, to nourish and breed Eels.

The Pond being made, let in Water, and thus store it: Put Carp, Bream and Tench by themselves: Pike, Pearch, Eel, and Tench (the Fishes Physician) by themselves; for Food of the greater Fishes, put store of Roach, Dace, Loach and Menow; and Lastly to one Melter, put three Spawners, and in three Years the increase will be great, and in five Years with difficulty be destroyed.

In 3 Years *Sue your Pond*; which you must continue to do, for the Roach will increase in such abundance, that eating up the sweet food, will make other Fish, as Carps, &c. be very lean: Therefore every Year view your Pond, and observe if any such Fry appears, thin them.

*To make Carps grow large, &c.*

About *April*, when your Pond is low rake the sides where the Water is fallen with an Iron rake, sow *Hay-seeds* there, rake it well; and at the end of Summer you shall have store of Grass: In *Winter* the Water will over-top the Grass, and being Water enough for them, the Carps will resort to the sides, and feed briskly, and grow fat: Thus do every Summer, till you sue your Pond, and no River Carp can surpass them.

*FINIS.*