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Introduction by the Ex-Classics Project

The Herbal, or General History of Plants was first published in 1597, and in a new edition revised and expanded by Thomas Johnson, in 1633. The revised version is a magnificent work; over 1600 folio pages illustrated with nearly 2,000 woodcuts. Described by Edmund Gosse as "the noblest of all the English Herbals," it covers virtually every plant known to western botany at the time. Each is described and illustrated, with notes on the places where it may be found, when it flowers, its names in various languages, and its medicinal uses. Interspersed with these, are various charming anecdotes and quotations from ancient and modern authors. The illustrations are extremely accurate and modern botanists can easily identify the plant from them. The medicinal uses are detailed and very numerous; so much so that one wonders how in those days anyone was ever ill at all. There are even cures for diseases with no modern treatment, such as "pestilential botch", "unprofitable blood", and "hardening of the matrix."

This Ex-Classics edition is a work in progress. Here we have the first of five volumes, which has all the introductory material, and Book One, Containing Grass, Rushes, Reeds, Corn, Flags, and Bulbous, or Onion-rooted plants. Volumes 2, 3, and 4 will make up Book Two, Containing most sorts of Herbs used for Meat, Medicine, or Sweet Smelling, and finally Volume 5 will hold Book 3, Containing Trees, Shrubs, Bushes, Fruit-Bearing Plants, Rosins, Gums, Roses, Heaths, Mosses, Mushrooms, Coral, and their several kinds, together with the addenda.
BIBLIOGRAPHICAL AND EDITORIAL NOTE

This edition of the Gerard's Herbal is taken from the 1633 edition, expanded and edited by Thomas Johnson. The references to "the author" are Johnson's comments on Gerard's original text.

The following changes have been made for this edition:
- The spelling has been modernised and obsolete words standardised as the primary spelling used by the OED.
- An introduction and some poems in Latin have been omitted.
- Greek has for the most part been omitted; when included, it has been transliterated.
- A translation of Latin sentences and phrases, if not translated in the original, follows each one in square brackets.
Introduction by Edmund Gosse

The proverb says that a door must be either open or shut. The bibliophile is apt to think that a book should be either little or big. For my own part, I become more and more attached to "dumpy twelves"; but that does not preclude a certain discreet fondness for folios. If a man collects books, his library ought to contain a Herbal; and if he has but room for one, that should be the best. The luxurious and sufficient thing, I think, is to possess what booksellers call "the right edition of Gerard"; that is to say, the 1633 edition. There is no handsomer book to be found, none more stately or imposing, than this magnificent folio of sixteen hundred pages, with its close, elaborate letterpress, its innumerable plates, and John Payne's fine frontispiece in compartments, with Theophrastus and Dioscorides facing one another, and the author below them, holding in his right hand the new-found treasure of the potato plant.

This edition of 1633 is the final development of what had been a slow growth. The sixteenth century witnessed a great revival, almost a creation of the science of botany. People began to translate the great Materia Medica of the Greek physician, Dioscorides of Anazarba, and to comment upon it. The Germans were the first to append woodcuts to their botanical descriptions, and it is Otto Brunfelsius, in 1530, who has the credit of being the originator of such figures. In 1545 there was published the first great Herbal, that of Rembertus Dodonaeus, body-physician to the Emperor Maximilian II., who wrote in Dutch. An English translation of this, brought out in 1578, by Henry Lyte, was the earliest important Herbal in our language. Five years later, in 1583, a certain Dr. Priest translated all the botanical works of Dodonaeus, with much greater fullness than Lyte had done, and this volume was the germ of Gerard's far more famous production. John Gerard was a Cheshire man, born in 1545, who came up to London, and practised there as a surgeon.

According to his editor and continuator, Thomas Johnson, who speaks of Gerard with startling freedom, this excellent man was by no means well equipped for the task of compiling a great Herbal. He knew so little Latin, according to this too candid friend, that he imagined Leonard Fuchsius, who was a German contemporary of his own, to be one of the ancients. But Johnson is a little too zealous in magnifying his own office. He brings a worse accusation against Gerard, if I understand him rightly to charge him with using Dr. Priest's manuscript collections after his death, without giving that physician the credit of his labours. When Johnson made this accusation, Gerard had been dead twenty-six years. In any case it seems certain that Gerard's original Herbal, which, beyond question, surpassed all its predecessors when it was printed in folio in 1597, was built up upon the ground-work of Priest's translation of Dodonaeus. Nearly forty years later, Thomas Johnson, himself a celebrated botanist, took up the book, and spared no pains to reissue it in perfect form. The result is the great volume before us, an elephant among books, the noblest of all the English Herbals. Johnson was seventy-two years of age when he got this gigantic work off his hands, and he lived eleven years longer to enjoy his legitimate success.

The great charm of this book at the present time consists in the copious woodcuts. Of these there are more than two thousand, each a careful and original study from the plant itself. In the course of two centuries and a half, with all the advance in appliances, we have not improved a whit on the original artist of Gerard's and Johnson's time. The drawings are all in strong outline, with very little attempt at
shading, but the characteristics of each plant are given with a truth and a simplicity which are almost Japanese. In no case is this more extraordinary than in that of the orchids, or "satyrions," as they were called in the days of the old herbalist. Here, in a succession of little figures, each not more than six inches high, the peculiarity of every portion of a full-grown flowering specimen of each species is given with absolute perfection, without being slurred over on the one hand, or exaggerated on the other. For instance, the little variety called "ladies' tresses" [Spiranthes], which throws a spiral head of pale green blossoms out of dry pastures, appears here with small bells hanging on a twisted stem, as accurately as the best photograph could give it, although the process of woodcutting, as then practised in England, was very rude, and although almost all other English illustrations of the period are rough and inartistic. It is plain that in every instance the botanist himself drew the form, with which he was already intelligently familiar, on the block, with the living plant lying at his side.

The plan on which the herbalist lays out his letterpress is methodical in the extreme. He begins by describing his plant, then gives its habitat, then discusses its nomenclature, and ends with a medical account of its nature and virtues. It is, of course, to be expected that we should find the fine old names of plants enshrined in Gerard's pages. For instance, he gives to the deadly nightshade the name, which now only lingers in a corner of Devonshire, the "dwale." As an instance of his style, I may quote a passage from what he has to say about the virtues, or rather vices, of this plant:

"Banish it from your gardens and the use of it also, being a plant so furious and deadly; for it bringeth such as have eaten thereof into a dead sleep wherein many have died, as hath been often seen and proved by experience both in England and elsewhere. But to give you an example hereof it shall not be amiss. It came to pass that three boys of Wisbeach, in the Isle of Ely, did eat of the pleasant and beautiful fruit hereof, two whereof died in less than eight hours after they had eaten of them. The third child had a quantity of honey and water mixed together given him to drink, causing him to vomit often. God blessed this means, and the child recovered. Banish, therefore, these pernicious plants out of your gardens, and all places near to your houses where children do resort."

Gerard has continually to stop his description that he may repeat to his readers some anecdote which he remembers. Now it is how "Master Cartwright, a gentleman of Grey's Inn, who was grievously wounded into the lungs," was cured with the herb called "Saracen's Compound," "and that, by God's permission, in short space." Now it is to tell us that he has found yellow archangel growing under a sequestered hedge "on the left hand as you go from the village of Hampstead, near London, to the church," or that "this amiable and pleasant kind of primrose" (a sort of oxlip) was first brought to light by Mr. Hesketh, "a diligent searcher after simples," in a Yorkshire wood. While the groundlings were crowding to see new plays by Shirley and Massinger, the editor of this volume was examining fresh varieties of auricula in "the gardens of Mr. Tradescant and Mr. Tuggie." It is wonderful how modern the latter statement sounds, and how ancient the former. But the garden seems the one spot on earth where history does not assert itself, and, no doubt, when Nero was fiddling over the blaze of Rome, there were florists counting the petals of rival roses at Paestum as peacefully and conscientiously as any gardeners of to-day.

The herbalist and his editor write from personal experience, and this gives them a great advantage in dealing with superstitions. If there was anything which people were certain about in the early part of the seventeenth century, it was that the
mandrake only grew under a gallows, where the dead body of a man had fallen to pieces, and that when it was dug up it gave a great shriek, which was fatal to the nearest living thing. Gerard contemptuously rejects all these and other tales as "old wives' dreams." He and his servants have often digged up mandrakes, and are not only still alive, but listened in vain for the dreadful scream. It might be supposed that such a statement, from so eminent an authority, would settle the point, but we find Sir Thomas Brown, in the next generation, battling these identical popular errors in the pages of his Pseudodoxia Epidemica. In the like manner, Gerard's botanical evidence seems to have been of no use in persuading the public that mistletoe was not generated out of birdlime dropped by thrushes into the boughs of trees, or that its berries were not desperately poisonous. To observe and state the truth is not enough. The ears of those to whom it is proclaimed must be ready to accept it.

Our good herbalist, however, cannot get through his sixteen hundred accurate and solemn pages without one slip. After accompanying him dutifully so far, we double up with uncontrollable laughter on p. 1587, for here begins the chapter which treats "of the Goose Tree, Barnacle Tree, or the Tree bearing Geese." But even here the habit of genuine observation clings to him. The picture represents a group of stalked barnacles—those shrimps fixed by their antennae, which modern science, I believe, calls Lepas anatifera; by the side of these stands a little goose, and the suggestion of course is that the latter has slipped out of the former, although the draughtsman has been far too conscientious to represent the occurrence. Yet the letterpress is confident that in the north parts of Scotland there are trees on which grow white shells, which ripen, and then, opening, drop little living geese into the waves below. Gerard himself avers that from Guernsey and Jersey he brought home with him to London shells, like limpets, containing little feathery objects, "which, no doubt, were the fowls called Barnacles." It is almost needless to say that these objects really were the plumose and flexible cirri which the barnacles throw out to catch their food with, and which lie, like a tiny feather-brush, just within the valves of the shell, when the creature is dead. Gerard was plainly unable to refuse credence to the mass of evidence which presented itself to him on this subject, yet he closes with a hint that this seems rather a "fabulous breed" of geese.

With the Barnacle Goose Tree the Herbal proper closes, in these quaint words:

"And thus having, through God's assistance, discoursed somewhat at large of grass, herbs, shrubs, trees and mosses, and certain excrescences of the earth, with other things more, incident to the history thereof, we conclude, and end our present volume with this wonder of England. For the which God's name be ever honoured and praised."

And so, at last, the Goose Tree receives the highest sanction.
Dedication to William Cecil, Lord Burghley

TO THE RIGHT HONOURABLE
HIS SINGULAR GOOD LORD & MASTER,
SIR WILLIAM CECIL

Knight, Baron of Burghley, Master of the Court of Wards & Liveries, Chancellor of the University of Cambridge, Knight of the most noble Order of the Garter, one of the Lords of her Majesty's most honourable Privy Council, and Lord High Treasurer of England.

AMONG the manifold creatures of God (right Honourable, and my singular good Lord) that have all in all ages diversely entertained many excellent wits, and drawn them to the contemplation of the divine wisdom, none have provoked men's studies more, or satisfied their desires so much as plants have done, and that upon just and worthy causes: for if delight may provoke men's labour, what greater delight is there than to behold the earth apparelled with plants, as with a robe of embroidered work, set with Orient pearls and garnished with great diversity of rare and costly jewels? If this variety and perfection of colours may affect the eye, it is such in herbs and flowers, that no Apelles, no Zeuxis ever could by any art express the like: if odours or if taste may work satisfaction, they are both so sovereign in plants, and so comfortable that no confection of the apothecaries can equal their excellent virtue. But these delights are in the outward senses: the principal delight is in the mind, singularly enriched with the knowledge of these visible things, setting forth to us the invisible wisdom and admirable workmanship of Almighty God. The delight is great, but the use greater, and joined often with necessity. In the first ages of the world they were the ordinary meat of men, and have continued ever since of necessary use both for meats to maintain life, and for medicine to recover health. The hidden virtue of them is such, that (as Pliny noteth) the very brute beasts have found it out: and (which is another use that he observes) from thence the dyers took the beginning of their art.

Furthermore, the necessary use of those fruits of the earth doth plainly appear by the great charge and care of almost all men in planting & maintaining of gardens, not as ornaments only, but as a necessary provision also to their houses. And here beside the fruit, to speak again in a word of delight, gardens, especially such as your Honour hath, furnished with many rare simples, do singularly delight, when in them a man doth behold a flourishing show of summer beauties in the midst of winter's force, and a goodly spring of flowers, when abroad a leaf is not to be seen. Besides these and other causes, there are many examples of those that have honoured this science: for to pass by a multitude of the philosophers, it may please your Honour to call to remembrance that which you know of some noble princes, that have joined this study with their most important matters of state: Mithridates the great was famous for his knowledge herein, as Plutarch noteth. Euax also King of Arabia, the happy garden of the world for principal simples, wrote of this argument, as Pliny showeth. Diocletian likewise, might have had his praise, had he not drowned all his honour in the blood of his persecution. To conclude this point, the example of Solomon is before the rest, and greater, whose wisdom and knowledge was such, that he was able to set out the nature of all plants from the highest cedar to the lowest moss. But my very good Lord, that which sometime was the study of great philosophers and mighty princes, is now neglected, except it be of some few, whose spirit and wisdom hath carried them among other parts of wisdom and counsel, to a care and study of special herbs both for the furnishing of their gardens, and furtherance of their knowledge: among whom
I may justly affirm and publish your Honour to be one, being myself one of your servants, and a long time witness thereof: for under your Lordship I have served, and that way employed my principal study and almost all my time, now by the space of twenty years. To the large and singular furniture of this noble island I have added from foreign places all the variety of herbs and flowers that I might any way obtain, I have laboured with the soil to make it fit for plants, and with the plants, that they might delight in the soil, that so they might live and prosper under our climate, as in their native and proper country: what my success hath been, and what my furniture is, I leave to the report of they that have seen your Lordship's gardens, and the little plot of mine own especial care and husbandry. But because gardens are private, and many times finding an ignorant or a negligent successor, come soon to ruin, there be that have solicited me, first by my pen, and after by the press to make my labours common, and to free them from the danger whereunto a garden is subject: wherein when I was overcome, and had brought this History or report of the nature of plants to a just volume, and had made it (as the reader may by comparison see) richer than former herbals, I found it no question unto whom I might dedicate my labours; for considering your good Lordship, I found none of whose favour and goodness I might sooner presume, seeing I have found you ever my very good lord and master. Again, considering my duty and your Honour's merits, to whom may I better recommend my labours, than to him unto whom I owe myself, and all that I am able in your service or devotion to perform? Therefore under hope of your honourable and accustomed favour I present this Herbal to your Lordship's protection; and not as an exquisite work (for I know my meanness) but as the greatest gift and chiefest argument of duty that my labour and service can afford: whereof if there be no other fruit, yet this is of some use, that I have ministered matter for men of riper wits and deeper judgements to polish, and to add to my large additions where anything is defective, that in time the work may be perfect. Thus I humbly take my leave, beseeching God to grant you yet many days to live to his glory, to the support of this state under her Majesty our dread sovereign, and that with great increase of honour in this world, and all fullness of glory in the world to come.

Your Lordship's most humble and obedient Servant,
JOHN GERARD.
Stephen Bredwell to the Reader

To the well affected Reader and peruser of this book, St. Bredwell physician, greeting.

Open is the camp of glory and honour for all men, saith the younger Pliny: not only men of great birth and dignity, or men of office endued with public charge and titles, are seen therein, and have the garland of praise and preferment waiting to crown their merits, but even the common soldier likewise: so as he, whose name and note was erst all obscure, may by egregious acts of valour obtain a place among the noble. The school of science keepeth semblable proportion: whose amplitude, as not always, nor only, men of great titles and degrees, labour to illustrate; so whosoever doth, may confidently account of, at the least, his name to be immortal. What is he then that will deny his voice of gracious commendation to the authors of this book: to every one, no doubt, there is due a condign measure. The first gatherers out of the ancients, and augmenters by their own pains, have already spread the odour of their good names, through all the Lands of learned habitations. Dr. Priest, for his translation of so much as Dodonæus, hath thereby left a tomb for his honourable sepulture. Mr. Gerard coming last, but not the least, hath many ways accommodated the whole work unto our English nation: for this History of plants, as it is richly replenished by those fine men's labours laid together, so yet could it full ill have wanted that new accession he hath made unto it. Many things hath he nourished in his garden, and observed in our English fields, that never came into their pens to write of. Again, the greatest number of these plants, having never been written of in the English tongue, would have wanted names for the vulgar sort to call them by: in which defect he hath been curiously careful, touching both old and new names to make supply. And lest the Reader should too often languish with frustrate desire, to find some plant he readeth, of rare virtue, he spareth not to tell (if himself have seen it in England) in what wood, pasture or ditch the same may be seen and gathered. Which when I think of, and therewithal remember, with what cheerful alacrity, and resolute attendance he hath many years tilled this ground, and now brought forth the fruit of it, whether I should more commend his great diligence to attain this skill, or his large benevolence in bestowing it on his country, I cannot easily determine. This book-birth thus brought forth by Gerard, as it is in form and disposition fair and comely, every species being referred to his likeliest genus, of whose stock it came: so is it accomplished with surpassing variety, unto such spreading growth and strength of every limb, as that it may seem some heroical imp of illustrious race, able to draw the eyes and expectation of every man unto it. Somewhat rare it will be here for a man to move a question of this nature, and depart again without some good satisfaction. Manifold will be the use both to the physician and others: for every man delighteth in knowledge naturally, which (as Aristotle said) is in prosperity an ornament, in adversity a refuge. But this book above many others will suit with the most, because it both plenteously ministreth knowledge, which is the food of the mind, and cldoth it also with a familiar and pleasing taste to every capacity. Now as this commodity is communicated to all, and many shall receive much fruit thereof, so I with some may have the mind to return a benefit again; that it might not be true in all that Juvenal saith, Scire volunt omnes, mercedem solvere nemo (i. e.) All desire to know, none to yield reward. Let men think, that the perfection of this knowledge is the high advancement of the health of man; that perfection is not to be attained, but by strong endeavour: neither can strong endeavour be accomplished without free maintenance. This hath not he, who is forced
to labour for his daily bread: but if he, who from the first hours of his daily and necessary travail, stealing as it were some, for the public behoof, and setting at length those pieces together, can bring forth so comely a garment as this, meet to cover or put away the ignorance of many: what may be thought he would do, if public maintenance did free him from that private care, and unite his thoughts to be wholly intent to the general good. Reader, if such men as this stick not to rob themselves of such wealth as thou hast to enrich thee, with that substance thou wantest, detract not to share out of thine abundance to merit and encourage their pains: that so flexible riches, and permanent sciences, may the one become a prop unto the other. Although praise and reward joined as companions to fruitful endeavours, are (in part) desired of all men, that undertake losses, labours, or dangers for the public behoof: because they add sinews (as it were) unto reason, and able her more and more to refine herself: yet do they not embrace that honour in respect of itself, nor in respect of those that conferred it upon them, but as having thereby an argument in themselves, that there is something in them worthy estimation among men: which then doubleth their diligence to deserve it more abundantly. Admirable and for the imitation of princes, was that act of Alexander, who setting Aristotle to compile commentaries of the brute creatures, allowed him for the better performance thereof, certain thousands of men, in all Asia and Greece, most skilful observers of such things, to give him information touching all beasts, fishes, fowls, serpents, and flies. What came of it? A book written, wherein all learned men in all ages since do exercise themselves principally, for the knowledge of the creatures. Great is the number of those that of their own private have laboured in the same matter, from his age down to our present time, which all do not in comparison satisfy us. Whereas if in those ensuing ages there had risen still new Alexanders, there (certainly) would not have wanted Aristotles to have made the evidence of those things an hundredfold more clear unto us, than now they be. Whereby you may perceive the unequal effects that follow those unsuitable causes of public and private maintenances unto labours and studies. Now that I might not despair in this my exhortation, I see examples of this munificence in our age to give me comfort: Ferdinand the Emperor and Cosmos Medici Prince of Tuscany are herein registered for furthering this science of plants, in following of it themselves and becoming skilful therein: which course of theirs could not be holden without the supporting and advancing of such as were studious to excel in this kind. Bellonius likewise (whom for honour's cause I name) a man of high attempts in natural science, greatly extolleth his King's liberality, which endued him with free leisure to follow the study of plants, seconded also herein by Montmorency the Constable, the Cardinals Castilion and Lorraine, with Oliverius the Chancellor; by whose means he was enabled to perform those his notable peregrinations in Italy, Africa and Asia: the sweet fruit whereof, as we have received some taste by his observations, so we should plenteously have been filled with them, if violent death by most accursed robbers had not cut him off. And as I find these examples of comfort in foreign nations, so we are (I confess) much to be thankful to God, for the experience we have of the like things at home. If (nevertheless) unto that physic lecture lately so well erected, men who have this world's goods shall have hearts also of that spirit, to add some ingenious labourer in the skill of simples, they shall mightily augment and adorn the whole science of physic. But if to that likewise they join a third, namely the art of chemical preparation; that out of those good creatures which God hath given man for his health, pure substances may be procured for those that be sick, (I fear not to say it, though I see how Momus scorneth) this present generation would purchase more to the perfection of physic, than all the generations passed since Galen's time have done: that
I say, nothing of this one fruit that would grow thereof, to wit, the discovering and abolishing of these pernicious impostures and sophistications, which mount-promising Paracelsians everywhere obtrude, through want of true and constant light among us to discern them by. In which behalf, remembering the mournful speech of grave Hippocrates; *The art of physic truly excelleth all arts, howbeit, through the ignorance partly of those that exercise it, and partly of those that judge rashly of physicians, it is accounted of all arts the most inferior.* I say in like manner, the art of chemistry is in itself the most noble instrument of natural knowledges; but through the ignorance & impiety, partly of those that most audaciously profess it without skill, and partly of them that impudently condemn that they know not, it is of all others most basely despised and scornfully rejected. A principal remedy to remove such contumelious disgrace from these two pure virgins of one stock and lineage, is this that I have now insinuated, even by erecting the laboratory of an industrious chemist, by the sweet garden of flourishing simples. The physic reader by their means shall not only come furnished with authorities of the ancients, and sensible probabilities for that he teacheth, but with real demonstrations also in many things, which the reason of man without the light of the furnace would never have reached unto. I have uttered my heart's desire, for promoting first the perfection of my profession, and next by necessary consequence, the healthier lives of men. If God open men's hearts to provide for the former, it cannot be but that the happy fruits shall be seen in the latter. Let the ingenious learned judge whether I have reason on my side; the partial addicted sect I shun, as men that never meant good to posterity.
George Baker to the Reader

George Baker, one of her Majesty's chief Surgeons in ordinary, and M. of the Surgeons of the City of London, to the Reader.

Aristotle, a Prince amongst the Philosophers, writing in his *Metaphysics* of the nature of mankind, saith, that man is naturally inclined and desirous of science. The which sentence doth teach us, that all creatures (being virtuously given) do strive to attain to perfection, and draw near in what they can to the Creator; and this knowledge is one of the principal parts which doth concern the perfection of understanding: for of the same doth follow, that all such are generally inclined to know the means by which they may conserve their life, health, and reputation. And although it be necessary for man to learn and know all sciences, yet nevertheless the knowledge of natural philosophy ought to be preferred, as being the most necessary; and moreover it doth bring with it a singular pleasure and contentment. The first inventor of this knowledge was Chiron the Centaur, of great renown, son to Saturn and Philyra and others say that it was invented of Apollo: & others of Æsculapius his son; esteeming that so excellent a science could never proceed but from the gods immortal, and that it was impossible for man to find out the nature of plants, if the great worker, which is God, had not first instructed and taught him. For, as Pliny saith, if any think that these things have invented by man, he is ungrateful for the works of God. The first that we can learn of among the Greeks that have diligently written of herbs, have been Orpheus, Museus, and Hesiod, having been taught by the Egyptians: then Pythagoras of great renown for his wisdom, which did write books of the nature of plants, and did acknowledge to learn the same from Apollo and Æsculapius. Democritus also did compose books of plants, having first travelled over all Persia, Arabia, Ethiopia, and Egypt. Many other excellent spirits have taken great pleasure in this science, which to accomplish have hazarded their lives in passing many unknown regions, to learn the true knowledge of Helleborus, and other medicaments: of which number were Hippocrates, Crateuas, Aristotle, Theophrastus, Diocles Caristius, Pamphylus, Montius, Hierophilus, Dioscorides, Galen, Pliny, and many others, which I leave to name, fearing to be too long. And if I may speak without partiality of the author of this book, his great pains, his no less expenses in travelling far and near for the attaining of his skill have been extraordinary. For he was never content with the knowledge of those simples which grow in those parts, but upon his proper cost and charges hath had out of all parts of the world all the rare simples which by any means he could attain unto, not only to have them brought, but hath procured by his excellent knowledge to have them growing in his garden, which as the time of the year doth serve may be seen: for there shall you see all manner of strange trees, herbs, roots, plants, flowers, and other such rare things, that it would make a man wonder, how one of his degree, not having the purse of a number, could ever accomplish the same. I protest upon my conscience, I do not think for the knowledge of plants, that he is inferior to any: for I did once see him tried with one of the best strangers that ever came into England, and was accounted in Paris the only man, being recommended unto me by that famous man Master Amb. Pareus; and he being here was desirous to go abroad with some of our herbarists, for the which I was the mean to bring them together, and one whole day we spent therein, searching the rarest simples: but when it came to the trial, my French man did not know one to his four. What doth this man deserve that hath taken so much pains for his country, in setting out a book, that to this day never any in what language soever did the like? First for correcting their faults in so many hundred places, being falsely named, mistaken the one for the other;
Gerard's Herbal

and then the pictures of a great number of plants now newly cut. If this man had taken this pains in Italy and Germany, where Matthiolus did write, he should have sped as well as he did: For (saith he) I had so great a desire ever to finish my Book, that I never regarded anything in respect of the public good, not so much as to think how I should finish so great a charge, which I had never carried out, but that by God's stirring up of the renowned Emperor Ferdinand of famous memory, and the excellent princes had not helped me with great sums of money, so that the Commonwealth may say, That this blessing doth rather proceed of them than from me. There have been also other princes of Almaine which have been liberal in the preferring of this book, and the most excellent Elector of the Empire the Duke of Saxony, which sent me by his post much money toward my charges: the liberality of the which and the magnificence toward me I cannot commend sufficiently. They which followed in their liberality were the excellent Frederick Count Palatine of the Rhine, and the excellent Joachim Marquess of Brandenburg, which much supplied my wants: and the like did the reverend Cardinal and Prince of Trent, and the Excellent Archbishop of Salzburg, the Excellent Dukes of Bavaria and Cleeves, the duke of Megapolensis Prince of Vandalis, the State Republic of Nuremberg, the liberality of whom ought to be celebrated for ever: and it doth much rejoice me that I had the help and reward of Emperors, Kings, Electors of the Roman Empire, Arch-dukes, Cardinals, Bishops, Dukes and Princes, for it giveth more credit to our labours than anything that can be said. Thus far Matthiolus his own writing of the liberality of Princes towards him. What age do we live in here that will suffer all virtue to go unrewarded? Master Gerard hath taken more pains than ever Matthiolus did in his Commentaries, and hath corrected a number of faults that he passed over; and I dare affirm (in reverence be it spoken to that excellent man) that Master Gerard doth know a great number of simples that were not known in his time: and yet I doubt whether he shall taste of the liberality of either Prince, Duke, Earl, Bishop, or public estate. Let a man excel never so much in any excellent knowledge, nevertheless many times he is not so much regarded as a jester, a boaster, a quacksalver or mountebank; for such kind of men can flatter, dissemble, make of trifles great matters, in praising of this rare secret, or that excellent spirit, or this elixir or quintessence; which when it shall come to the trial, nothing shall be found but boasting words.

VALE.
John Gerard to the Reader

To the courteous and well willing Readers.

Although my pains have not been spent (courteous reader) in the gracious discovery of golden mines, nor in the tracing after silver veins, whereby my native country might be enriched, with such merchandise as it hath most in request and admiration yet hath my labour (I trust) been otherwise profitably employed, in descrying of such harmless treasure of herbs, trees and plants, as the earth frankly without violence offereth unto our most necessary uses. Harmless I call them, because they were such delights, as man in the perfectest estate of his innocence did erst enjoy; and treasure I may well term them, seeing both kings and princes have esteemed them as jewels; sith wise men have made their whole life as a pilgrimage, to attain to the knowledge of them. By the which they have gained the hearts of all, and opened the mouths of many, in commendation of those rare virtues, which are contained in these terrestrial creatures. I confess blind Pluto is nowadays more sought after, than quick sighted Phœbus, and yet this dusty metal, or excrement of the earth (which was first deeply buried, least it should be an eyesore to grieve the corrupt heart of man) by forcible entry made into the bowels of the earth, is rather snatched at of man to his own destruction, than directly sent of God, to the comfort of this life. And yet behold in the compassing of this worldly dross, what care, what cost, what adventures, what mystical proofs, and chemical trials are set abroach; when as notwithstanding the chiefest end is but uncertain wealth. Contrariwise, in the expert knowledge of herbs, what pleasure still renewed with variety? what small expense? what security? and yet what an apt and ordinary means to conduct man to that most desired benefit of health? Which as I devoutly wish unto my native country, and to the careful nursing mother of the same; so having bent my labours to the benefiting of such as are studiously practised in the conservation thereof, I thought it a chief point of my duty, thus out of my poor store, to offer up these my far-fetched experiments, together with mine own country's unknown treasure, combined in this compendious Herbal (not unprofitable, though unpolished) unto your wise constructions and courteous considerations. The drift whereof is a ready introduction to that excellent art of simpling, which is neither so base nor contemptible, as (perhaps) the English name may seem to intimate; but such is it, as altogether hath been a study for the wisest, an exercise for the noblest, a pastime for the best. From whence there spring flowers, not only to adorn the garlands of the Muses, to deck the bosoms of the beautiful, to paint the gardens of the curious, to garnish the glorious crowns of Kings; but also such fruit as learned Dioscorides long travelled for; and princely Mithridates reserved as precious in his own private closet: Mithridates I mean, better known by his sovereign mithridate, than by his sometime speaking two and twenty languages. But what this famous prince did by tradition, Euax King of the Arabians did deliver in a discourse written of the virtues of herbs, and dedicated unto the Emperor Nero. Every green herbarist can make mention of the herb Lysimachia, whose virtues were found out by King Lysimachus, and his virtues no less eternized in the self-same plant than the name of Phydias, quaintly beaten into the shield of Pallas, or the first letters of Ajax or Hyacinthus (whether you please) registered in that beloved flower of Apollo. As for Artemisia, first called Παρ`δενις [Par’denis] whether the title thereof sprang from Αρτεμις [Artemis] Diana herself, or from the renowned Queen of Caria, which disclosed the use thereof unto posterity, it surviveth as a monument to revive the memories of them both for ever. What should we speak of Gentiana, bearing still the cognisance of Gentius? or of divers other herbs, taking their denomination of their
princely inventors? What should I say of those royal personages, Iuba, Attalus, Climenus, Achilles, Cyrus, Semiramis, Dioecletian: but only thus, to bespeak their princely loves to Herbarism, & their everlasting honours (which neither old Pliny dead, nor young Lipsia living, will permit to die?) Crescent herbae, cresce tis amores: crescent herbae cresce tis honores [The plants flourish, love flourishes: The plants flourish, honours flourish]. But had this wonted faculty wanted the authorisement of such a royal company: one King Solomon, excelling all the rest for wisdom, of greater royalty than they all (though the lilies of the field outbraved him) he only (I say) might yield hereunto sufficient countenance and commendation, in that his lofty wisdom thought no scorn to stoop unto the lowly plants. I list not seek the common colours of antiquity; when notwithstanding the world can brag of no more ancient monument than Paradise, and the garden of Eden: and the fruits of the earth may contend for seniority, seeing their mother was the first creature that conceived, and they themselves, the first fruit she brought forth. Talk of perfect happiness or pleasure, and what place was so fit for that, as the garden place where Adam was set, to be the herbarist? Whither did the poets hunt for their sincere delights, but into the gardens of Alcinous, of Adonis, and the orchards of Hesperides? Where did they dream that heaven should be, but in the pleasant garden of Elysium? Whither do all men walk for their honest recreation but thither, where the earth hath most beneficially painted hit face with flourishing colours? And what season of the year more longed for, than the spring? Whose gentle breath enticeth forth the kindly sweets, and makes them yield their fragrant smells? Who would therefore look dangerously up at planets, that might safely look down at plants? And if true be the old proverb, Quæ supra nos, nihil ad nos [What lies above us is none of our business]. I suppose this new saying cannot be false, Quæ infra nos, ea maxime ad nos [What lies below us is our most important business]. Easy therefore is this treasure to be gained, and yet precious. The science is nobly supported by wise and kingly favourites: the subject thereof so necessary and delectable, that nothing can be confected, either delicate for the taste, dainty for smell, pleasant for sight, wholesome for body, conservative or restorative for health, but it borroweth the relish of an herb, the savour of a flower, the colour of a leaf, the juice of a plant, or the decoction of a root: and such is the treasure that this my treatise is furnished withal, wherein though mine art be not able to countervail nature in her lively portraitures; yet have I counterfeited likeness for life, shapes and shadows for substance, being ready with the bad painter, to explain the imperfections of my pencil with my pen, choosing rather to score upon my pictures such rude marks, as may describe my meaning, than to let the beholder to guess at random and miss. I have here therefore set down not only the names of sundry plants, but also their natures, their proportions and properties, their affects and effects, their increase and decrease, their flourishing and fading, their distinct varieties and several qualities, as well of those which our own country yieldeth, as of others which I have fetched further, or drawn out by perusing divers herbals, set forth in other languages, wherein none of our countrymen hath to my knowledge taken any pains, since that excellent work of Master Doctor Turner; after which time Master Lyte a worshipful gentleman, translated Dodonæus out of French into English; and since that Doctor Priest, one of our London College, hath (as I heard) translated the last edition of Dodonæus, which meant to publish the same; but being prevented by death, his translation likewise perished: lastly, myself one of the least among many, have presumed to set forth unto the view of the world, the first fruits of these mine own labours, which if they be such as may content the reader, I shall think myself well rewarded, otherwise there is no man to be blamed but myself,
being a work, I confess, for greater clerks to undertake, yet may my blunt attempt
serve as a whetstone to set an edge upon some sharper wits, by whom I wish this my
course discourse might be both fined and refined. Faults I confess have escaped, some
by the printer's oversight, some through defects in myself to perform so great a work,
and some by means of the greatness of the labour, and that I was constrained to seek
after my living, being void of friends to bear some part of the burden. The rather
therefore accept this at my hands (loving countrymen) as a token of my good will,
trusting that the best and well minded will not rashly condemn me, although some
thing have passed worthy reprehension. But as for the slanderer or envious, pass not
for them, but return upon themselves, anything they shall without cause either
murmur in corners, or jangle in secret. Farewell.

From my House in Holborn, within the Suburbs of London, this first of December,
1597.
Thy sincere and unfeigned Friend,
JOHN GERARD.
Thomas Johnson to the Reader

courteous READER,

There are many things which I think needful to impart unto thee, both concerning the knowledge of plants in general, as also for the better explaining of some things pertinent to this present History, which I have here set forth much amended and enlarged. For the general differences, affections, &c. of plants, I hold it not now so fitting nor necessary for me to insist upon them; neither do I intend in any large discourse to set forth their many and great uses and virtues: give me leave only to tell you, That God of his infinite goodness and bounty hath by the medium of plants, bestowed almost all food, clothing, and medicine upon man. And to this offspring we also owe (for the most part) our houses, shipping, and infinite other things, though some of them Proteus-like have run through divers shapes, as this paper whereon I write, that first from seed became flax; then after much vexation thread, then cloth, where it was cut and mangled to serve the fashions of the time: but afterwards rejected and cast aside, yet unwilling so to forsake the service of man for which God had created it, again it comes (as I may term it) to the hammer, from whence it takes a more noble form and aptitude to be employed to sacred, civil, foreign and domestic uses. I will not speak of the many and various objects of delight that these present to the senses, nor of sundry other things, which I could plentifully in this kind deliver: but rather acquaint you from what fountains this knowledge may be drawn, by showing what authors have delivered to us the history of plants, and after what manner they have done it; and this will be a means that many controversies may be the more easily understood by the less learned and judicious reader.

He whose name we first find upon record (though doubtless some had treated thereof before) that largely writ of plants, was the wisest of men, even King Solomon, who certainly would not have meddled with this subject, if he in his wisdom had not known it worthy himself, and exceeding fitting: first for the honour of his Creator, whose gifts and blessings these are: secondly for the good of his subjects, whereof without doubt, he in this work had a special regard in the curing of their diseases and infirmities. But this kingly work being lost, I will not insist upon it, but come to such as are yet extant, of which (following the course of antiquity) that of Theophrastus first takes place.

Now Theophrastus succeeded Aristotle in the government of the school at Athens, about the 114 Olymp. which was some 322 years before Christ. He among many other things writ a History of plants in ten books, and of the causes of them, eight books; of the former ten there are nine come to our times reasonable perfect; but there now remain but six of the eight of the causes of plants. Some looking upon the catalogue of the books of Theophrastus his writing, set forth in his life, written by Diogenes Laertius, may wonder that they find no mention of these books of plants, amongst there he reckons up, and indeed I thought it somewhat strange, and so much the more, because this his life is set forth by Daniel Heinsius before his edition of Theophrastus, and there also no mention neither in the Greek nor Latin of those works. Considering this, I thinking to have said something thereof, I found the doubt was long since cleared by the learned Causabone in his notes upon Laertius. Thus being certain of the author, let me say somewhat of the work, which though by the injury of time it hath suffered much, yet is it one of the chief pieces of Antiquity, from whence the knowledge of plants is to be drawn. Theophrastus as he followed Aristotle in the school, so also in his manner of writing, for according as Aristotle hath
delivered his *Historia Animalium*, so hath he set forth this of plants, not by writing of each species in particular, but of their differences and nature, by their parts, affections, generations and life. Which how hard a thing it was he tell you in his second Chapter, and renders you this reason, *because there is nothing common to all plants as the mouth and belly is to other living creatures*. &c. Now by this manner of writing you may learn the general differences and affections of plants, but cannot come to the particular knowledge of any without much labour: for you must go to many places to gather up the description of one plant: neither doth he (nor is it necessary for any writing in this manner) make mention of any great number, and of many it may be but once. His works being in Greek were translated into Latin by Theodore Gaza, who did them but *Greca fide*, [with Greek faithfulness i.e. unfaithfully] for he omitted some things, otherwhiles rendered them contrary to the mind of the author: but above all he took to himself too much liberty in giving of names in imitation of the Greek, or of his own invention, when it had been better by much for his Reader to have had them in the Greek. The learned Julius Scaliger hath set forth *Animadversiones* upon these books, wherein he hath both much explained the mind of Theophrastus, and showed the errors of Gaza. Some since his time have promised to do something to this author, as Daniel Heinsius, and Spigelius, but twenty years are past since, and I have not yet heard of anything done in this kind by either of them. Thus much for Theophrastus.

Let me not pass over Aristotle in silence, though his books writ of this subject were but two, and these according to the conjecture of Julius Scaliger (who hath made a large and curious examination of them) have either perished, or come to us not as they were originally written by Aristotle, but as they have been by some later man put into Greek. Amongst other things Scaliger hath these concerning those two books *Reor e textrina Theophrasti detracta fila quædam iisq, clavos additos*, tamet si neque aereos, neque purpureos quod si protinus autorem tibi dare vis ad Arabum diligentiam proprius accedis. And afterwards thus *Attribuere viri docti, alius alii, at quidem qui aliiorem viderem nihil planudem autorem facianti malim assentiri; extant enim illius alius in librís similis vestigia semilatini etatis, &c*. Thus much for Aristotle, whom as you see I have placed after his scholar, because there is such doubt of these books carried about in his name, and for that Scaliger as you see thinks them rather taken out of Theophrastus, than written by his Master.

The next that orderly follows is Pedacius Dioscorides Anazarbeus, who lived (according to Suidas) in the time of Cleopatra, which was some few years before the birth of our Saviour. Now Suidas hath confounded Dioscorides Anazarbeus with Dioscorides Phocas, but by some places in Galen you may see they were different men: for our Anazarbean Dioscorides was of the Emperic sect, but the other was a follower of Herophilos and of the Rational sect. He writ not only of plants, but *de tota materia medico* to which study he was addicted even from his childhood, which made him travel much ground, and lead a military life, the better to accomplish his ends: and in this he attained to that perfection, that few or none since his time have attained to, of the excellency of his work, which is as it were the foundation and ground-work of all that hath been since delivered in this nature. Hear what Galen one of the excellentest of physicians, and one who spent no small time in this study, affirms: But, saith he, the Anazarbean Dioscorides in five books hath written of the necessary matter of medicine, not only making mention of herbs, but also of trees, fruits, liquors and juices, as also of all minerals, and of the parts of living creatures: and in mine opinion he hath with the greatest perfection performed this work of the matter of Medicine: for although many before him have written well upon this subject, yet none
have writ so well of all. Now Dioscorides follows not the method of Theophrastus, but treats of each kind of herb in particular, first giving the names, then the description, and then the place where they usually grow, and lastly their virtues. Yet of some, which then were as frequently known with them, as Sage, Rosemary, an Ash or Oak tree are with us, he hath omitted the descriptions, as not necessary, as indeed at that time when they were so vulgarly known, they might seem so to be: but now we know the least of these, and have no certainty, but some probable conjectures do direct us to the knowledge of them. He was not curious about his words nor method, but plainly and truly delivered that whereof he had certain and experimental knowledge, concerning the description and nature of plants. But the general method he observed you may find set forth by Bauhin in his edition of Matthiolus, immediately after the preface of the 1st book, whereto I refer the curious, being too long for me in this place to insist upon. His works that have come to us are five books De Materia Medica. One De letalibus venenus, corumq. praecautione et curatione: another De Cane rabido, deq; notis quae morsus ictusve animalium venenum reliquentium sequuntur a third De corum curatione. These eight books within these two last centuries of years have been translated out of Greek into Latin, and commented upon by divers, as Hermolaus Barbarus, Iohannes Ruellius, Marcellus Virgilius, &c. But of these and the rest, as they offer themselves, I shall say somewhat hereafter. There is also another work which goes under his name, and may well be his. It is Geri Thyporison sive de facile parabilibus, divided into two books, translated and confirmed with the consent of other Greek physicians, by the great labour of John Moibane a physician of Augsburg, who lived not to finish it, but left it to be perfected and set forth by Conrad Gesner.

The next that takes place is the laborious Caius Plinius Secundus, who lived in the time of Vespasian, and was suffocated by the sulphurous vapours that came from Mount Vesuvius, falling at that time on fire; he through overmuch curiosity to see and find out the cause thereof approaching too nigh, and this was Anno Domini, 79. He read and writ exceeding much, though by the injury of time we have no more of his than 37 books De Historia Mundi, which also have received such wounds, as have tried the best skill of our critics, and yet in my opinion in some places require medicas manus. From the twelfth to the end of the twenty-seventh of these books he treats of plants, more from what he found written in other authors than from any certain knowledge of his own, in many places following the method and giving the words of Theophrastus, and in other places those of Dioscorides, though he never makes mention of the later of them. He also mentions, and no question followed many other authors, whose writings have long since perished. Sometimes he is pretty large, and otherwhiles so brief, that scarce anything can thence be gathered. From the seventeenth unto the twenty-seventh he variously handles them, what method you may quickly see by his Elenchus contained in his first book, but in the twenty seventh he handles those whereof he had made no, or not sufficient mention, after an alphabetical order, beginning with Æthyopis, Ageratum, Aloe, &c. so going on to the rest.

I must not pass over in silence, neither need I long insist upon Galen, Paulus Ægineta, and Aetius, for they have only alphabetically named plants and other simple medicines, briefly mentioning their temperature and faculties, without descriptions (some very few, and those brief ones, excepted) and other things pertinent to their history.
The next that present themselves are two counterfeits, who abuse the world under feigned titles, and their names have much more antiquity than the works themselves: the first goes under the title of Æmilius Macer a famous Poet, of whom Ovid makes mention in these verses;

Saepe suases volucres legit mihi grandior ævo
Quaeq; nocet Serpens, quæ ivuat herba Macer.
[Often old Macer read to me about those birds of his, the snakes that harm you, and the herbs that heal. Ovid, Sorrows Bk.4.10 l. 43-44]

Pliny also makes mention of this Macer: he in his poems imitated Nicander, but this work that now is carried about under his name, is written in a rude, and somewhat barbarous verse, far different from the style of those times wherein Macer lived, and no way in the subject imitating Nicander. It seems to have been written about 400 or 500 years ago.

The other also is of an unknown author, to whom the printers have given the title of Apuleius Madaurensis, and some have been so absurdly bold of late, as to put it unto the works of Apuleius; yet the uncurious style and method of the whole book will convince them of error, if there were no other argument. I have seen some four manuscripts of this author, and heard of a fifth, and all of them seem to be of good antiquity: the figures of them all for the most part have some resemblance each of other: the first of these I saw some nine years age with that worthy lover and storer of antiquities, Sir Robert Cotton: it was in a fair Saxon hand, and as I remember in the Saxon tongue; but what title it carried, I at that time was not curious to observe. I saw also another after that, which seemed not to be of any small standing, but carelessly observed not the title. But since I being informed by my friend Master Goodyer (as you may find in the chapter of Saxifrage of the ancients) that his manuscript which was very ancient, acknowledged no such author as Apuleius, I begun a little to examine some other manuscripts, so procured a very fair one of my much honoured friend Sir. Theod. Mayern: in the very beginning of this is writ, In hoc continentur libri quatuor medicinæ Ypocratis, Platonis Apoliensis urbis de diversis herbis; Sexti Papiri placiti ex animalibus, &c. ["This book contins four books of medicine by Hippocrates, Of Various Herbs by Plato Apoliensis, six papers about animals, &c."] A little after in the same page at the beginning of a table which is of the virtues, are these words, In prima libro sunt herba descriptæ, quas Apoliensis Plato descrisit, &c. ["In the first book are descriptions of herbs, as described by Plato Apoliensis"] and thus also he is named in the title of the Epistle or Proem; but at the end of the work is Explicit liber Platonis de herbis masculinis, &c. [The end of Plato's bok of masculine herbs &c.] With this in all things agrees that of Mr. Goodyer, as he hath affirmed to me. Betides these, I found one with Mr. John Tradescant, which was written in a more ignorant and barbarous time, as one may conjecture by the title, which is thus at the very beginning. In nomine Domini incipit Herboralium Apolei Platonis quod accepta a Scolapio, & Chirone Centauro magistro. ["In God's name here begins the herbal of Plato Apoliensis, which re recieved from Scolapius and Master Chiron the centaur"] Then follows (as also in the former, and in the printed books) the tract ascribed to Antonius Musa, De herba Betonica: after that are these words, Liber Medicinæ Platonis herbaticus explicit. ["The end of Plato the herbarist's book of medicine"] By this it seems the author of this work either was named, or else called himself Plato, a thing not without example in these times. This work was first printed at Basel, 1528, amongst some other works of physic, and one Albanus Torinus set it forth by the help of many manuscripts, of whose imperfections he much
complains, and I think not without cause: after this, Gabriel Humelbergius of Ravensburg in Germany set it forth with a comment upon it, who also complains of the imperfections of his copies, and thinks the work not perfect: indeed both the editions are faulty in many places: and by the help of these manuscripts I have seen they might be mended (if any thought it worth their labour) in some things, as I observed in cursorily looking over them. One thing I much marvel at, which is, that I find not this author mentioned in any writer of the middle times, as Platearius, Bartholomæus Anglus, &c. Now I conjecture this work was originally written in Greek; for these reasons first because it hath the Greek names in such plenty, and many of them proper, significant, and in the first place: Secondly some are only named in Greek, as Hierobulbon, Artemisia Leptophyllos, and Artemesia tagantes, Battrichon, Gryas (which I judge rather Greek than Latin) &c. Besides in both the written books in very many places amongst the names I find this word Ομοεος, but diversly written; for I conjecture the Greek names were written in the Greek character, and ομοιως amongst them and then also when the rest of the work was translated, which afterwards made the transcribers who understood it not to write it variously, for in the one book it is always written Ομοεος, and in the other Ομοεος, and sometimes Ομοεος, as in the Chapter of Brittanica, the one hath it thus, Νομεν herbae istius Brittanica, Ομοεος dicant eam Damasinium, &c. The other thus: Νομεν herbae Brittanica, Ομοεος Damasinius, &c. & in the chap. of Althea the one hath it thus: Νομεν huius herbae Altea Αμοεος vocant hoc herbam Moloche, &c. The other Νομεν herba Ibiscus ομοεος Moloce, &c. If it be certain which Philip Ferrarius affirms in his Lexicon Geographicum, that the city Apoley is Constantinople, then have I found Apoliensis urbus, of which I can find no mention in any ancient or modern Geographer besides; and then it is more than probable that this was written in Greek, and it may be thought differently translated, which occasions such diversity in the copies, as you shall find in same places. Now I conjecture this work was written about some 600 years ago.

From these ancients have sprung all, or the greatest part of the knowledge, that the middle or later times have had of plants; and all the controversies that of late have so stuffed the books of such as have writ of this subject, had their beginning by reason that the carelessness of the middle times were such, that they knew little but what they transcribed out of these ancients, never endeavouring to acquire any perfect knowledge of the things themselves: so that when as learning (after a long winter) began to spring up again, men began to be somewhat more curious, and by the notes and descriptions in these ancient authors they have laboured to restore this lost knowledge; making inquiry, first whether it were known by Theophrastus, Dioscorides, or any of the ancients, then by what name. But to return to my authors.

About An. Dom. 1100, or a little after, lived the Arabians Avicenna, Averroes, Mesve, Rhasis and Serapio; most of these writ but briefly of this subject; neither have we their works in the Arabic wherein they were written, but barbarously translated into Latin, and most part of these works were by them taken out of the Greeks, especially Dioscorides and Galen; yet so as they added somewhat of their own, and otherwhiles confounded other things with those mentioned by the Greeks, because they did not well know the things whereof they writ. Avicenna, Averroes, and Rhasis alphabetically and briefly (following the method of Galen) give the names, temperature, and virtues, of the chiefest simple medicines. But Serapio, after a particular tract of the temperature and qualities of simple medicines in general, comes to treat of them in particular, and therein follows chiefly Dioscorides, Galen, and
Paulus, and divers Arabians that went before him. This is the chief work in this kind of the Arabians, which have come to us; he himself tells us his method in his preface, which is (when he comes to particulars) first of medicines temperate, then of those that are hot and dry in the first degree; then those cold and dry in the same degree: after that, those hot and dry in the second degree, &c. and in each of these tracts he follows the order of the Arabic Alphabet.

In or after the times of the Arabians until about the year 1400, there were divers obscure and barbarous writers, who by sight knew little whereof they writ, but took out of the Greeks, Arabians, and one another, all that they writ, giving commonly rude figures, seldom setting down any descriptions: I will only name the chief of them that I have seen, and as near as I can guess in that order that one of them succeeded another. For the particular times of their living is somewhat difficult to be found out. One of the ancientest of them seems to be Isidore; then Platearius whose work is alphabetical and entitled *Circa instans*; the next Matthæus Sylvaticus, who flourished about the year 1319; his work is called *Pandectæ*: a little after him was Bartholomæus Anglus, whose works (as that of Isidore, and most of the rest of those times) treat of divers other things besides plants, as beasts, birds, fishes, &c. His work is called *De proprietatibus rerum*: the author's name was Bartholomew Glanvill, who was desended of the noble family of the Earls of Suffolk; and he wrote this work in Edward the third's time, about the year of our Lord, 1397. After all these, and much like them is the *Hortus sanitatis* whose author I know not. But to leave these obscure men and their writings, let me reckon some of later time, who with much more learning and judgement have endeavoured to illustrate this part of physic.

About some 200 year ago learning again beginning to flourish, divers begun to leave and loathe the confused and barbarous writings of the middle times, and to have recourse to the ancients, from whence together with purity of language, they might acquire a more certain knowledge of the things treated of, which was wanting in the other. One of the first that took pains in this kind was Hermolaus Barbarus Patriarch of Aquileia, who not only translated Dioscorides, but writ a commentary upon him in five books, which he calls his *Corollarium*; in this work he hath showed himself both judicious and learned.

After him Marcellus Virgilius secretary to the state of Florence, a man of no less learning and judgement than the former, set forth Dioscorides in Greek and Latin with a *Comment* upon him.

Much about their time also John Ruellius a French physician, who flourished in the year 1480, translated Dioscorides into Latin, whose translation hath been the most followed of all the rest. Moreover he set forth a large work, *De natura Stirpium*, divided into three books, wherein he hath accurately gathered all things out of sundry writers, especially the Greeks and Latins; for first having (after the manner of Theophrastus) delivered some common precepts and advertisements pertaining to the form, life, generation, ordering, and other such accidents of plants; he then comes to the particular handling of each species.

Much about this time, the Germans began to beautify this so necessary part of physic; and amongst them Otho Brunselslus, a physician of good account, writ of plants, and was the first that gave the lively figures of them; but he treated not in all of above 288 plants. He commonly observes this method in his particular chapters: First the figure (yet he gives not the figures of all he writes of) then the Greek, Latin, and German names; after that, the description and history out of most former authors; then
Gerard's Herbal

the temperature and virtues, and lastly, the authors' names that had treated of them. His work is in three parts or tomes, the first was printed in 1530, the second in 1531, and the third in 1536.

Next after him was Hieronymus Tragus a learned, ingenious, and honest writer, who set forth his works in the German tongue, which were shortly after translated into Latin by David Kiber. He treats of most of the plants commonly growing in Germany, & I can observe no general method he keeps, but his particular one is commonly this he first gives the figure with the Latin and high Dutch name; then commonly a good description; after that the names, then the temperature, and lastly the virtues, first inwardly, then outwardly used. He hath figured some 567, and described some 800. His figures are good, (and so are most of the rest that follow.) His works were set forth in Latin, An. 1552.

In his time lived Leonhartus Fuchsius, a German physician, being also a learned and diligent writer, but he hath taken many of his descriptions as also virtues word for word out of the ancients, and to them hath put figures; his general method is after the Greek alphabet, and his particular one thus: First the names in Greek and Latin, together oft-times with their etymologies, as also the German and French names, then the kinds, after that the form, the place, time, temperature then the virtues: first out of the ancients, as Dioscorides, Galen, Pliny, &c. and sometimes from the late writers, whom he doth not particularize, but expresses in general ex recentioribus. His work was set forth at Basel, 1542, in Fol. containing 516 figures; also they were set forth in octavo, the history first, with all the figures by themselves together at the end with the Latin and high Dutch names.

About this time, and a little after, flourished Conrad Gesner also a German physician, who set forth divers things of this nature, but yet lived not to finish the great and general work of plants, which he for many years intended, and about which he had taken a great deal of pains, as may be gathered by his Epistles. He was a very learned, painful, honest and judicious writer, as may appear by his many & great works; whereof those of plants were first a brief alphabetical history of plants without figures, gathered out of Dioscorides, Theophrastus, Pliny, &c. with the virtues briefly, and for the most part taken out of Paulus Ægineta, with their names in Greek and French put in the margin: this was printed at Venice, 1541, in a small form. He set forth a catalogue of plants, in Latin, Greek, high-Dutch and French, printed at Zurich, 1542. Also another tract De Lunarii & noctu lucentibus cum montis fracti, sive Pilati Lucernatum descriptione, An. 1552, in quarto. He also set forth the four Books of Valerius Cordus (who died in his time) and his Sylva observationum at Strasbourg, 1561, in fol. and to these he added a Catalogue of the German Gardens with an Appendix and Corollarium to Cordus his History. Also another treatise of his De stirpium collectione, was set forth at Zurich by Wolphius, An. 1587, in Octavo.

At the same time lived Adam Lonicerus a physician of Frankfurt, whose Natural History was there printed, An. 1551, and the first part thereof is of plants; and four years after he added another part thereto, treating also of plants. I find no general method observed by him, but his particular method usually is this: first he gives the figure, then the names in Latin and Dutch, then the temperature, &c. as in Tragus, from whom & Cordus, he borrows the most part of his first tome, as he doth the 2nd from Matth. & Amatanus Lusit.

In his time the Italian physician Petrus Andreas Matthiolus set forth his Commentaries upon Dioscorides, first in Italian with 957 large and very fair figures,
and then afterwards in Latin at Venice, with the same figures, An. 1568. After this he set forth his *Epitome* in Quarto, with 921 smaller figures. Now these his Commentaries are very large; and he hath in them delivered the history of many plants not mentioned by Dioscorides; but he is justly reprehended by some, for that he everywhere taxes and notes other writers, when as he himself runs into many errors, and some of them wilful ones, as when he gives figures framed by his own fancy, as that of *Dracontium maius, Rhabarbarum, &c.* and falsified other some in part, the better to make them agree with Dioscorides his description, as when he pictures *Arbor Judæ* with prickles, and gives it for the true *Acacia*: and he oft-times gives bare figures without description of his own, but saith, it is that described by Dioscorides, *Nullis reclamantibus notis* [with no further information], for which the authors of the *Adversaria* much declaim against him. It had been fit for him, or any one that takes such a work in hand, to have showed by describing the plant he gives, and conferring it with the description of his author, that there is not any one note wanting in the description, virtues, or other particulars which his author sets down; and if he can show that his is such, then will the contrary opinions of all others fall of themselves, and need no confutation.

Amatus Lusitanus also about the same time set forth *Commentaries* upon Dioscorides, adding the names in divers languages but without figures, at Strasbour, An. 1554, in Quarto: he dissented from Matthiolus in many things; whereupon Matthiolus writ an *Apology* against him. He hath performed no great matter in his *Enarrations* upon Dioscorides, but was an author of the honesty of Matthiolus, for as the one deceived the world with counterfeit figures, so the other by feigned cures to strengthen his opinion, as Crato judges of his *Curationes Medicinales* (another work of his) which he thinks, *potius fictæ, quam factæ* [More fiction than fact].

Rembertus Dodonæus a physician born at Mechlin in Brabant, about this time begun to write of plants. He first set forth a *History* in Dutch, which by Clusius was turned into French, with some additions, Anno Domini, 1560. And this was translated out of French into English by Master Henry Lite, and set forth with figures, Anno Dom. 1578, and divers times since printed, but without figures. In the year 1552, Dodonæus set forth in Latin his *Frugum Historia*, and within a while after his *Florum, purgantium, & deleteriorum Historia*. Afterwards he put them all together, his former, and those his later works, and divided them into thirty books, and set them forth with 1305 figures, in fol. An. 1583. This edition was also translated into English, which became the foundation of this present work, as I shall show hereafter. It hath since been printed in Latin, with the addition of some few new figures: and of late in Dutch, Anno 1618, with the addition of the same figures; and most of these in the *Exotics* of Clusius, and great store of other additions. His general method is this: first he divides his works into six pentads or fives: the fifth pentad or five books of these contain plants in an alphabetical order, yet so as that other plants that have affinity with them are comprehended with them, though they fall not into the order of the alphabet. The second pent. contains *Flores Coronarii, plantæ odorata & umbelliferae*. The third is *De Radicibus, Purgantibus Herbis, convolvulis, deleteriis ac perniciosis plantis, Filicibus, Muscis et Fungis*. The fourth is *De Frumentis, Leguminibus, palustribus & aquatilibus*. The fifth, *De Oleribus & Carduis*. The sixth, *de Fruticibus & Arboribus*. The particular method is the same used by our author.

In the year 1570, Peter Pena and Matthias Lobel did here at London set forth a work, entitled *Stirpium Adversaria nova*; the chief end and intention whereof being to find out the *Materia medica* of the ancients. The general method is the same with that
of our author, which is, putting things together as they have most resemblance one
with another in external form, beginning with Grass, Corns, &c. They give few
figures, but sometimes refer you to Fuchsius, Dodonæus, and Matthiolus: but where
the figure was not given by former authors, then they commonly give it; yet most part
of these figures are very small and unperfect, by reason (as I conjecture) they were
taken from dried plants. In this work they insist little upon the virtues of plants, but
succinctly handle controversies, and give their opinions of plants, together with their
descriptions and names, which sometimes are in all these languages, Greek, Latin,
French, high and low Dutch, and English: otherwhiles in but one or two of them.
Some writers for this work call them Doctissimi Angli; yet neither of them were borne
here, for Pena (as I take it) was a Frenchman, and Lobel was borne at Lille in
Flanders, yet lived most part of his later time in this Kingdom; and here also ended his
days. In the year 1576 he set forth his Observations, and joined them with the
Adversaria, by them two to make one entire work: for in his Observations he gives
most part of the figures and virtues belonging to those herbs formerly described only
in the Adversaria; and to these also adds some new ones not mentioned in the former
work. After which he set forth an Herbal in Dutch, wherein he comprehended all
those plants that were in the two former works, and added divers other to them, the
work containing some 2116 figures; which were printed afterwards in a longish form,
with the Latin names, and references to the Latin and Dutch books. After all these, at
London, Anno 1605, he again set forth the Adversaria, together with the second part
thereof, wherein is contained some forty figures, being most of them of Grass and
Flowers; but the descriptions were of some 100 plants, varieties and all. To this he
added a Treatise of Balsam (which also was set forth alone in Quarto, Anno 1598) and
the Pharmacopæa of Rondeletius, with Annotations upon it. He intended another great
work, whose title should have been Stirpium Illustrationes, but was prevented by
death.

Some six years after the edition of the Adversaria, Anno 1576, that learned,
diligent, and laborious herbarist Carol. Clusius set forth his Spanish Observations,
having to this purpose travelled over a great part of Spain; and being afterwards called
to the Imperial Court by Maximilian the second, he viewed Austria and the adjacent
provinces, and set forth his there Observation, Anno 1583. He also translated out of
Spanish the works of Garcias ab Orta and Christopher Acosta, treating of the simple
medicines of the East Indies, and Nicolas Monardus, who writ of those of the West
Indies. After this he put into one body both his Spanish and Pannonic Observations,
with some other, and those he comprehends in six books, entitled Rariorum
plantarum Historia: whereto he also adds an Appendix, a treatise of Mushrooms, six
Epistles treating of plants, from Honourius Bellus an Italian physician living at
Cydonia in Candy; as also the description of mount Baldus, being a catalogue with the
description and figures of some rare and not before written of plants there growing,
written by John Pona an apothecary of Verona (This Description of Pona's was
afterwards with some new descriptions and thirty-six figures set forth alone in Quarto,
An. 1608.) This first Volume of Clusius was printed in Antwerp, Anno 1601, in folio:
and in the year 1605 he also in folio set forth in another volume six books of exotics
containing various matter, as plants, or some particles of them, as Fruits, Woods,
Barks, &c. as also the forenamed translations of Garcias, Acosta, and Monardus:
Three Tracts besides of the same Monardus; the first, De lapide Bezoar, & Herba
Scorsonera. The second, De Ferro & eius facultatibus: The third, De nive & eius
commodis. To these he also added Bellonius his Observations or Singularities, and a
tract of the same author, De neglecta stirpium cultura, both formerly translated out of
French into Latin by him. He was borne at Atrebas or Arras, the chief city of Artois, Anno 1526, and died at Leyden, Ann. 1609. After his death, by Everard Vorstius, Peter Paw, or some others, were set forth some additions and emendations of his former works, together with his funeral oration made by Vorstius, his epitaph, &c. in quarto, Anno 1611, by the name of his *Cura Posteriores*.

In the year 1583, Andreas Caesalpinus an Italian physician, and professor at Pisa, set forth an history of plants, comprehended in sixteen books: his work is without figures, and he oft times gives the Tuscan names for Latin; wherefore his work is the more difficult to be understood, unless it be by such as have been in Tuscany, or else are already well exercised in this study. He commonly in his own words diligently for the most part describes each plant, and then makes enquiry whether they were known by the ancients. He seldom sets down their faculties, unless of some, to which former writers have put down none. In the first book he treats of plants in general, according as Theophrastus doth: but in the following books he handles them in particular: he maketh the chief affinity of plants to consist in the similitude of their seeds and seed vessels.

Joachimus Camerarius a physician of Nuremberg flourished about this time: He set forth the *Epitome of Matthiolus*, with some additions and accurate figures, in quarto, at Frankfurt, 1586: in the end of which work (as also in that set forth by Matthiolus himself) is *Iter Baldi*, or a journey from Verona to Mount Baldus, written by Franco Calceolarius an apothecary of Verona. Another work of Camerarius was his *Hortus Medicus*, being an alphabetical enumeration of plants, wherein is set forth many things concerning the names, ordering, virtues, &c. of plants. To this he annexed *Hycinia Saxonothuringica Iohannis Thalii*, or an alphabetical catalogue written by John Thalius of such plants as grew in Harkwald a part of Germany between Saxony and Thuringia. This was printed also at Frankfurt in quarto, An. 1588.

In the year 1587 came forth the great history of plants printed at Lyons, which is therefore vulgarly termed *Historia Lugdunensis*: it was begun by Dalechampius: but he dying before the finishing thereof, one John Molinaeus set it forth, but put not his name thereto. It was intended to comprehend all that had written before, and so it doth, but with a great deal of confusion; which occasioned Bauhin to write a treatise of the errors committed therein, in which he shows there are about four hundred figures twice or thrice over. The whole number of the figures in this work are 2686. This History is divided into eighteen books, and the plants in each book are put together either by the places of their growings, as in woods, copses, mountains, watery places, &c. or by their external shape, as umbelliferous, bulbous, &c. or by their qualities, as purging, poisonous, &c. Herein are many places of Theophrastus and other ancient Writers explained. He commonly in each chapter gives the names, place, form, virtue, as most other do. And at the end thereof there is an Appendix containing some Indian plants, for the most part out of Acosta; as also divers Syrian and Egyptian plants described by Reinold Rawolfe a physician of Augsburg.

At this time, to wit Anno 1588, Jacobus Theodorus Tabernamontanus set forth an *History of Plants* in the German tongue, and some twelve years after his figures being in all 2087, were set forth in a long form, with the Latin and High-Dutch names put unto them; and with these same figures was this work of our author formerly printed.
Prosper Alpinus a physician of Padua in Italy, in the year 1592 set forth a Treatise of some Egyptian Plants, with large yet not very accurate figures: he there treats of some 46 plants, and at the end thereof is a Dialogue or Treatise of Balsam. Some six years ago, Anno 1627, his son set forth two books of his father's, De plantis Exoticis, with the figures cut in brass: this work contains some 136 plants.

Fabius Columna a gentleman of Naples, of the house of Columna of Rome, An. 1592 set forth a Treatise called Phytobasanos, or an examination of plants; for therein he examines and asserts some plants to be such and such of the ancients: and in the end of this work he gives also the history of some not formerly described plants. He also set forth two other books, De minus cognitis, or of less known plants: the first of which was printed at Rome, Anno 1606; and the other 1616. He in these works, which in all contain little above two hundred thirty six plants, shows himself a man of an exquisite judgment, and very learned and diligent, duly examining and weighing each circumstance in the writings of the ancients.

Caspar Bauhin, a physician and Professor of Basel, besides his anatomical works, set forth divers of plants. Anno 1596 he set forth his Phytopinax, or Index of Plants wherein he follows the best method that any yet found: for according to Lobel's method (which our author followed) he begins with Grass, Rushes, &c. but then he briefly gives the Etymology of the name in Greek and Latin, if any such be, and tells you who of the ancients writ thereof, and in what part of their works: and lastly (which I chiefly commend him for) he gives the synonyms or several names of each plant given by each late writer, and quoteth the pages. Now there is nothing more troublesome to such as newly enter into this study, than the diversity of names, which sometimes for the same plant are different in each author; some of them not knowing that the plant they mention was formerly written of, name it as a new thing; others knowing it writ of, yet not approving of the name. In this work he went but through some half of the history of plants. After this, Anno 1598, he set forth Matthiolus his Commentaries upon Dioscorides, adding to them 330 Figures, and the descriptions of fifty new ones not formerly described by any; together with the synonyms of all such as were described in the work. He also Anno 1613 set forth Tabernamontanus in Dutch, with some addition of history and figures. In Anno 1620 he set forth the Prodromus, or fore-runner of his Theatrum Botanicum, wherein he gives a hundred and forty new figures, and describes some six hundred plants, the most not described by others. After this, Anno 1623, he set forth his Pinax Theatri Botanici, whose method is the same with his Phytopinax, but the quotations of the pages in the several authors are omitted. This is indeed the Index and summa of his great and general work, which should contain about six thousand plants, and was a work of forty years: but he is dead some nine years ago, and yet this his great work is not in the press, that I can hear of.

Basil Besler an apothecary of Nuremberg, Anno 1623 set forth the garden of the Bishop of Eichstätt in Bavaria, the figures being very large, and all curiously cut in brass, and printed upon the largest paper: he only gives the synonyms and descriptions, and divideth the work first into four parts, according to the four seasons of the year; and then again he subdivides them, each into three, so that they agree with the months, putting in each class the plants that flourish at that time.

These are the chief and greatest part of those that either in Greek or Latin (whose works have come to our hands) have delivered to us the history of plants; yet there are some who have used great diligence to help forward this knowledge, whose
names I will not pass over in silence. The first and ancientest of there was Aloysius Anguillara a physician of Padua, and president of the public garden there: his opinions of some plants were set forth in Italian at Venice, 1561.

Melchior Guillandinus, who succeeded Anguillara in the garden at Padua, writ an Apology against Matthiolus, some Epistles of plants, and a commentary upon three chapters of Pliny, De Papyro.

Ferantes Imperatus an apothecary of Naples also set forth a Natural History divided into twenty-eight books, printed at Naples Anno 1599. In this there is something of plants: but I have not yet seen the opinions of Anguillara, nor this Natural History: yet you shall find frequent mention of both these in most of the forementioned authors that writ in their time, or since, wherefore I could not omit them.

Let me now at last look home, and see who we have had that have taken pains in this kind. The first that I find worthy of mention is Dr. William Turner, the first of whose works that I have seen, was a little book of the names of herbs, in Greek, Latin, English, Dutch, and French, &c. printed at London Anno 1548. In the year 1551 he set forth his Herbal or History of Plants, where he gives the figures of Fuchsius, for the most part: he gives the names in Latin, Greek, Dutch, and French: he did not treat of many plants; his method was according to the Latin alphabet. He was a man of good judgment and learning, and well performed what he took in hand.

After this, Dodonæus was translated into English by Mr. Lyte, as I formerly mentioned. And some years after, our author set forth this work, whereof I will presently treat, having first made mention of a work set forth between that former edition, and this I now present you withal.

Mr. John Parkinson an apothecary of this city (yet living and labouring for the common good) in the year 1629 set forth a work by the name of Paradisus terrestris, wherein he gives the figures of all such plants as are preserved in gardens, for the beauty of their flowers, for use in meats or sauces; and also an orchard of all trees bearing fruit, and such shrubs as for their rarity or beauty are kept in orchards and gardens, with the ordering, planting and preserving of all these. In this work he hath not superficially handled these things, but accurately descended to the very varieties in each species: wherefore I have now and then referred my Reader addicted to these delights, to this work especially in flowers and fruits, wherein I was loth to spend too much time, especially seeing I could add nothing to what he had done upon that subject before. He also there promised another work, the which I think by this time is fit for the Press.

Now am I at length come to this present work, whereof I know you will expect I should say somewhat; and I will not frustrate your expectation, but labour to satisfy you in all I may, beginning with the author, then his work, what it was, and lastly what it now is.

For the author Mr. John Gerard I can say little, but what you also may gather out of this work; which is, he was born in the year 1545 in Cheshire, at Nantwich, from whence he came to this city, and betook himself to surgery, wherein his endeavours were such, as he therein attained to be a Master of that worthy profession: he lived some ten years after the publishing of this work, and died about the year 1607. His chief commendation is, that he out of a propense good will to the public advancement of this knowledge, endeavoured to perform therein more than he could
well accomplish; which was partly through want of sufficient learning, as (besides that which he himself saith of himself in the chapter of Water Dock) may be gathered by the translating of divers places out of the *Adversaria*; as this for one in the description of *Aster Atticus*, *Caules pedales terni aut quaterni* [Three or four stalks a foot long] which is rendered, *A stalk four or five foot long*. He also by the same defect called burnt Barley, *Hordeum distichon*; and divided the titles of honour from the name of the person whereto they did belong, making two names thereof, beginning one clause with *Julius Alexandrinus saith*, &c. and the next with, *Caesarius Archiater saith*. He also was very little conversant in the writings of the ancients, neither, as it may seem by divers passages, could he well distinguish between the ancient and modern writers: for he in one place saith, *Neither by Dioscorides, Fuchsius, or any other ancient writer once remembered.* Divers such there are, which I had rather pass over in silence, than here set down: neither should I willingly have touched hereon, but that I have met with some that have too much admired him, as the only learned and judicious writer. But let none blame him for these defects, seeing he was neither wanting in pains nor good will, to perform what he intended; and there are none so simple but know, that heavy burdens are with most pains undergone by the weakest men: and although there were many faults in the work, yet judge well of the author; for as a late writer well saith, *Falli & hallucinari humanum est; solitudinem quærat oportet, qui vult cum perfectis vivere. Pensanda vitiis bona cuiusque sunt, & qua maior pars ingenii stetit, ea iudicandum de homine est.*

Now let me acquaint you how this work was made up. *Dodonæus* his *Pentades* coming forth Anno 1583, were shortly after translated into English by Dr. Priest a physician of London, who died either immediately before or after the finishing of his translation. This I had first by the relation of one who knew Dr. Priest and Mr. Gerard: and it is apparent by the work itself, which you shall find to contain the *Pentades* of Dodonæus translated, so that divers chapters have scarce a word more or less than what is in him. But I cannot commend my author for endeavouring to hide this thing from us, cavilling (though commonly unjustly) with Dodonæus, wheresoever he names him, making it a thing of hearsay, that Dr. Priest translated Dodonæus: when in the Epistle of his friend Mr. Bredwell, prefixed before this work, are these words: *The first gatherers out of the ancients, and augmenters by their own pains, have already spread the odour of their good names through all the lands of learned habitations:* Dr. Priest for translating so much as Dodonæus, hath hereby left a tomb for his honourable sepulture. Mr. Gerard coming last, but not the least, hath many ways accommodated the whole work unto our English Nation, &c. But that which may serve to clear all doubts, if any can be in a thing so manifest, is a place in Lobel’s *Annotations upon Rondeletius his Pharmacopeia*, where, page 59, he finds fault with Dodonæus, for using barbarously the word *Seta* for *Sericum* and with Dr. Priest, who (saith he) at the charges of Mr. Norton translated Dodonæus, and deceived by this word *Seta*, committed an absurd error in translating it a *bristle*, when as it should have been *silk*. This place so translated is to be seen in the chapter of the Scarlet Oak, at the letter F. And Lobel well knew that it was Dr. Priest that committed this error, and therefore blames not Mr. Gerard, to whom he made show of friendship, and who was yet living: but yet he covertly gave us to understand, that the work wherein that error was committed, was a translation of Dodonæus, and that made by Dr. Priest, and set forth by Mr. Norton. Now this translation became the ground-work whereupon Mr. Gerard built up this work: but that it might not appear a translation, he changes the general method of Dodonæus, into that of Lobel, and therein almost all over follows his *Icones* both in method and names, as you may plainly see in the Grass and Orchids.
To this translation he also added some plants out of Clusius, and other some out of the *Adversaria*, and some fourteen of his own not before mentioned. Now to this history figures were wanting, which all so Mr. Norton procured from Frankfurt, being the same wherewith the works of Tabernamontanus were printed in Dutch: but this fell cross for my author, who (as it seems) having no great judgement in them, frequently put one for another: and besides, there were many plants in those authors which he followed, which were not in Tabernamontanus, and divers in him which they wanted, yet he put them all together, and one for another; and oft times by this means so confounded all, that none could possibly have set them right, unless they knew this occasion of these errors. By this means, and after this manner was the work of my author made up, which was printed at the charges of Mr. Norton, An. 1597.

Now it remains I acquaint you with what I have performed in this Edition, which is either by mending what was amiss, or by adding such as formerly were wanting: some places I helped by putting out, as the kinds in the chapter of Stonecrop, where there was but one mentioned. I have also put out the kinds in divers places else where they were not very necessary, by this means to get more room for things more necessary as also divers figures and descriptions which were put in two or three places, I have put them out in all but one, yet so, as that I always give you notice where they were, and of what. Some words or passages are also put out here and there, which I think needless to mention. Sometimes I mended what was amiss or defective, by altering or adding one or more words, as you may frequently observe if you compare the former edition with this in some few chapters almost in any place. But think I shall best satisfy you if I briefly specify what is done in each particular, having first acquainted you with what my general intention was: I determined, as well as the shortness of my time would give me leave, to retain and set forth whatsoever was formerly in the book described, or figured without descriptions (some varieties that were not necessary excepted) and to these I intended to add whatsoever was figured by Lobel, Dodonæus, or Clusius, whose figures we made use of; as also such plants as grow either wild, or usually in the gardens of this kingdom, which were not mentioned by any of the forenamed authors; for I neither thought it fit nor requisite for me, ambitiously to aim at all that Bauhin in his *Pinax* reckons up, or the *Exotics* of Prosper Alpinus containe not mentioned in the former. This was my general intention.

Now come I to particulars, and first of figures: I have, as I said, made use of those wherewith the works of Dodonæus, Lobel, and Clusius were formerly printed, which, though some of them be not so sightly, yet are they generally as truly expressed, and sometimes more. Such as were formerly figured in the book, though put for other things; and so having no description therein, I have caused to be new cut and put into their fit places, with descriptions to them. The next are the Descriptions, which I have in some places lightly amended, in others much altered, or new written. The next is the Place, which I have seldom altered, yet in some places supplied, and in others I have put doubts, & do suspect other some to be false, which because I had not yet viewed, I left as I found. The Time was a thing of no such moment, for any matter worth mentioning to be performed upon, wherefore I will not insist upon it. Names are of great importance, and in them I should have been a little more curious if I had had more time, as you may see at the first have been; but finding it a troublesome work, I have only afterwards where I judged it most needful insisted upon it: Bauhin in his *Pinax* may supply what you in this kind find wanting. In many places of this work you shall find large discourses and sometimes controversies handled by our author in the names; these are for the most part out of Dononæus, & some of them were so abbreviated, and by that means confounded, that I thought it not worth my
pains to mend them, so I have put them out in some few places, and referred you to the places in Dodonæus out of which they were taken, as in the chapter of Ale-hoof: it may be they are not so perfect as they should be in some very few other places, (for I could not compare all) but if you suspect any such thing, have recourse to that author, and you shall find full satisfaction.

Now come I to the Temper and Virtues. These commonly were taken forth of the fore-mentioned author, and here and there out of Lobel's Observations, and Camerarius his Hortus Medicus. To these he also added some few receipts of his own: these I have not altered, but here and there showed to which they did most properly belong; as also if I found them otherwise than they ought, I noted it; or if in unfit places, I have transferred them to the right place, and in divers things whereof our author hath been silent, I have supplied that defect.

Further, I must acquaint you how there were the descriptions of a few plants here and there put in unfitting places, which made me describe them as new added, as Saxifraga maior Matthioli, Persicaria siliquosa, of which in the chapter of Persicaria there was an ill description, but a reasonable good one in the chapter of Astrantia nigra. Papaver spinosum, was figured and described amongst the Cardui; now all these (as I said) I added as new in the most fitting places: yet found them afterwards described, but put them out all, except the last, whose history I still retaining, with a reference to the preceding figure and history. Note all so, wheresoever my author formerly mentioned Clusius, according to his Spanish or Pannonic Observations, I have made it, according to his History, which contains them both with additions.

Also I must certify you, (because I know it is a thing that some will think strange, that the number of the pages in this book do no more exceed that of the former, considering there is such a large accession of matter and figures) the cause hereof is, each page contains divers lines more than the former, the lines themselves also being longer; and by the omission of descriptions and figures put twice or thrice over, and the kinds unnecessarily put in some places, I gained as much as conveniently I could, being desirous that it might be bound together in one volume.

Thus have I showed what I have performed in this work, entreating you to take this my labour in good part; and if there be any defect therein (as needs there must in all human works) ascribe it in part to my haste and many businesses, and in some places to the want of sufficient information, especially in exotic things, and in other some, to the little conversation I formerly had with this author, before such time as (overcome by the importunity of some friends, and the general want of such a work) I took this task upon me. Furthermore I desire, that none would rashly censure me for that which I have here done; but they that know in what time I did it, and who themselves are able to do as much as I have here performed, for to such alone I shall give free liberty, and will be as ready to yield further satisfaction if they desire it, concerning anything I have here asserted, as I shall be apt to neglect and scorn the censure of the ignorant and unlearned, who I know are still forward to verify our English proverb A fool's bolt is soon shot.

I must not in silence pass over those from whom I have received any favour or encouragement, whereby I might be the better enabled to perform this task. In the first place let me remember the only assistant I had in this work, which was Mr. John Goodyer of Maple Durham in Hampshire, from whom I received many accurate descriptions, and some other observations concerning plants; the which (desirous to give every man his due) I have caused to be so printed, as they may be distinguished
from the rest: and thus you shall know them; in the beginning is the name of the plant
in Latin in a line by itself, and at the end his name is inserted; so that the Reader may
easily find those things that I had from him, and I hope together with me will be
thankful to him, that he would so readily impart them for the further increase of this
knowledge.

Mr. George Bowles of Chislehurst in Kent must not here be forgot, for by his
travails and industry I have had knowledge of divers plants, which were not thought
nor formerly known to grow wild in this kingdom, as you shall find by divers places
in this book. My loving friends and fellow travellers in this study (Thomas Hickes,
John Buggs, William Broad, Job Weale, Leonard Buckner, James Clarke, Robert
Lorkin), and of the same profession, whose company I have formerly enjoyed in
searching over a great part of Kent, and who are still ready to do the like in other
places, are here also to be remembered: and that the rather, because this knowledge
amongst us in this city was almost lost, or at least too much neglected, especially by
those to whom it did chiefly belong, and who ought to be ashamed of ignorance,
especially in a thing so absolutely necessary to their profession. They should indeed
know them as workmen do their tools, that is readily to call them by their names,
know where to fetch, and whence to procure the best of each kinds and lastly, how to
handle them.

I have already much exceeded the bounds of an epistle, yet have omitted many
things of which I could further have informed thee reader, but I will leave them until
such time as I find a grateful acceptance or some other occasion that may again invite
me to set pen to paper; which, that it may be for my country's good and God's glory,
shall ever be the prayers and endeavours of thy well-wisher.

From my house on Snow-hill,
Octob. 22. 1633.
THOMAS JOHNSON
THE FIRST BOOK OF THE HISTORY OF PLANTS.

Containing Grass, Rushes, Reeds, Corn, Flags, and Bulbous, or Onion-rooted plants.

In this History of plants it would be tedious to use by way of introduction any curious discourse upon the general division of plants, contained in Latin under Arbor, Frutex, Suffrutex, Herba: or to speak of the differing names of their several parts, more in Latin than our vulgar tongue can well express. Or to go about to reach thee, or rather to beguile thee by the smell or taste, to guess at the temperature of plants when as all and every of these in their place shall have their true face and note, whereby thou mayest both know and use them.

In three books therefore, as in three gardens, all our plants are bestowed; sorted as near as might be in kindred and neighbourhood.

The first book hath grass, rushes, corn, reeds, flags, bulbous or onion-rooted plants.

The second, most sorts of herbs used for meat, medicine, or sweet smelling.

The third hath trees, shrubs, bushes, fruit-bearing plants, rosins, gums, roses, heaths, mosses, mushrooms, coral, and their several kinds.

Each book hath Chapters, as for each herb a bed: and every plant presents thee with the Latin and English name in the title, placed over the picture of the plant.

Then followeth the kinds, description, place, time, names, natures, and virtues, agreeing with the best received opinions.

And thus having given thee a general view of this garden, now with our friendly labours we will accompany thee and lead thee through a grass-plot, little or nothing of many herbarists heretofore touched; and begin with the most common or best known grass, which is called in Latin Gramen pratense; and then by little and little conduct thee through most pleasant gardens and other delightful places, where any herb or plant may be found fit for meat or medicine.
CHAP 1. Of Meadow Grass.

Fig. 1. Meadow Grass (1)  
Fig. 2. Small Meadow Grass (2)

There be sundry and infinite kinds of Grass not mentioned by the ancients, either as unnecessary to be set down, or unknown to them: only they make mention of some few, whose wants we mean to supply, in such as have come to our knowledge, referring the rest to the curious searcher of simples.

The Description

1. Common Meadow Grass hath very small tufts or roots, with thick hairy threads depending upon the highest turf, matting and creeping on the ground with a most thick and apparent show of wheaten leaves, lifting up long thin jointed and light stalks, a foot or a cubit high, growing small and sharp at the top, with a loose ear hanging downward, like the tuft or top of the common Reed.

2. Small Meadow Grass differeth from the former in the variety of the soil; for as the first kind groweth in meadows, so doth this small grass clothe the hilly and more dry grounds untilled, and barren by nature; a grass more fit for sheep than for greater cattle. And because the kinds of Grass do differ apparently in root, tuft, stalk, leaf, sheath, ear, or crest, we may assure ourselves that they are endowed with several virtues, formed by the Creator for the use of man, although they have been by a common negligence hidden and unknown. And therefore in this our labour we have placed each of them in their several bed, where the diligent searcher of nature, may if so he please, place his learned observations.
Gerard's Herbal

The Place

Common Meadow-Grass groweth of itself unset or unsown, everywhere; but the small Meadow-Grass for the most part groweth upon dry and barren grounds, as partly we have touched in the description.

The Time

Concerning the time when Grass springeth and seedeth, I suppose there is none so simple but knoweth it, and that it continueth all the whole year, seeding in June and July. Neither needeth it any propagation or replanting by seed or otherwise; no not so much as the watery Grass, but that they recover themselves again, although they have been drowned in water all the winter long, as may appear in the wild fens in Lincolnshire, and such like places.

The Names

Grass is called in Latin, *Gramen*, as it is thought *a gradiendo, quod geniculatis internodiis serpat crebroque novas spargat radices*: for it groweth, goeth, or spreadeth itself unset or unsown naturally over all fields or grounds, clothing them with a fair and perfect green. It is yearly mowed, in some places twice, and in some rare places thrice. Then is it dried and withered by the heat of the sun, with often turning it; and then is it called *Foenum, nescio a foenere aut foetu*. In English, Hay: in French, *Le herb du praiz*.

The Nature

The roots and seeds of Grass are of more use in physic than the herb, and are accounted of writers moderately to open obstructions, and provoke urine.

The Virtues

A. The decoction of Grass with the roots of Parsley drunk, helpeth the dysury, and provoketh urine.

B. The roots of Grass, according to Galen, do glue and consolidate together new and bleeding wounds.

C. The juice of grass mixed with honey and the powder of Southernwood taken in drink, killeth worms in children, but if the child be young, or tender of nature, it shall suffice to mix the juice of Grass, and the gall of an ox or bull together, and therewith anoint the child's belly, and lay a clout wet therewith upon the navel.

D. Fernelius saith, that grass doth help the obstructions of the liver, reins and kidneys and the inflammation of the reins called nephritis.

E. Hay sodden in water till it be tender, and applied hot to the chaps of beasts that be chap-fallen, through long standing in pound or stable without meat, is a present remedy.
The Description.

1. Dwarf Grass is one of the least of Grasses. The root consists of many little bulbs, covered with a reddish film or skin, with very many small hairy and white strings: the tuft or ear is of a reddish colour, and not much differing from the grass called *Ischæmon*, though the ear be softer, broader and more beautiful.

2. This kind of Grass hath small hairy roots; the leaves are small and short, as also the stalk, which on the top thereof bears a panicle not much unlike the small meadow Grass, but less: the colour thereof is sometimes white, and otherwhiles reddish; whence some have given two figures, which I thinking needless, have only retained the later, and for the former given the figure of another Grass, intended by our author to be comprehended in this Chapter.
3. Small Hard Grass hath small roots compact of little strings or threads, from which come forth many sour rushy leaves of the length of an inch and a half: the tuft or ear is compact of many panicles or very little ears, which to your feeling are very hard or harsh. This Grass is unpleasant, and no wholesome food for cattle.

4. Rush-Grass is a small plant some handful high, having many small rushy leaves tough and pliant, as are the common Rushes: whereupon do grow small leafy or chaffy husks, instead of flowers, like those of Rushes, but smaller. The root is thready like the former. There is a variety of this to be found in bogs, with the seeds bigger, and the leaves and whole plant lesser.

**The Place**

1. The Dwarf-Grass doth grow on heathy rough and dry barren grounds in most places of England.

2. The white Dwarf-Grass is not so common as the former, yet doth it grow very plentifully among the hop gardens in Essex and many other places.

3. Small Hard-Grass groweth in moist fresh marshes, and such like places.

4. Rush-Grass groweth in salt marshes near unto the sea, where the marshes have been overflown with salt water. It also groweth in many wet woods, lanes, and such places, as in the lane going by Tottenham Court towards Hampstead. The lesser variety hereof grows on the bogs upon Hampstead Heath.
The Time.

These kinds of Grass do grow, flower, and flourish when the common Meadow-Grass doth.

The Names.

It sufficeth what hath been said of the names in the description, as well, in English as Latin; only that some have deemed White Dwarf-Grass to be called Xerampelinum.

Rush-Grass hath been taken for Holosteum Mathioli.

The Names in particular.

1. This I here give you in the first place is the Gramen minimum Xerampelinum of Lobel: it is the Gramen of Matthiolus, and Gramen bulbosum of Dalechampius. Our author did not understand what Xerampelinus signified, when as he said the white Dwarf-Grass was so termed; for the word imports red, or murrey, such a colour as the withered leaves of Vines are of.

2. Tabernamontanus calls this, Gramen panniculatum minus.

3. Lobel calls this, Exile Gramen durius.

4. This by Matthiolus was called Holostium: by Thalius, Gramen epigontocaulon: by Tabernamontanus, Gra. Busonium, that is, Toad-Grass.

The Nature and Virtues.

These kinds of Grass do agree as it is thought with the common Meadow-Grass, in nature and virtues, notwithstanding they have not been used in physic as yet, that I can read of.
CHAP. 3. Of Corn-Grass.

The Description.

1. Corn-Grass hath many grassy leaves resembling those of Rye, or rather Oats, amongst the which cometh up slender benty stalks, kneed or jointed like those of corn, whereupon groweth a fair tuft or panicle not much unlike to the feather-like tuft of common Reed, but rounder, compact together like unto Millet. The root is thready like those of Oats.

2. Reed-Grass hath many thin grassy leaves like the former: the bushy top, with his long feather-like panicles do resemble the common Reed; which is lightly shaken with the wind, branched upon a long slender reeden stalk, kneed or jointed like corn. The root is small and fibrous.

The Place and Time.

These kinds of Grass grow for the most part near hedges, & in fallow fields in most places. Their time of springing, flowering, and fading may be referred to the common Meadow-Grass.

The Names.

1. The first is called in English, Corn-Grass. Lobel calls this, *Segetum gramen pannicula speciosa latiore*: others term it *Gramen segetale*, for that it usually groweth among corn; the which I have not as yet seen.

2. The second is called in English, Reed-Grass: of Lobel in Latin, *Gramen agrorum latiore, arundinacea, & comosapannicula*, for that his tuft or panicles do
resemble the Reed: and *Spica venti agrorum*, by reason of his feather-top, which is
easily shaken with the wind. Some in English, much agreeable to the Latin name, call
these, Windle-straws. Now I take this last to be the Grass with which we in London
do usually adorn our chimneys in summer time: and we commonly call the bundle of
it handsomely made up for our use, by the name of Bents.

**The Temperature and Virtues.**

These Grasses are thought to agree with common Grass, as well in temperature
as virtues, although not used in physic.
CHAP. 4. Of Millet grass.

The Description.

1. Millet Grass is but a slender Grass, bearing a tuft or ear like unto the common Meadow-Grass, but consisting of small seeds or chaffy heads like to Milium, or Millet, whereof it took the name. The stalk or leaves do resemble the Bent, wherewith country people do trim their houses.

2. The Great Water-Grass in root, leaf, tuft, and reeden stalk doth very well resemble the Grasse called in Latin, Gramen sulcatum, or Pictium: and by our English women, Lady-laces, because it is striped or furrowed with white and green streaks like silk laces, but yet differs from that, that this Water-Grass doth get unto itself some new roots from the middle of the stalks and joints, which the other doth not. This is a large Grass, having stalks almost as thick as one's little finger, with the leaves answerable unto them, and a little roughish: the tuft is somewhat like a reed, but less, and whitish coloured.

The Place, Names, Nature, and Virtues.

The former grows in meadows, and about hedges, and the later is to be found in most fenny and watery places, and have their virtues and natures common with the other Grass, for anything that we can find in writing. The reason of their names may be gathered out of...
CHAP. 5. Of Darnel Grass.

1. Darnel Grass, or *Gramen Sorghinum*, as Lobel hath very properly termed it, hath a brownish stalk thick and knotty, set with long sharp leaves like unto the common Dog's Grass: at the top whereof groweth a tuft or ear of a grayish colour, somewhat like Sorghum, whereof it took his name.

2. Wild Reed, or *Gramen harundinaceum panniculatum*, called also *Calamogrostis*, is far bigger than Couch grass, or Dog's grass, and in stalks and leaves more rough, rugged, and cutting. It is bad food for cattle, though they want, or be very hungry; and deadly to sheep, because that, as the husbandman saith, it is a cause of leanness in them, thirst, and consumption; it cutteth their tongue, straiteneth the gullet or throat, and draweth down blood into the stomach or maw; whereof ensueth inflammation, and death for the most part. And not only this *Calamogrostis* is hurtful, but also all other kinds of shearing leaved reeds, flags, sedge, or the like, which have as it were edges; and cut on both tides like knives as well men's fingers, as cattle's mouths. This herb is in a mean between reed & grass. The root is white, creeping downwards very deep. The spike or ear is like unto the reed, being soft and cottony, somewhat resembling Panic.
Fig. 13. Lesser Reed Grass (3)

3. This in root, stalks, and leaves is like to the last described, but that they are lesser: the top or head is a long single spike or ear, not severed or parted into many ears like the top of the precedent, and by this and the magnitude it may chiefly be distinguished from it.

The Place.

The first grows in fields and orchards almost everywhere; the other grow in fenny waterish places.

The Names.

2. This in Lincolnshire is called Sheer-Grass, or Hen: in other parts of England, wild Reed: in Latin, Calamagrostis. As for their natures and virtues we do not find any great use of them worth the setting down.

The Description.

1. This might fitly have been put to those mentioned in the foregoing chapter, but that our author determined it for this, as may appear by the mention made of it in the names, as also by the description hereof, framed from the figure we here give you. This Grass is garnished with chaffy and downy tufts, set upon a long benty stalk of two cubits high or somewhat more, naked without any blades or leaves, for the most part. His root is tough and hard. The top is commonly of a red or murrey colour, and the leaves soft and downy.

2. This is a very pretty and elegant grass: it in roots and leaves is not unlike to the usual Meadow Grass; the stalk riseth to the height of a foot, and at the top thereof it beareth a beautiful panicle, (whence the French and Spanish nations call it Amourettes, that is, the Lovely Grass.) This head consists of many little ears, shaped much like those of the ordinary Quaking Grass, longer and flatter, being composed of more scales, so that each of them somewhat resembles the leaf of a small Fern, whence I have called it Fern-Grass. These tops when they are ripe are white and are gathered where they grow naturally to beautify garlands.
Fig. 16. Greater Wood-Grass (3)

3. Wood-Grass hath many small and thready roots, compact together in manner of a tuft; from which spring immediately out of the earth many grey leaves, among the which are sundry benty stalks, naked and without leaves or blades like the former, bearing at the top a soft spiky tuft or ear much like unto a fox-tail, of a brownish colour.

4. This in leaves, stalks, roots, manner and place of growing is like the last described; the only difference between them is, that this hath much less, yet sharper or rougher ears or tufts. Because the difference between the last described and this is so small, we have spared the figure, to make room for others more different and noteworthy.

The Time and Place.

1. This kind of grass grows in fertile fields and pastures.
2. The second grows in divers places of Spain and France.
3. The other two grow in woods.

The Names.

1. Lobel in Latin calls this *Gramen tomentosum & Acerosum*. Some have taken it for the second kind of *Calamagrostis*; but most commonly it is called *Gramen plumosum*: and in English, a Bent, or Feather-top Grass.

2. *Gramen panniculatum* is called by some *Heragrostis* in Greek. Lobel calls this *Gramen panniculosum phalaroides*. And it is named in the Hist. Lugd. *Gramen fliceum, seu polyanthos*: that is, Fern, or many-flowered Grass.

3. *Gramen sylvaticum*, or as it pleaseth others, *Gramen nemorosum*, is called in our tongue, wood Grass, or shadow Grass.
CHAP. 7. Of Great Fox-tail grass.

The Description.

1. The Great Fox-tail Grass hath many thready roots like the common Meadow Grass, and the stalk riseth immediately from the root, in fashion like unto Barley, with two or three leaves or blades like Oats; but is nothing rough in handling, but soft and downy, and somewhat hoary, bearing one ear or tuft on the top, and never more; fashioned like a Fox-tail, whereof it took his name. At the approch of winter it dieth, and recovereth itself the next year by falling of his seed.

2. The lesser Fox-tail Grass hath a tough and hard root compact of many small strings, yielding a strawy stalk like the former, though somewhat lesser, with the like top or crest, but of a whitish colour.
3. Great Bastard Fox-tail Grass hath a strawy stalk or stem, which riseth to the height of a cubit and an half, having a small root consisting of many fibres. His leaf is small and grassy, and on his top one tuft or spike, or ear of a hard chaffy substance, some three inches long, composed of longish seeds, each having a little beard or awn.

4. Small Bastard Fox-tail Grass doth resemble the former, saving that this kind doth not send forth such large stalks and ears as the other, but smaller, and not so close packed together, neither having so long beards or awns.

The Place and Time.

These wild Bastard Fox-tail Grasses do grow in the moist furrows of fertile fields, towards the later end of summer.

The Names.


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CHAP. 8. Of Cat's-tail Grass.

The Description.

1. Great Cat's-tail Grass hath very small roots, compact of many small skins or threads, which may easily be taken from the whole root. The stalk riseth up in the midst, and is somewhat like unto wild Barley, kneed and jointed like corn, of a foot high or thereabout; bearing at the top a handsome round close compact ear resembling the cat's tail.

2. The small Cat's-tail grass is like unto the other, differing chiefly in that it is lesser than it. The root is thick and cloved like those of Rush Onions, or Chives, with many small strings or hairy threads annexed unto it.

3. There is another that grows plentifully in many places about London, the which may fitly be referred to this classis. The root thereof is a little bulb, from whence ariseth a stalk some two foot or better high, set at each joint with long grassy leaves: the spike or ear is commonly four or five inches long, closely and handsomely made in the fashion of the precedent, which in the shape it doth very much resemble.

The Place and Time.

These kinds of Grass do grow very well near watery places, as Gramen Cypereoides doth, and flourish at the same time that all the others do.

The latter may be found by the bridge entering into Chelsea field, as one goeth from Saint James to little Chelsea.
The Names.

The Latins call it *Gramen Typhinum*, of *Typha*, a Cat's tail: and it may in English as well be called Round Bent-Grass, as Cat's-tail Grass.

The last described is by Bauhin, who first gave the figure and description thereof in his *Prodomus*, pag. 10, called *Gramen Typhoides maximum spica longissima*; that is, the largest Fox-tail Grass with a very long ear.

The Description.

1. Cyperus Grass hath roots somewhat like Cyperus, whereof it took his name: his leaves are long and large like unto the common reed: the stalk doth grow to the height of a cubit in some places, upon which groweth little scaly knobs or ears, spike fashion, somewhat like unto Cat's-tail, or Reed-mace, very chaffy, rough, and rugged.

2. Rushy Water-Grass hath his roots like the former, with many fibres or strings hanging at them; and creepeth along upon the uppermost face of the earth, or rather mud, wherein it groweth, bearing at each joint one slender benty stalk, set with a few small grassy blades or leaves, bringing forth at the top in little hoods, small feather-like tufts or ears.

The Place, Time, and Names.

They grow, as I have insinuated, in miry and muddy grounds, in the same season that others do. And concerning their names there hath been said enough in their titles.
CHAP. 10. Of Water-Grass.

The Description.

1. Water-Grass, or as we term it, Water Bur-Grass, hath a few slender and long jointed leaves: among which riseth up a stalk of two foot high, bearing on his small and tender branches, certain little rough knobs, or brownish sharp pointed seeds made up into cornered heads; his root is small and thready.

The figure of this plant is not well expressed, for it should have had the leaves made narrower, and joints expressed in them, like as you may see in the Gramen juncum sylvaticum, which is the ninth in the sixteenth chapter; for that and this are so like, that I know no other difference between them, but that this hath leaves longer and narrower than that, and the heads smaller and whiter. There is a reasonable good figure of this in the Historia Lugd. p. 1001, under the name of Arundo minima.

2. Spiked Water-Grass hath long narrow leaves: the stalk is small, single, and naked, without leaves or blades, bearing alongst the same toward the top an ear or spike made of certain small buttons, resembling the buttony flowers of Sea Wormwood. His root is thick & tough, full of fibres or threads.

The Place and Time.

They differ not from the former kinds of Grass in place and time: and their names are manifest.
The Nature and Virtues.

Their nature and virtues are referred unto Dog's Grass, whereof we will speak hereafter.

The Description.

1. Float-Grass hath a long and round root somewhat thick, like unto Dog's-Grass, set on even joints with small strings or threads; from the which rise up long and crooked stalks, crossing, winding, and folding one within another with many flaggy leaves, which horses eat greedily of. At the top of these stalks, and somewhat lower, there come forth very many little ears of a whitish colour, composed of two ranks of little chaffy seeds set alternately, each of these small ears being almost an inch in length.

2. Spike Float-Grass, or Spiked Float-Grass beareth at the top of each slender creeping stalk one spiked ear and no more, and the other many, which maketh a difference betwixt them; otherwise they are one like the other. His root is compact, tufted, and made of many thrummy threads.

The Place.

The first of these grows everywhere in waters. The second is harder to be found.

The Names.

1. The first is called Gramen fluviatile, and also Gramen aquis innatans: in English, Float-Grass. Tragus calls it, Gramen Anatum, Duck's-Grass.
2. The second is called *Gramen fluviatile spicatum*, and *fluviatile album* by Tabernamontanus. Likewise in English it is called Float-Grass, and Floater-Grass, because they swim and float in the water.
CHAP. 12. Of Kneed-Grass.

The Description.

1. Kneed-Grass hath straight and upright strawy stalks, with joints like to the straw of corn, and beareth small grassy leaves or blades spiked at the top like unto Panic, with a rough ear of a dark brown colour. His roots are hairy and thready, and the joints of the straw are very large and conspicuous.

2. Water Kneed-Grass hath many long and slender stems, jointed with many knobby and gouty knees like unto Reed, set with broad flaggy leaves somewhat sharp pointed; bearing at the top a tuft or panicle divided into sundry small branches, of a duskish colour. His root is thready like the other.

The Place, Time, and Names.

These grasses do grow in fertile moist meadows, not differing in time from others. And they are called *Geniculata*, because they have large joints like as it were knees.

We have nothing delivered us of their nature and properties.

1. Bearded Panic Grass hath broad and large leaves like Barley, somewhat hoary, or of an overworn russet colour. The stalks have two or three joints at the most, and many ears on the top, without order; upon some stalks more ears; on others fewer, much like unto the ear of wild Panic, but that this hath many beards or awns, which the other wants.

2. Small Panic Grass, as Lobel writeth, in roots, leaves, joints, and stalks is like the former, saving that the ear is much less, consisting of fewer rows of seed, contained in small chaffy blackish husks. This, as the former, hath many ears upon one stalk.
3. This small Panic Grass from a thready root sendeth forth many little stalks, whereof some are one handful, other-some little more than an inch high, and each of these stalks on the top sustains one single ear, in shape very like unto the ear of wild Panic, but about half the length. The stalks of this are commonly crooked, and set with grassy leaves like to the rest of this kind.

The Place and Time.

The first of these two doth grow near unto mud walls, or such like places not manured, yet fertile or fruitful.

The second growtheth in shallow watery plashes of pastures, and at the same time with others. I have not as yet observed any of these three growing wild.

The Names and Virtues.

They are called Panic Grass, because they are like the Italian corn called Panic. Their nature and virtues are not known.

The Description.

Hedgehog Grass hath long stiff flaggy leaves with stalks proceeding from a thick spreading root; and at the top of every stalk grow certain round and pricking knobs fashioned like an Hedgehog.

2. The second is rough and hairy: his roots do spread and creep under the mud and mire as Cyperus doth; and at the top of the stalks are certain round soft heads, their colour being brown, intermixed with yellow, so that they look prettily when as they are in their prime.
3. This Grass hath a small and fibrous root, from which rise leaves like those of Wheat, but with some long white hairs upon them like those of the last described: at the tops of the stalks (which are some foot or better high) there grow two or three round heads consisting of soft and white downy threads. These heads are said to shine in the night, and therefore they in Italy call it (according to Cæsalpinus) *Luciola, quia noctu lucet*.

4. To this I may add another growing also in Italy, and first described by Fabius Columna. It hath small creeping jointed roots, out of which come small fibres, and leaves little and very narrow at the first, but those that are upon the stalks are as long again, encompassing the stalks, as in Wheat, Dog's-Grass, and the like. These leaves are crested all along, and a little forked at the end: the straw or stalk is very slender, at the top whereof grows a sharp prickly round head, much after the manner of the last described: each of the seed-vessels whereof this head consists ends in a prickly stalk having five or seven points, whereof the uppermost that is in the middle is the longest. The seed that is contained in these prickly vessels is little and transparent, like in colour to that of Cow-Wheat. The flowers (as in others of this kind) hang trembling upon yellowish small threads.

**The Place and Time.**

1 & 2. They grow in watery meadows and fields, as you may see in Saint George's fields and such like places.

3 & 4. Both these grow in divers mountainous places of Italy; the later whereof flowers in May.
The Names.

1. The first is called Hedgehog Grass, and in Latin, *Gramen Echinatum*, by reason of those prickles which are like unto a Hedgehog.

2. The second hairy Grass is called *Gramen exile hirsutum Cyperoides*, because it is small and little, and rough or hairy like a goat: and *Cyperoides*, because his roots do spring and creep like the Cyperus.

3. This by Anguillara is thought to be *Combretum* of Pliny; it is *Gram. lucidum* of Tabernamontanus; and *Gramen hirsutum capitolo globoso*, of Bauhin, *Pin. pag. 7*.

4. Fabius Columna calls this, *Gramen montanum Echinatum tribuloides capitatum* and Bauhin nameth it, *Gramen spica subrotunda echinata*. We may call it in English, Round-headed Caltrop Grass.

The Virtues

3. The head of this (which I have thought good to call Silver-Grass) is very good to be applied to green wounds, and effectual to stay bleeding, Cæsalp.
CHAP. 15. Of Hairy Wood-Grass.

The Description.

1. Hairy Wood-Grass hath broad rough leaves somewhat like the precedent, but much longer, and they proceed from a thready root, which is very thick, and full of strings, as the common Grass, with small stalks rising up from the same roots; but the top of these stalks is divided into a number of little branches, and on the end of every one of them standeth a little flower or husk like the top of *Allium ursinum*, or common Ramsons, wherein the seed is contained when the flower is fallen.

2. Cyperus Wood-Grass hath many sheary grassy leaves, proceeding from a root made of many hairy strings or threads: among which there riseth up sundry straight and upright stalks, on whose tops are certain scaly and chaffy husks, or rather spiky blackish ears, not much unlike the catkins or tags which grow on Nut-trees, or Alder trees.

The Place, Time, and Names.

There two grow in woods or shadowy places, and may in English be called Wood-Grass. Their time is common with the rest.

Their Nature and Virtues.

There is nothing to be said of their nature and virtues, being as unknown as most of the former.

1. Sea Spike-Grass hath many small hollow round leaves about six inches long, rising from a bushy thready white fibrous root, which are very soft and smooth in handling. Among these leaves there do spring up many small rushy stalks; amongst which are at the first divers small flowering round buttons; the sides whereof falling away, the middle part grows into a longish seed-vessel standing upright.

2. Salt-marsh Spike-Grass hath a woody tough thick root with some small hairy threads fastened thereunto; out of which arise long and thick leaves very like those of that Sea-Grass we vulgarly call Thrift. And amongst these leaves grow up slender naked rushy stalks which have on one side small knobs or buttons of a greenish colour hanging on them.
3. The third hath many rushy leaves tough and hard, of a brown colour, well resembling Rushes: his root is compact of many small tough and long strings. His stalk is bare and naked of leaves unto the top, on which it hath many small pretty chaffy buttons or heads.

4. The fourth is like the third, saving that it is larger; the stalk also is thicker and taller than that of the former, bearing at the top such husks as are in Rushes.
Gerard's Herbal

Fig. 41. Great Cypress Grass (5) Fig. 42. Small Cypress Grass (6)

5. Great Cypress Grass hath divers long three-square stalks proceeding from a root compact of many long and tough strings or threads. The leaves are long and broad, like unto the sedge called Carex. The spike or ear of it is like the head of Plantain, and very prickly, and commonly of a yellowish green colour.

6. Small Cypress Grass is like unto the other in root and leaves, saving that it is smaller. His stalk is smooth and plain, bearing at the top certain tufts or panicles, like to the last described in roughness and colour.
7. The first of these two kinds hath many crooked and crambling roots of a woody substance, very like unto the right Cyperus, differing from it only in smell, because the right Cyperus roots have a fragrant smell, and these none at all. His leaves are long and broad, rough, sharp or cutting at the edges like sedge. His stalk is long, big, and three-square, like to Cyperus, and on his top a chaffy umbel or tuft like unto the true Cyperus.

8. The second kind hath many broad leaves like unto those of Gillyflowers, but of a fresher green: among the which riseth up a short stalk some handful or two high, bearing at the top three or four short ears of a reddish murrey colour, and these ears grow commonly together at the top of the stalk, and not one under another. There is also another lesser sort hereof, with leaves and roots like the former, but the stalk is commonly shorter, and it hath but one single ear at the top thereof. You have the
figures of both these expressed in the same table or piece. This kind of Grass is the *Gramen spicatum foliis Vetonica* of Lobel.

![Wood Rushy-Grass](image)

Fig. 45. Wood Rushy-Grass (9)

9. This hath long tough and hairy strings growing deep in the earth like a turf, which make the root, from which rise many crooked tough and rushy stalks, having toward the top scaly and chaffy knobs or buttons. This grows some half yard high, with round brownish heads, and the leaves are jointed as you see them expressed in the figure we here give you.

**The Place, Time, Names, Nature, and Virtues.**

All the Grasses which we have described in this chapter do grow in marsh and watery places near to the sea, or other fenny grounds, or by muddy and miry ditches, at the same time that the others do grow and flourish. Their names are easily gathered of the places they grow in, or by their descriptions, and are of no virtue nor property in medicine, or any other necessary use as yet known.
CHAP. 17. Of Couch-Grass, or Dog's-Grass.

The Description.

1. The common or best known Dog's-Grass, or Couch-Grass hath long leaves of a whitish green colour: the stalk is a cubit and a half high, with joints or knees like wheaten straw, but these joints are covered with a little short down or woolliness. The plume or tuft is like the reed, but smaller and more chaffy, and of a grayish colour: it creepeth in the ground hither and thither with long white roots, jointed at certain distances, having a pleasant sweet taste, and are plaited or wrapped one within another very intricately, insomuch as where it happeneth in gardens amongst pot-herbs, great labour must be taken before it can be destroyed, each piece being apt to grow, and every way to dilate itself.

2. Knotty Dog's-Grass is like unto the former in stalk and leaf, but that they are of a deeper colour; also the spike or ear is greener, and about some two handfuls long, much in shape resembling an Oat, yet far smaller, and is much more dispersed than the figure presents to you.

The roots of this are somewhat knotty and tuberous, but that is chiefly about the spring of the year, for afterwards they become less and less until the end of summer. And these bulbs do grow confusedly together, not retaining any certain shape or number.
Gerard's Herbal

The Place.

1. The first grows in gardens and arable lands, as an infirmity or plague of the fields, nothing pleasing to husbandmen; for after that the field is ploughed, they are constrained to gather the roots together with harrows and rakes, and being so gathered and laid upon heaps, they set them on fire lest they should grow again.

2. The second grows in ploughed fields and such like places, but not everywhere as the other. I have found of these in great plenty, both growing, and plucked up with harrows, as before is rehearsed, in the fields next to S. James' wall as ye go to Chelsea, and in the fields as ye go from the Tower-hill of London to Ratcliffe.

The Time.

These Grasses seldom come to show their ear before July.

The Names.

It is called *Gramen Caninum*, or *Sanguinale*, and *Uniola*. The Countrymen of Brabant name it *Pren*; others, *Lebt grass*: of the Latins, by the common name, *Gramen*: in English, Couch-Grass, Quitch-Grass, and Dog's-Grass.

*Gramen Caninum bulbosum*, or *nodosum*, is called in English, Knobby, or Knotty Couch-Grass.

The Nature.

The nature of Couch-Grass, especially the roots, agreeth with the nature of common Grass: although that Couch-Grass be an unwelcome guest to fields and gardens, yet his physic virtues do recompense those hurts; for it openeth the stoppings of the liver and reins, without any manifest heat.

The learned Physicians of the College and Society of London do hold this bulbous Couch-Grass in temperature agreeing with the common Couch-Grass, but in virtues more effectual.

The Virtues.

A. Couch-Grass healeth green wounds. The decoction of the root is good for the kidneys and bladder: it provoketh urine gently, and driveth forth gravel. Dioscorides and Galen do agree, that the root stamped and laid upon green wounds doth heal them speedily.

B. The decoction thereof serveth against griping pains of the belly, and difficulty of making water.

C. Marcellus an old author maketh mention in his 26. chapter, That seven and twenty knots of the herb which is called *Gramen*, or Grass, boiled in wine till half be consumed, pressed forth, strained, and given to drink to him that is troubled with the strangury, hath so great virtue, that after the patient hath once begun to make water without pain, it may not be given any more. But it must be given with water only to such as have a fever. By which words it appeareth, That this knotted Grass was taken for that which is properly called *Gramen*, or *Agrostis*; and hath been also commended against the stone and diseases of the bladder.

D. The later physicians do use the roots sometimes of this, and sometimes of the other indifferently.

The Description.

1. The Sea Dog's-Grass is very like unto the other before named: his leaves are long and slender, and very thick compact together, set upon a knotty stalk spiked at the top like the former. Also the root crambleth and creepeth hither and thither under the earth, occupying much ground by reason of his great increase of roots.

2. This Grass (whereof Lobel gave the first figure and description, under the name of *Gramen geniculatum Caninum marinum*) I conjecture to be that which grows plentifully upon the banks in the salt marshes by Dartford in Kent, and most other salt places by the sea; as also in many banks and orchards about London, and most other places far from the sea. Now Lobel's figure being not good, and the description not extant in any of his Latin works; I cannot certainly affirm anything. Yet I think it fit to give you an exact description of that I do probably judge to be it; and not only so, but I judge it to be the same Grass that Bauhin in his *Prodromus* hath set forth, Pag. 17. under the name of *Gramen latifolium spicatriticea compacta*. This is a very tall grass; for it sends forth a stalk commonly in good ground to the height of a yard and an half: the leaves are large, stiff, and green, almost as big as those of white Wheat; the which it also very much resembles in the ear, which usually is some handful and an half long, little spokes standing by course with their flat sides towards the straw. About the beginning of July it is hung with little whitish yellow flowers such as Wheat hath. The roots of this are like those of the first described. This sometimes varies in the largeness of the whole plant, as also in the greatness, sparsedness, and compactness of the ear.
2. The second Sea Dog's-Grass is according unto Lobel somewhat like the former: his roots are more spreading and longer, dispersing themselves under the ground farther than any of the rest. The leaves are like the former, thick bushed at the top, with a cluster or bush of short thick leaves one folded within another. The stalk and tuft is of a middle kind, between Ischaemon and the common Couch-Grass.

**The Place, Time, Names, Nature, and Virtues**

They grow on the sea shore at the same time that others do; and are so called because they grow near the seaside. Their nature and virtues are to be referred unto Dog's-Grass.

The Description.

1. Upright Dog's-Grass, or Quich-Grass, by reason of his long spreading jointed roots is like unto the former, and hath at every knot in the root sundry strings of hairy substance, shooting into the ground at every joint as it spreadeth: the stalks lie creeping, or rise but a little from the ground, and at their tops have spoky panicles far smaller than the common Couch-Grass. By which notes of difference it may easily be discerned from the other kinds of Dog's-Grass.
2. Ladies' Laces hath leaves like unto Millet in fashion, rough and sharp pointed like to the Reed, with many white veins or ribs, and silver streaks running along through the midst of the leaves, fashioning the same like to laces or ribbons woven of white and green silk, very beautiful and fair to behold: it growth unto the height of wild Panic, with a spoky top not very much unlike, but more compact, soft, white, and chaffy. The root is small and hairy, and white of colour like unto the Meadow-Grass.

The Place.

1. Upright Dog's-Grass groweth in dunged grounds and fertile fields.
2. Ladies' Laces grows naturally in woody and hilly places of Savoy, and answers common Grass in his time of seeding.

It is kept and maintained in our English gardens, rather for pleasure than virtue, which is yet known.

The Names.

Lobel calleth the later, *Gramen sulcatum*, and *striatum*, or *Gramen pictum*: in English, the Furrowed Grass, the white Chameleon Grass, or streaked Grass; and usually of our English women it is called Lady-laces, or painted Grass: in French, *Aiguillettes d'armes*.

The Nature and Virtues.

The virtues are referred unto the Dog's-Grass.

1. Dew-Grass hath very hard and tough roots long and fibrous: the stalks are great, of three or four cubits high, very rough and hairy, jointed and knood like the common Reed: the leaves are large and broad like unto corn. The tuft or ear is divided into sundry branches, chaffy, and of a purple colour; wherein is contained seed like *Milium*, wherewith the Germans do make pottage and such like meat, as we in England do with Oatmeal; and it is sent into Middleborough and other towns of the Low-countries, in great quantity for the same purpose, as Lobel hath told me.

2. The second kind of Dew-Grass or *Ischæmon* is somewhat like the first kind of Meadow-Grass, resembling one the other in leaves and stalks, saving that the crest or tuft is spread or stretched out abroad like a cock's foot let down upon the ground, whereupon it was called *Galli crus*, by Apuleius. These tops are clear and upright, of a glistening purple colour, or rather violet; and it is divided into four or five branches like the former Dew-Grass. The root consists of a great many small fibres.

3. To these may fitly be added another Grass, which Clusius hath judged to be the medicinal Grass of the ancients: and Lobel refers it to the Dog's-grass, because it hath a root jointed thick, and creeping like as the Dog's-Grass: the stalks are some foot high, round, and of a purplish colour: but the top is very like to that of the last described, of a dark purple colour.
The Place and Time.

1. The first groweth naturally in Germany, Bohemia, Italy, and in the territories of Gorizia and Carinthia, as Matthiolus reporteth.

2. The second groweth near unto rough banks of fields, as I have seen in the hilly banks near Greenhithe in Kent. It differeth not in time from those we have spoken of.

3. This groweth plentifully in most parts of Spain and France; and it is probable, that this was the grass that our author found near Greenhithe in Kent.

The Names.

1. The Germans call it Himelbau: That is to say, Cœli ros; whereupon it was called Gramen Manna: it seemeth to be Milii sylvestris spurium quoddam genus, a certain wild or bastard kind of Millet. Leonicensus and Ruellius name it Capriola, and Sanguinaria: some would have it to be Gramen aculeatum Plinii, but because the description thereof is very short, nothing can be certainly affirmed. But they are far deceived who think it be Coronopus, as some very learned have set down: but every one in these days is able to control that error. Lobel calleth it Gramen Manna esculentum, for that in Germany and other parts, as Bohemia and Italy, they use to eat the same as a kind of bread corn, and also make potage therewith as we do with Oatmeal; for the which purpose it is there sown as Corn, and sent into the Low-countries, and there sold by the pound. In English it may be called Manna-Grass, or Dew-Grass; but more fitly Rice-Grass.

2. This is judged to be Ischaemon of Pliny; and Galli crus of of Apuleius.
Gerard's Herbal

The Nature.

These Grasses are astringent and drying, in taste sweet like the common Dog's-Grass.

The Virtues.

A. Apuleius saith, if a plaster be made of this grass, hog's grease, and leaven of household bread, it cureth the biting of mad dogs.

B. As in the description I told you, this plant in his tuft or ear is divided into sundry branches, some tuft into three, some four, and some five cloven parts like Cock's toes. Apuleius reporteth, If ye take that ear which is divided only into three parts, it wonderfully helpeth the running or dropping of the eyes, and those that begin to be blear eyed, being bound about the neck, and so used for certain days together, it turneth the humors away from the weak part.

C. Manna Grass, or Rice-Grass is said to be very good to be put into poultices, to discuss hard swellings in women's breasts.

D. The Cocks-foot Dog's-Grass is very good in all cases, as the other Dog's-Grass are and equally as effectual.
CHAP. 21. Of divers Cyperus Grasses.

The Description.

1. The first of there hath reasonable strong fibrous roots, from whence rise stiff long and narrow leaves like those of other Cyperus Grasses: the stalks also (as it is proper to all the plants of this kindred) are three-square, bearing at their tops some three brownish ears soft and chaffy like the rest of this kind, and standing upright, and not hanging down as some others do.

2. This hath pretty thick creeping black roots, from whence arise three-square stalks set with leaves shorter, yet broader than those of the last described; and from the top of the stalk come forth three or four foot-stalks, whereupon do hang longish rough scaly and yellowish heads.
3. The roots of this are black, without smell, and somewhat larger than those of the last described: the 3-square stalk also is some two cubits high, bearing at the top dispersedly round scaly heads somewhat like those of the Wood Rush-Grass: the leaves are somewhat sharp and triangular like those of the other Cyperus.

4. This Cyperus hath creeping black roots, having here and there knotty tuberous heads for the most part, putting up leaves like those of the last described, as also a stalk bearing at the top long chaffy ears like to some others of this kind.
5. This Cyperus Grass hath pretty thick fibrous and black roots, from whence ariseth a stalk some cubit high, pretty stiff, triangular, jointed, set at each joint with a large green leaf which at the bottom encompasses the stalk, which is omitted in the figure. At the top of the stalk, as in the true Cyperus, come forth two or three pretty large leaves, between which rise up many small foot-stalks very much branched, and bearing many black seeds somewhat like Millet or rushes.

The Place and Time.

All these grow in ditches and watery places, and are to be found with their heads about the middle of summer, and some of them sooner.

The Names.

The first of these by Lobel is called *Gramen palustre maius*.
2. This by Gesner, Lobel, and Dodonæus is called *Pseudocyperus*.
3. Lobel names this, *Cyperus longus inodorus sylvestris*.
4. He also calls this, *Cyperus aquaticus septentrionalis*.
5. This is the *Cyperus graminea miliacea* of Lobel and Pena: the *Juncus latus* in the Histor. Lugd. Pag. 988. and the *Pseudocyperus polycarpus* of Thalius.

The Temper and Virtue.

None of these are made use of in physic; but by their taste they seem to be of a cold and astringent quality.
CHAP. 22. Of divers other Grasses.

1. This Oat or Haver-Grass, described by Clusius, hath small creeping roots: the stalks are some cubit high, slender jointed, and set with short narrow leaves: at the top of the stalk grows the ear; long, slender, and bending, composed of downy husks containing a seed like to a naked Oat. The seed is ripe in July. It grows in the mountainous and shadowy woods of Hungary, Austria, and Bohemia.

2. I cannot omit this elegant grass, found by Mr. Goodyer upon the walls of the ancient city of Winchester, and not described as yet by any that I know of. It hath a fibrous and stringy root, from which arise leaves long and narrow, which growing old become round as those of Spartum or Mat-weed: amongst these grassy leaves there grows up a slender stalk some two foot long, scarce standing upright, but oft times hanging down the head or top of the ear: it hath some two joints, and at each of these a pretty grassy leaf. The ear is almost a foot in length, compassed of many small and slender hairy tufts, which when they come to maturity look of a grayish or whitish colour, and do very well resemble a capon's tail whence my friend, the first observer thereof, gave it the title of Capon-tail Grass: by which name I received the seed thereof; which sown, took root, and flourishes.

3. Next to this I think fit to place the Gramen Cristatum, or Cock's-comb grass of Bauhin. This Grass hath for the root many white fibrous threads thick packed together; the leaves are but short, about the bigness of the ordinary Meadow Grass; the stalks are some cubit and half high, with some two or three knots apiece: the leaves of the stalk are some four or five inches long: the ear is small, longish, of a pale
green colour, somewhat bending, so that in some sort it resembles the comb of a Cock, or the seed-vessel of that plant which is called Caput Gallinaceum. This is ordinarily to be found in most meadows about midsummer.

4. There is also commonly about the same time in our meadows to be found a Grass growing to some cubit high, having a small stalk, at the top whereof there grows an ear some inch and an half, or two inches long, consisting as it were of two ranks of corn: it very much resembles Rye both in shape and colour, and in his short bearded awns, wherefore it may very fitly be termed Gramen secalinum, or Rye-Grass. Yet is it not Gramen spica secalina which Bauhin describes in the fifty seventh place, in his Prodromus pag. 18, for that is much taller, and the ear much larger than this of my description.

5. In divers places about hedges, in July and August is to be found a fine large tall Grass, which Bauhin (who also first described it) hath under the name of Gramen spica Brizaëmajus. This hath stalks as tall as Rye, but not so thick, neither are the leaves so broad at the top of the stalk grow divers pretty little flattish ears consisting of two ranks of chaffy husks or seed-vessels, which have yellowish little flowers like to those of Wheat.

6. There is also commonly to be found about May or the beginning of June, in meadows and such places that Grass which in the Historia Lugdun. is set forth under the name of Gramen Lanatum Dalechampii: the stalks and leaves are much like the common meadow grass, but that they are more whitish and hairy; the head or panicle is also soft and woolly and it is commonly of a grey, or else a murrey colour.

7. There is to be found in some bogs in summer time about the end of July a pretty rushy grass some foot or better in height, the stalk is hard and rushy, having some three joints, at each whereof there comes forth a leaf as in other grasses, and out of the bosom of the two uppermost of these leaves comes out a slender stalk being some 2 or 3 inches high, and at the top thereof grows as in a little umbel a pretty white chaffy flower; and at, or nigh to the top of the main stalk there grow three or some such flowers clustering together upon little short and slender foot stalks: the leaves are but small, and some handful or better long; the root I did not observe. This seems to have some affinity with the Gramen junceum aquaticum, formerly described in the ninth chapter. I never found this but once, and that was in the company of Mr. Thomas Smith, and Mr. James Clarke, apothecaries of London; we riding into Windsor Forest upon the search of rare plants, and we found this upon a bog near the high way side at the corner of the great park. I think it may very fitly be called Gramen junceum leucanthemum: White-flowered Rush-Grass.

8. The last year at Margate in the Isle of Thanet, near to the seaside and by the chalky cliff I observed a pretty little grass which from a small white fibrous root sent up a number of stalks of an unequal height; for the longest, which were those that lay partly spread upon the ground, were some handful high, the others that grew straight up were not so much; and of this one inch and half was taken up in the spike or ear, which was no thicker than the rest of the stalk, and seemed nothing else but a plain smooth stalk, unless you looked upon it earnestly, and then you might perceive it to be like Darnel grass: wherefore in the Journal that I wrote of this simpling voyage, I called it pag. 3. Gramen parvum marinum spica Loliacea. I judge it to be the same that Bauhin in his Prodromus, pag. 19 hath set forth under the name of Gramen Loliaceum minus spica simplici. It may be called in English, Dwarf Darnel Grass.
9. The Darnel grass that I compared the ear of this last described unto, is not the *Gramen sorghinum* (which our author called Darnel-Grass) but another grass growing in most places with stalks about some span high, but they seldom stand upright, the ear is made just like that which hereafter chap. 58. is called *Lolium rubrum*, Red Darnel, of which I judge this a variety, differing little therefrom but in smallness of growth.

10. Upon Hampstead Heath I have often observed a small grass whose longest leaves are seldom above two or three inches high, and these leaves are very green, small, and perfectly round like the *Spartum Austriacum*, or Feather-Grass; I could never find any stalk or ear upon it: wherefore I have brought it into the garden to observe it better. In the forementioned *Journal*, pag. 33, you may find it under the name of *Gramen Spartium capillaceo folio minimum*. It may be this is that grass which Bauhin set forth in his *Prodromus*, pag. 11, under the title of *Gramen sparteum Monspeliacum capillaceo folio minimum*. I have thought good in this place to explain my meaning by these two names to such as are studious of plants, which may happen to light by chance (for they were not intended for public) upon our *Journal*, that they need not doubt of my meaning.

11. I must not pass over in silence two other Grasses, which for anything that I know are strangers with us, the one I have seen with Mr. Parkinson, and it is set forth by Bauhin, pag. 30 of his *Prodromus*. The other by Lobel in the second part of his *Adversaria*, pag. 468. The first (which Bauhin fitly calls *Gramen alopecuriodes spica aspera*, and thinks it to be *Gram. Echinatum Dalechampii*, described *Hist. Lugd. 432.*) hath a fibrous and white root, from which arises a stiff stalk divided by many knots, or knees: the leaves are like to the other fox-tail grass, but greener: the ear is rough, of some inch in length, and grows as it were upon one side of the stalk: the ear at first is green, and shows yellowish little flowers in August.

12. This other Grass which Lobel in the quoted place figures and describes by the name of *Gramen Scoparium Ischemi panniculus Gallicum*, hath roots some cubit long, slender, and very stiff, (for of these are made the head brushes which are vulgarly used) the straw is slender, and some cubit high, being here and there jointed like to other Grass: the top hath four or five ears standing after the manner of Cock's-foot Grass, whereof it is a kind. It grows naturally about Orleans, and may be called in English, Brush-Grass.
CHAP. 23. Of Cotton Grass.

The Description.

1. This strange Cotton grass, which Lobel hath comprehended under the kinds of Rushes; notwithstanding that it may pass with the Rushes, yet I find in mine own experience, that it doth rather resemble grass than rushes, and may indifferently be taken for either, for that it doth participate of both. The stalk is small and rushy, garnished with many grassy leaves alongst the same, bearing at the top a bush or tuft of most pleasant down or cotton like unto the most fine and soft white silk. The root is very tough, small and thready.

2. This Water Gladiole, or grassy Rush, of all others is the fairest and most pleasant to behold, and serveth very well for the decking and trimming up of houses, because of the beauty and bravery thereof: consisting of sundry small leaves of a white colour mixed with carnation, growing at the top of a bare and naked stalk, five or six foot long, and sometime more. The leaves are long and flaggy, not much unlike the common reed. The root is thready, and not long.

The Place and Time.

1. Cotton grass groweth upon bogs and such like moorish places, and it is to be seen upon the bogs on Hampstead Heath. It groweth likewise in Highgate Park near London.

2. Water Gladiole groweth in standing pools, moats, and water ditches. I found it in great plenty being in company with a worshipful gentleman Master Robert
Wilbraham, at a village fifteen miles from London called Bushey. It groweth likewise near Redriffe by London, and many other places: the season answereth all others.

The Names.

*Gramen Tomentosum* is called likewise *Juncus bombicinus*: of Cordus, *Linum pratense*, and *Gnaphalium Hieronymi Bockii*. In English Cotton Grass.

2. Water Gladiole is called of Lobel, *Juncus Cyperoides floridus paludosus*, Flowering Cypress Rush: *Juncus*, for that his stalk is like the rush; *Cyperoides*, because his leaves resemble *Cyperus*: *Floridus*, because it hath on the top of every stalk a fine umbel or tuft of small flowers, in fashion of the Lily of Alexandria, the which it is very like, and therefore I had rather call it Lily grass.

The Nature and Virtues.

A. Cordus saith, That *Juncus bombicinus* sodden in wine, and so taken, helpeth the throws and gripings of the belly, that women have in their childing.

There be also sundry kinds of grass wholly unknown, or at the least not remembered of the old writers, whereof some few are touched in name only by the late and new writers: now for as much as they have only named them, I will refer the better consideration of them to the industry and diligence of painful searchers of nature, and prosecute my purposed labour, to unfold the divers sorts and manifold kinds of *Cyperus*, Flags, and Rushes: and because that there is added unto many of the grasses before mentioned, this difference, *Cyperoides*, that is to say, resembling *Cyperus*, I thought it therefore expedient to join next unto the history of grass, the discourse of *Cyperus*, and his kinds, which are as follow.
The Description.

1. English Galingale hath leaves like unto the common Reed, but lesser and shorter. His stalk is three-square, two cubits high: upon whose top stand sundry branches, every little branch bearing many small chaffy spikes. The root is black and very long, creeping hither and thither, occupying much ground by reason of his spreading: it is of a most sweet and pleasant smell when it is broken.

2. The common round *Cyperus* is like the former in leaves and tops, but the roots are here and there knotty and round, and not altogether so well smelling as the former.

3. There is also another *Cyperus* which grows in Syria and Egypt, whose roots are round, blackish, and large, many hanging upon one string, and having a quick and aromatic smell: the leaves and spoken-tufts resemble the former.

4. There is said to be another kind of this last described, which is lesser, and the roots are blacker, and it grows in Crete, now called Candia.
5. There is also another round *Cyperus* which grows about ditches and the banks of Rivers whereas the salt water sometimes comes: the roots of this are hard and black without smell, many hanging sometimes upon one string: the stalk and leaves are much like the former, but the heads unlike, for they are rough and blackish, about the bigness of a filbert, and hang some six or seven at the top of the stalk. It flowers in July and August.

**The Place and Time.**

1 & 2. The first and second of these grow naturally in fenny grounds, yet will they prosper exceedingly in gardens, as experience hath taught us.

3 & 4. The former of these grows naturally in Syria and Egypt, the later in Candia.

5. This grows plentifully in the marshes below Gravesend, in Sheppey, Thanet, and other places.

**The Name in general.**

*Cyperus* is called of the Latins as well *Cypirus* as *Cyperus*: of some *Juncus quadratus*: of Pliny *Juncus Angulosus*, and *Triangularis*: of others *Aspalathum* and *Erysisceptron*. In French *Souche*: in Dutch *Galleng*: in Spanish *Iunco odoroso*: By us *Cyperus* and English Galingale.

**The Names in particular.**

1. This is called *Cyperus longus*, and *Cyperus longus Oderatior*: in English, Common *Cyperus*, and English Galingale.

2. This is called *Cyperus rotundus vulgaris*, Round English Galingale.
3. *Cyperus rotundas Cyriacus*, or *Egyptiacus*, Syrian or Egyptian round *Cyperus*.

4. *Cyperus minor Creticus*, Candia round *Cyperus*.

5. *Cyperus rotundus inodorus Littoreus*, Round Salt-marsh *Cyperus*, or Galingale.

The Nature.

Dioscorides saith, That *Cyperus* hath an heating quality. Galen saith, The roots are most effectual in medicine, and are of an heating and drying quality: and some do reckon it to be hot and dry in the second degree.

The Virtues.

A. It maketh a most profitable drink to break and expel gravel, and helpeth the dropsy.

B. If it be boiled in wine, and drunk, it provoketh urine, driveth forth the stone, and bringeth down the natural sickness of women.

C. The same taken as aforesaid, is a remedy against the stinging and poison of Serpents.

D. Fernelius saith, The root of *Cyperus* used in baths helpeth the coldness and stopping of the matrix, and provoketh the terms.

E. He writeth also, that it increaseth blood by warming the body, and maketh good digestion; wonderfully refreshing the spirits, and exhilarating the mind, comforting the senses, and increasing their liveliness, restoring the colour decayed, and making a sweet breath.

F. The powder of *Cyperus* doth not only dry up all moist ulcers either of the mouth, privy members, and fundament, but stayeth the humour and healeth them, though they be malign and virulent, according to the judgement of Fernelius.
CHAP. 25. Of Italian Trasi, or Spanish Galingale.

The Description

The Italian Trasi, which is here termed Spanish Galingale, is a plant that hath many small roots, hanging at stringy fibres like as our ordinary Dropwort roots do, but they are of the bigness of a little Medlar, and have one end flat and as it were crowned like as a Medlar, and it hath also sundry streaks or lines seeming to divide it into several parts; it is of a brownish colour without, and white within; the taste thereof is sweet almost like a Chestnut. The leaves are very like those of the garden Cyperus, and never exceed a cubit in length. Stalks, flowers, or seed it hath none, as John Pond an apothecary of Verona, who diligently observed it nigh to that city whereas it naturally grows, affirms; but he saith there grows with it much wild Cyperus, which as he judges hath given occasion of their error who give it the stalks and flowers of Cyperus, or English Galingale, as Matthiolus and others have done. It is increased by setting the roots first steeped in water, at the beginning of November. I have here given you the figure of it without the stalk, according to Pena, and with the stalk, according to Matthiolus and others.

The Names.

The Italian Trasi is called by Pliny Anthalium: the later writers Cyperus Esulentus, and Dulcichinum: The Italians, Trasi, and Dolzolini, by which names in Italy they are cried up and down the streets, as oranges and lemons are here.

The temper and Virtues.

A. The milk or cream of these bulbous roots being drunk, mundifies the breast and lungs, wherefore it is very good for such as are troubled with coughs. Now you must beat these roots, and macerate them in broth, and then press out the cream

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through a linen cloth, which by four late writers is commended also to be used in venereal potions.

B. The same cream is also good to be drunk against the heat and sharpness of the urine, especially if you in making it do add thereto the seeds of Pumpkins, Gourds, and Cucumbers. The citizens of Verona eat them for dainties, but they are somewhat windy.
CHAP. 26. Of the true Galingale, the greater and the lesser.

Fig. 69. Greater and lesser Galingale

The affinity of name and nature hath induced me in this place to insert these two, the bigger and the lesser Galingale; first therefore of the greater.

The Description

1. The Great Galingale, whose root only is in use, and brought to us from Java in the East Indies, hath flaggy leaves some two cubits high, like these of Cat's-tail or Reed-mace: the root is thick and knotty, resembling those of our ordinary flags, but that they are of a more whitish colour on the inside, and not so large. Their taste is very hot and biting, and they are somewhat reddish on the outside.

2. The lesser growing in China, and commonly in shops called Galingale, without any addition, is a small root of a brownish red colour both within and without; the taste is hot and biting, the smell aromatical, the leaves (if we may believe Garcias ab Horto) are like those of Myrtles.

The Names.

1. The first is called by Matthiolus, Lobel, and others, Galanga major. Some think it to be the Acorus of the ancients; and Pena and Lobel in their Stirp. Advers. question whether it be not the Acorus Galaticus of Dioscorides. But howsoever, it is the Acorus of the shops, and by many used in Mithridate instead of the true. The Indians call it Lancuaz.

2. The lesser is called Galanga, and Galanga minor, to distinguish it from the precedent. The Chinese call it Lauandon: the Indians Lancuaz: we in England term it Galingale, without any addition.

Their temper and virtue.

These roots are hot and dry in the third degree, but the lesser are somewhat the hotter.

A. They strengthen the stomach, and mitigate the pains thereof arising from cold and flatulencies.

B. The smell, especially of the lesser, comforts the too cold brain; the substance thereof being chewed sweetens the breath. It is good also against the beating of the heart.

C. They are useful against the colic proceeding of flatulencies, and the flatulent affects of the womb; they conduce to venery, and heat the too cold reins. To conclude, they are good against all cold diseases.
CHAP. 27. Of Turmeric.

This also challengeth the next place, as belonging to this tribe, according to Dioscorides: yet the root, which only is brought us, and in use, doth more on the outside resemble Ginger, but that it is yellower, and not so flat, but rounder. The inside thereof is of a saffron colour, the taste hot and bitterish; it is said to have leaves larger than those of Millet, and a leafy stalk. There is some variety of these roots, for some are longer, and others rounder, and the later are the hotter, and they are brought over oft times together with Ginger.

The Place.

It grows naturally in the East-Indies about Calicut, as also at Goa.

The Names.

This without doubt is the *Cyperus Indicus* of Dioscorides, Lib. 1, Cap. 4. It is now vulgarly by most writers, and in shops, called by the name *Terra Merita*, and *Curcuma*; yet some term it *Crocus indicus*, and we in English call it Turmeric.

The Temperature and Virtues.

A. This root is certainly hot in the third degree, and hath a quality to open obstructions, and it is used with good success in medicines against the yellow jaundice, and against the cold dispempers of the liver and spleen.

Zedoary is also a root growing naturally in the woods of Malabar about Calicut and Cannanore in the Indies; the leaves thereof are larger than Ginger, and much like them; the root is also as large, but consisting of parts of different figures, some long and small, others round; their colour is white, and oft times brownish on the inside, and they have many fibres coming out of them, but they are taken away together with the outward rind before they come to us. These roots have a strong medicine-like smell, and somewhat an ungrateful taste.

The Names.

Some call the long parts of these roots Zedoaria, and the round (whose figure we here give you) Zerumbeth, and make them different, whenas indeed they are but parts of the same root, as Lobel and others have well observed. Some make Zedoaria and Zerumbeth different, as Avicenna: others confound them and make them one, as Rhases and Serapio. It is an aromatic, and therefore chiefly mixed in ointments: which is as much as if he should have said, That it was put into ointments for the smell's sake, which in this is no ways grateful, but rather the contrary.

The Temperature and Virtues.

A. It is hot and dry in the second degree; it discusses flatulencies, and fattens by a certain hidden quality. It also dissipates and amends the ungrateful smell which Garlic, Onions, or too much wine infect the breath withal, if it be eaten after them. It cures the bites and stings of venomous creatures, stops lasks, resolves the abscesses of the womb, stays vomiting, helps the colic, as also the pain of the stomach.

B. It kills all sorts of worms, and is much used in antidotes against the plague, and such like contagious diseases.
CHAP. 29. Of Rushes.

I do not here intend to trouble you with an accurate distinction and enumeration of Rushes; for if I should, it would be tedious to you, laborious to me, and beneficial to neither. Therefore I will only describe and reckon up the chief and more noteworthy of them, beginning with the most usual and common.

The Description.

1. The roots of our common Rushes are long and hairy, spreading largely in the ground from which, as from one entire tuft, proceed a great company of small rushes; so exceedingly well known, that I shall not need to spend much time about the description thereof.

2. There be sundry sorts of Rushes betides the former, whose pictures are not here expressed, and the rather, for that the general description of Rushes, as also their common use and service, are sufficiency to lead us to the knowledge of them. This great Water-Grass or Bull-Rush, instead of leaves bringeth forth many strait twiggy shoots or springs, which be round, smooth, sharp pointed, and without knots. Their tuft or flower breaketh forth a little beneath the top, upon the one side of the Rush, growing upon little short stem like grape clusters, wherein is contained the seed after the fashion of a spear's point. The roots be slender and full of strings. Pliny, and Theophrastus before him, affirm that the roots of the Rush do die every year, and that, it groweth again of the seed. And they affirm likewise that the male is barren, and groweth again of the young shoots; yet I could never observe any such thing.

3. There grows a Rush to the thickness of a Reed, and to some two yards and an half, or three yards high, in divers fenny grounds in this kingdom; it is very porous and light, and they usually make mats, and bottom chairs therewith. The seeds are
contained in reddish tufts, breaking out at the top thereof. The roots are large and jointed, and it grows not unless in waters.

4. *Juncus acutus*, or the sharp Rush, is likewise common and well known; not much differing from *Juncus lævis*, but harder, rougher, and sharper pointed, fitter to straw houses and chambers than any of the rest; for the others are so soft and pithy, that they turn to dust and filth with much treading; where contrariwise this rush is so hard that it will last sound much longer.

5. There is also another pretty small kind of Rush growing to some foot in height, having smooth stalks which end in a head like to that of the ordinary Horse-tail. This rush hath also one little joint towards the bottom thereof. It grows in watery places, but not so frequently as the former.

**The Place**

1. *Juncus Lævis* groweth in fertile fields, and meadows that are somewhat mist.

2, 3 & 5. Grow in standing pools, and by rivers' sides in sundry places.

4. *Juncus acutus* groweth upon dry and barren grounds, especially near the furrows of ploughed land. I need not speak of their time of growing, they being so common as they are.

**The Names.**


2 & 3. The greater are commonly in many places termed Bumbles.

4. *Juncus acutus* is called in Dutch *Yseren Biesen*

5. This is called by Lobel, *Juncus aquaticus minor capitulis Equiseti*: By Dalechampius, *Juncus clavatus*, or Club-Rush.

**The Nature and Virtues.**

These Rushes are of a dry nature.

A. The seed of Rushes dried at the fire, and drunk with wine allayed with water, stayeth the lask and the overmuch flowing of women's terms.

B. Galen yieldeth this reason thereof, because that their temperature consisteth of an earthy essence, moderately cold and watery, and meanly hot, and therefore doth the more easily dry up the lower parts, and by little and little send up the cold humours to the head, whereby it provoketh drowsiness and desire to sleep, but causeth the head-ache; whereof Galen yieldeth the reason as before.

C. The tender leaves that be next the root make a convenient ointment against the bitings of the spider called *Phalangium*.

D. The seed of the Bull-Rush is most soporiferous, and therefore the greater care must be had in the administration thereof, lest in provoking sleep you induce a drowsiness or dead sleep.

The Kinds.

Of Reeds the ancients have set down many sorts. Theophrastus hath brought them all first into two principal kinds, and those hath he divided again into more sorts. The two principal are these, *Auletice*, or *Tibiales Arundines*, and *Arundo vallatoria*. Of these and the rest we will speak in their proper places.

![Fig. 72. Common Reed (1) Fig. 73. Cyprus Canes (2)](image)

The Description.

1. The common Reed hath long strawy stalks full of knotty joints or knees like unto corn, whereupon do grow very long rough flaggy leaves. The tuft or spoky ear doth grow at the top of the stalks, brown of colour, barren and without seed, and doth resemble a bush of feathers, which turneth into fine down or cotton which is carried away with the wind. The root is thick, long, and full of strings, dispersing themselves far abroad, whereby it doth greatly increase. Bauhin reports, That he received from D. Cargill a Scottish man a Reed whose leaves were a cubit long, and two or three inches broad, with some nerves apparently running amongst the leaf; these leaves at the top were divided into two three, or four points or parts; as yet I have not observed it. Bauhin terms it *Arundo Anglica foliis in summitate dissectis*.

2. The Cyprus Reed is a great Reed having stalks exceeding long, sometimes twenty or thirty foot high, of a woody substance, set with very great leaves like those of Turkey wheat. It carrieth at the top the like downy tuft that the former doth.
3. These Reeds Lobel hath seen in the Low Countries brought from Constantinople, where, as it is said, the people of that country have procured them from the parts of the Adriatic seaside where they do grow. They are full stuffed with a spongy substance, so that there is no hollowness in the same, as in Canes & other Reeds, except here and there certain small pores or passages of the bigness of a pin's point; in manner such a pith as is to be found in the Bull-Rush, but more firm and solid.

4. The second differeth in smallness, and that it will wind open in flakes, otherwise they are very like, and are used for darts, arrows, and such like.

5. This great sort of Reeds or Canes hath no particular description to answer your expectation, for that as yet there is not any man which hath written thereof, especially of the manner of growing of them, either of his own knowledge or report from others so that it shall suffice that ye know that that great cane is used especially in Constantinople and thereabout, of aged and wealthy citizens, and also Noblemen and such great personages, to make them walking staves of, carving them at the top with sundry scutcheons, and pretty toys of imagery for the beautifying of them; and so they of the better sort do garnish them both with silver and gold, as the figure doth most lively set forth unto you.

6. In like manner the smaller sort hath not as yet been seen growing of any that have been curious in herbarism, whereby they might set down any certainty thereof; only it hath been used in Constantinople and thereabout, even to this day, to make writing pens withal, for the which it doth very fitly serve, as also to make pipes, and such like things of pleasure.
The Place.

The common Reed groweth in standing waters and in the edges and borders of rivers almost everywhere: and the other being the angling cane for fishers groweth in Spain and those hot regions.

The Time.

They flourish and flower from April to the end of September, at what time they are cut down for the use of man, as all do know.

The Names.

1. The common Reed is called *Arundo* and *Harundo vallatoria*: in French *Roseau*: in Dutch *Riet*: in Italian *Canne a far siepo*: of Diosc. *Phragmitis*: in English, Reed.


The Nature.

Reeds are hot and dry in the second degree, as Galen saith.

The Virtues

A. The roots of reed stamped small draw forth thorns and splinters fixed in any part of man's body.

B. The same stamped with vinegar ease all luxations and members out of joint.

C. And likewise stamped they heal hot and sharp inflammations. The ashes of them mixed with vinegar helpeth the scales and scurf of the head and helpeth the falling of the hair.

D. The great Reed or Cane is not used in physic, but is esteemed to make flares for Weavers, sundry sorts of pipes, as also to light candles that stand before images, and to make hedges and pales, as we do of laths and such like; and also to make certain divisions in slips to divide the sweet oranges from the sour, the pomecitron and lemons likewise in sunder, and many other purposes.
CHAP. 31. Of Sugar Cane.

The Description.

1. Sugar Cane is a pleasant and profitable Reed, having long stalks seven or eight foot high, jointed or kneed like unto the great Cane; the leaves came forth of every joint on every side of the stalk, like unto wings, long, narrow, and sharp pointed. The Cane itself, or stalk is not hollow as other Canes or Reeds are, but full, and stuffed with a spongy substance in taste exceeding sweet. The root is great and long, creeping along within the upper crust of the earth, which is likewise sweet and pleasant, but less hard or woody than other Canes or Reeds; from the which there doth shoot forth many young scions, which are cut away from the main or mother plant, because they should not draw away the nourishment from the old stock, and so get unto themselves a little moisture, or else some substance not much worth, and cause the stock to be barren, and themselves little the better; which shoots do serve for plants to set abroad for increase.

The Place.

The Sugar Cane groweth in many parts of Europe at this day, as in Spain, Portugal, Olbia, and in Provence. It groweth also in Barbary, generally almost everywhere in the Canary Islands, and in those of Madiera, in the East and West Indies, and many other places. Myself did plant some shoots thereof in my garden, and some in Flanders did the like: but the coldness of our climate made an end of mine, and I think the Flemings will have the like profit of their labour.

The Time.

This Cane is planted at any time of the year in those hot countries where it doth naturally grow, by reason they fear no frosts to hurt the young shoots at their first planting.
The Names.

The Latins have called this plant *Arundo Saccharina*, with this additament, *Indica*, because it was first known or brought from India. Of some it is called *Calamus Saccharatus*: in English Sugar Cane: in Dutch *Suyickerriedt*.

The Nature and Virtues.

The sugar or juice of this Reed is of a temperate quality; it drieth and cleanseth the stomach, maketh smooth the roughness of the breast and lungs, cleareth the voice, and putteth away hoarseness, the cough, and all sourness and bitterness, as Isaac saith in *Dictis*.

The Use

Of the juice of this Reed is made the most pleasant and profitable sweet, called sugar; whereof is made infinite confections, confectures, syrups, and such like, as also preserving and conserving of sundry fruits, herbs, and flowers, as Roses, Violets, Rosemary flowers, and such like, which still retain with them the name of sugar, as sugar roses, sugar violet, &c., the which to write of would require a peculiar volume, and not pertinent unto this history, for that it is not my purpose to make of my book a confectionery, a sugar baker's furnace, a gentlewoman's preserving pan, nor yet an apothecary's shop or dispensatory; but only to touch the chiepest matter that I purposed to handle in the beginning, that is, the nature, properties, and descriptions of plants. Notwithstanding I think it not amiss to show unto you the ordering of these reeds when they be new gathered, as I received it from the mouth of an Indian my servant: he saith, They cut them in small pieces, and put them into a trough made of one whole tree, wherein they put a great stone in manner of a mill-stone, whereunto they tie a horse, buffalo or some other beast which draweth it round: in which trough they put those pieces of canes, and so crush and grind them as we do the barks of trees for Tanners, or apples for cider. But in some places they use a great wheel, wherein slaves do tread and walk as dogs do in turning the spit: and some others do feed as it were the bottom of the said wheel, wherein are some sharp or hard things which do cut and crush the canes into powder. And some likewise have found the invention to turn the wheel with water works, as we do our iron mills. The canes being thus brought into dust or powder, they put them into great cauldrons with a little water, where they boil until there be no more sweetness left in the crushed reeds. Then do they strain them through mats and such like things, and put the liquor to boil again unto the consistence of honey, which being cold is like unto sand both in show and handling, but somewhat softer; and so afterward it is carried into all parts of Europe, where it is by the sugar bakers artificially purged and refined to that whiteness as we see.
CHAP. 32. Of Flowering Reed.

Flowering Reed hath a thick and fat stalk of four or five foot high, great below near the ground, and smaller toward the top, taper-wise: whereupon do grow very fair broad leaves full of ribs or sinews like unto Plantains, in shape representing the leaves of white Hellebore, or the great Gentian, but much broader and larger every way: at the top of which stalks do grow fantastic flowers of a red or vermilion colour; which being faded, there follow round, rough, and prickly knobs, like those of Sparganium, or Water-Bur, of a brown colour, and from the middle of those knobs three small leaves. The seed contained in those knobs is exceeding black, of a perfect roundness, of the bigness of the smallest peas. The root is thick, knobby, and tuberous, with certain small threads fixed thereto. There is a variety of this, having flowers of a yellow or saffron colour, with red spots.

The Place.

It groweth in Italy in the garden of Padua, and many other places of those hot regions. Myself have planted it in my garden divers times, but it never came to flowering or seeding, for that it is very impatient to endure the injury of our cold climate. It is a native of the West Indies.

The Time.

It must be set or sown in the beginning of April, in a pot with fine earth, or in a bed made with horse-dung, and some earth strawed thereon, in such manner as Cucumbers and Musk-Melons are.
Gerard's Herbal

The Names.

The name *Arundo indica* is diversely attributed to sundry of the Reeds, but principally unto this, called of Lobel, *Cannacorus*: of others, *Arundo florida*, and *Harundo florida*: in English, the Flowering Reed.

The Nature and values.

There is not anything set down as touching the temperature and virtues or this Flowering Reed, either of the ancients, or of the new or later Writers.
CHAP. 33. Of Paper Reed.

Fig. 77. Paper Reed

The Description.

Paper Reed hath many large flaggy leaves somewhat triangular and smooth, not much unlike those of Cat's-tail, rising immediately from a tuft of roots compact of many strings, amongst the which it shooteth up two or three naked stalks, square, and rising some six or seven cubits high above the water; at the top whereof there stands a tuft or bundle of chaffy threads set in comely order, resembling a tuft of flowers, but barren and void of seed.

The Place.

This kind of Reed grows in the Rivers about Babylon, and near the city Cairo, in the river Nile, and such other places of those countries.

The Time.

The time of springing and flourishing answereth that of the common Reed.

The Names.

This kind of Reed which I have Englished Paper Reed, or Paper plant, is the same (as I do read) that Paper was made of in Egypt, before the invention of paper made of linen clouts was found out. It is thought by men of great learning and understanding in the Scriptures, and set down by them for truth, that this plant is the same Reed mentioned in the second chapter of Exodus; whereof was made that basket or cradle, which was daubed within and without with slime of that country, called Bitumen Iudaicum, wherein Moses was put being committed to the water, when Pharaoh gave commandment that all the male children of the Hebrews should be drowned.
Gerard's Herbal

The Nature, Virtues, and Use.

A. The roots of Paper Reed do nourish, as may appear by the people of Egypt, which do use to chew them in their mouths, and swallow down the juice, finding therein great delight and comfort.

B. The ashes burned assuage and consume hard apostumes, tumors, and corrosive ulcers in any part of the body, but chiefly in the mouth.

C. The burnt paper made hereof doth perform those effects more forcibly.

D. The stalks hereof have a singular use and privilege in opening the chapels or hollow passages of a fistula, being put therein; for they do swell as doth the pith of Elder, or a tent made of a sponge.

E. The people about Nile do use to burn the leaves and stalks, but especially the roots.

F. The frails wherein they put raisins and figs are sometimes made hereof; but generally with the herb Spartum, described in the next chapter.
CHAP. 34. Of Mat-weed.

Fig. 78. Pliny's Mat-weed (1)  Fig. 79 Hooded Mat-weed (2)

The Kinds.

There be divers kinds of Mat-Weeds, as shall be declared in their several descriptions.

The Description.

1. The herb *Spartum*, as Pliny saith, groweth of itself, and sendeth forth from the root a multitude of slender rushy leaves of a cubit high, or higher, tough and pliable, of a whitish colour, which in time draweth narrow together, making the flat leaf to become round, as is the Rush. The stub or stalk thereof beareth at the top certain feather-like tufts coming forth of a sheath or husk, among the which chaffy husks is contained the seed, long and chaffy. The root consisteth of many strings folding one within another, by means whereof it cometh to the form of a turf or hassock.

2. The second likewise Pliny describeth to have a long stalk not much unlike to Reed, but lesser, whereupon do grow many grassy leaves, rough and pliant, hard in handling as are the Rushes. A spoky chaffy tuft growtheth at the top of the stalk, coming forth of a hood or sinewy sheath, such as encloseth the flowers of Onions, Leeks, Narcissus, and such like, before they come to flowering, with seed and roots like the precedent.
3. English Mat-weed hath a rushy root, deeply creeping and growing in heaps of sand and gravel, from the which arise stiff and sharp pointed leaves a foot and a half long, of a whitish colour, very much resembling those of Camels' Hay. The stalk growtheth to the height of a cubit or more, whereupon doth grow a spike or ear of some five or six inches long, somewhat resembling Rye; it is the thickness of a finger in the midst, and smaller towards both the ends. The seed is brown, as small as Canary Seed, but round, and somewhat sharp at the one end. Of this plant neither sheep nor any other cattle will taste or eat.

4. The other English Mat-Weed is like unto the former, saving that the roots of this are long, not unlike to Dog's Grass, but do not thrust deep into the ground, but creep only under the upper crust of the earth. The tuft or ear is shorter, and more resembling the head of Canary Seed than than of Rye.

5. Lobel gives a figure of another smaller Rush-leaved Spartum, with small heads, but he hath not described it in his Latin Works, so that I can say nothing certainly of it.
6. To this kindred must be added the Feathered Grass, though not partaking with the former in place of growth. Now it hath many small leaves of a foot's length round, green, and sharp pointed, not much in form unlike the first described Mat-weed, but much less: amongst these leaves rise up many small stalks not exceeding the height of the leaves, which bear a spike unlike the forementioned Mat-weeds, having 3 or four seeds ending in or sending up very fine white feathers, resembling the smaller sort of feathers of the wings of the Bird of Paradise. The root consists of many small grassy fibres.

The Place.

1 & 2. These two grow in divers places of Spain.

3. I being in company with Mr. Tho. Broad, and three other London apothecaries besides, in August, 1632, to find out rare plants in the Island of Thanet, found this bigger English one in great plenty, as soon as we came to the seaside, going between Margate and Sandwich.

4 & 5. These it may be grow also upon our coasts; however they grow near the seaside in divers parts of the Lowb Countries.

6. This elegant plant Clusius first observed to grow naturally in the mountains nigh to the baths of Baden in Germany, and in divers places of Austria and Hungary. It is nourished for the beauty in sundry of our English gardens.

The Time.

These bear their heads in the middle, and some in the later end of summer.
Gerard's Herbal

**The Names.**

1. This is called *Spartum primum Plinii*; that is, the first Mat-Weed described by Pliny: in Spain they call it *Sparto*: the French in Provence term it *Olpho*.

2. This is *Spartum alterum Plinii*, Pliny his second Mat-Weed, or Hooded Mat-weed, it is called *Albardin* in Spain.

3. This is *Spartum testium* of Clusius, and *Gramen Sparteum secundum Schœnanthinum* of Tabernamontanus. This the Dutch call *Halme*; and our English in Thanet, Helme. Turner calls it Sea-Bent.

4. This is *Spartum herba Batavicum* of Clusius; *Gramen Sparteum*, or *Iunci Spartium* of Tabernamontanus. Lobel calls it *Spartum nostras alterum*.

5. Lobel calls this *Spartum nostras parvum*.

6. Clusius calls this *Spartum Austriacum*; Dalechampius, *Gramen pinnatum*; we in England call it *Gramen plumosum*, or Feathered Grass.

**The Temperature, Virtues, and Use.**

A. These kinds of grassy or rather rushy Reed have no use in physic, but serve to make Mats, and hangings for chambers, frails, baskets, and such like, The people of the Countries where they grow do make beds of them, straw their houses and chambers instead of Rushes, for which they do excel, as myself have seen. Turner affirmeth, That they made hats of the English one in Northumberland in his time.

B. They do likewise in sundry places or the Islands of Madeira, Canary, Saint Thomas, and other of the islands in the tract unto the West Indies, make of them their boots, shoes, Herd-men's Coats, fires, and lights. It is very hurtful for cattle, as Sheer-Grass is.

The Feather-Grass is worn by sundry ladies and Gentlewomen instead of a Feather, the which it exquisitely resembles.
CHAP. 35. Of Camels' Hay.

Fig. 83. Camels' Hay (1)  Fig. 84. Bastard Camels' Hay (2)

The Description

1. Camels' Hay hath leaves very like unto Mat-Weed or Helme; his roots are many, in quantity mean, full of small hairs or threads proceeding from the bigger root deeply growing in the ground, having divers long stalks like Cyperus Grass, set with some smaller leaves even unto the top, where do grow many small chaffy tufts or panicles like unto those of the wild Oats, of a reasonable good smell and savour, when they are broken, like unto a Rose, with a certain biting and nipping of the tongue.

2. Francis Penny, of famous memory, a good Physician and skilful herbarist, gathered on the coast of the Mediterranean sea, between Aigues Mortes and Pescaire, this beautiful plant, whose roots are creeping, and stalks and leaves resemble Squinanth. The flowers are soft, pappous, and thick compact, and come five or six inches in length, like to Fox-tail; they in colour resemble white silk or silver. Thus much Lobel.

The Place.

1. This grows in Africa, Nabathæa, and Arabia, and is a stranger in these northern regions.

2. The place of the second is mentioned in the description.

The Time.

Their time answereth the other Reeds and Flags.
Gerard's Herbal

The Names.

1 Camels' Hay is called in Latin, *Juncus odoratus*, and *Scænanthum*: in shops *Squinanthum*, that is, *Flos Junci*; in French, *Pasteur de Chameau*; in English, Camels' Hay, and Squinanth.

2. This Lobel calls *Juncus marinus gramineus*, and *Pseudoschænanthum*: We call it Bastard Squinanth, and Fox-tail Squinanth.

The temper.

This plant is indifferently hot, and a little astrictive.

The Virtues.

A. Camels' Hay provoketh urine, moveth the terms, and breaketh wind about the stomach.

B. It causeth aching and heaviness of the head, Galen yieldeth this reason thereof, because it heateth moderately, and bindeth with tenuity of parts.

C. According to Dioscorides, it dissolves, digests, and opens the passages of the veins.

D. The flowers or chaffy tufts are profitable in drink for them that piss blood anyways: It is given in medicines that are ministered to cure the pains and griefs of the guts, stomach, lungs, liver, and reins, the fulness, loathsomeness, and other defects of the stomach, the dropsy, convulsions, or shrinking of sinews, given in the quantity of a dram, with a like quantity of pepper, for some few days.

E. The same boiled in wine helpeth the inflammation of the matrix, if the woman do sit over the fume thereof, and bath herself often with it also.
The Description.

1. The first of these plants hath long leaves, which are double-edged, or sharp on both sides, with a sharp crest in the middle, in such manner raised up that it seemeth to be triangle or three-square. The stalks grow among the leaves, and are two or three foot long, being divided into many branches, garnished with many prickly husks or knops of the bigness of a nut. The root is full of hairy strings.

2. The Great Water-Bur differeth not in anything from the first kind in roots or leaves, save that the first hath his leaves rising immediately from the tuft or knop of the root; but this kind hath a long stalk coming from the root, whereupon, a little above the root, the leaves shoot out round about the stalk successively, some leaves still growing above others, even to the top of the stalk, and from the top thereof downward by certain distances. It is garnished with many round whorls, or rough coronets, having here and there among the said whorls one single short leaf of a pale green colour.

The Place.

Both these are very common, and grow in moist meadows, and near unto water-courses. They plentifully grow in the fenney grounds of Lincolnshire, and such like places; in the ditches about St. George his fields and in the ditch right against the place of execution, at the end of Southwark, called St. Thomas Waterings.

The Time.

They bring forth their burry bullets or seedy knots in August.
The Names.

These plants of some are called Sparganium: Theophrastus in his fourth Book and eighteenth Chapter calleth them Butomus: of some, Platanaria: I call them Bur-Reed: in the Arabian tongue they are called Sa farhe Bamon: in Italian Sparganio: of Dodoneus, Carex: Some call the first Sparganium ramosum, or Branched Bur-Reed. The second, Sparganium non ramosum, Not-branching Bur-Reed.

The Temperature.

They are cold and dry of complexion.

The Virtues.

A. Some write, that the knops or rough burs of these plants boiled in wine, are good against the bitings of venomous beasts, if either it be drunk, or the wound washed therewith.
CHAP. 37. Of Cat's Tail.

The Description.

Cat's Tail hath long and flaggy leaves, full of a spongy matter, or pith, among which leaves groweth up a long smooth naked stalk, without knot, fashioned like a spear, of a fine or solid substance, having at the top a brown knop or ear, soft, thick and smooth, seeming to be nothing else but a deal of flocks thick set and thrust together, which being ripe turneth into a down, and is carried away with the wind. The roots be hard, thick, and white, full of strings, and good to burn, where there is plenty thereof to be had.

The Place.

It groweth in pools and such like standing waters, and sometimes in running streams.

I have found a smaller kind hereof growing in the ditches and marshy grounds in the Isle of Sheppey, going from Sherland house to Feversham.

The Time.

They flower and bear their mace or torch in July and August.

The Names.

They are called in Latin Typha: of some Cestrum Morionis: in French Marteau Masses: in Dutch, Lischdoden, and Donsen: In Italian Mazza sorda: in Spanish Behordo, and Junco amacorodato: In English, Cat's Tail, and Reed-Mace. Of this Cat's Tail Aristophanes maketh mention in his Comedy of Frogs, where he bringeth them forth one talking with another, being very glad that they had spent the whole day
in skipping and leaping *inter Cyperum & Phleum*, among Galingale and Cat's Tail. Ovid seemeth to name this plant *Scirpus*; for he termeth the mats made of the leaves, Cat's-tail Mats, as in his sixth Book *Fastorum*,

\[At Dominus, discedite, ait, plaustroque morantes Sustulit, in plaustro scirpea matta fuit.\]

[But the master cried: "Away with you!" and packed
The laggards into a wagon lined with rushes.]

**The Nature.**

It is cold and dry of complexion.

**The Virtues.**

A. The soft down stamped with swine's grease well washed, healeth burnings or scaldings with fire or water.

B. Some practitioners by their experience have found, That the down of the Cat's tail beaten with the leaves of Betony, the roots of Gladiole, and the leaves of *Hippoglosson* into powder, and mixed with the yolks of eggs hard sodden, and so eaten, is a most perfect medicine against the disease in children called in Greek *Enterochole*, which is, when the gut called *intestinum caecum* is fallen into the cods. This medicine must be ministered every day fasting for the space of thirty days, the quantity thereof to be ministered at one time is 1 drachm. This being used as before is specified doth not only help children and striplings, but grown men also, if in time of their cure they use convenient ligature or trussings, and fit consounding plasters upon the grieved place, according to art appointed for that purpose in chirurgery.

C. This down in some places of the Isle of Ely, and the low countries adjoining thereto, is gathered and well sold to make mattresses of, for ploughmen and poor people.

D. It hath been also often proved to heal kibed or humbled heels (as they are termed) being applied to them, either before or after the skin is broken.
CHAP. 38. Of Stitchwort.

1. Stitchwort, or as Ruellius termeth it *Holosteum*, is of two kinds, and hath round tender stalks full of joints leaning toward the ground; at every joint grow two leaves one against another. The flowers be white, consisting of many small leaves set in the manner of a star. The roots are small, jointed, and thready. The seed is contained in small heads somewhat long, and sharp at the upper end, and when it is ripe it is very small and brown.

2. The second is like the former in shape of leaves and flowers, which are set in form of a star; but the leaves are orderly placed, and in good proportion, by couples two together, being of a whitish colour. When the flowers be faded then follow the seeds which are enclosed in bullets like the seed of flax, but not so round. The chives or threads in the middle of the flower are sometimes of a reddish, or of a blackish colour. There are more differences of this plant, or rather varieties, as differing little but in the largeness of the leaves, flowers, or stalks.

The Place.

They grow in the borders of fields upon bank sides and hedges, almost everywhere.

The Time

They flourish all the summer, especially in May and June.
The Names.

In Latin, *Tota ossea*; in English, All-Bones; whereof I see no reason, except it be by the figure *Antonomia*; as when we say in English, He is an honest man, our meaning is that he is a knave: for this is a tender herb having no such bony substance. Dodonæus questions, whether this plant be not *Crataegonon*; and he calls it *Gramen Leucanthemum*, or White-flowered Grass. The quality here noted with B. is by Dioscorides given to *Crataegonon*; but it is with *Some say or report so much*: which phrase of speech he often useth when as he writes faculties by hearsay and doubts himself of the truth of them.

The Nature.

The seed of Stitchwort, as Galen writeth, is sharp and biting to him that tasteth it, and to him that useth it very like to Mill.

The Virtues.

A. They are wont to drink it in wine with the powder of acorns, against the pain in the side, stitches, and such like.

B. Divers report, saith Dioscorides, That the seed of Stitchwort being drunk causeth a woman to bring forth a man child, if after the purgation of her sickness, before she conceive, she do drink it fasting thrice in a day, half a dram at a time, in three ounces of water many days together.

The Description.

1. The obscure description which Dioscorides and Pliny have set down for *Phalangium*, hath bred much contention among late writers. This plant *Phalangium* hath leaves much like Couch Grss, but they are somewhat thicker and fatter, and of a more whitish green colour. The stalks grow to the height of a cubit. The top of the stalk is beset with small branches, garnished with many little white flowers, compact of six little leaves. The threads or thrums in the middle are whitish, mixed with a fair yellow, which being fallen, there follow black seeds, enclosed in small round knobs, which be three-cornered. The roots are many, tough, and white of colour.

2. The second is like the first, but that his stalk is not branched as the first, and flowereth a month before the other.
3. The third kind of Spiderwort, which Carol Clusius nameth *Asphodelus minor*, hath a root of many thready strings, from the which immediately rise up grassy leaves, narrow and sharp pointed: among the which come forth divers naked strait stalks divided towards the top into sundry branches, garnished on every side with fair star-like flowers, of colour white, with a purple vein dividing each leaf in the midst: they have also certain chives or threads in them. The seed followeth enclosed in three-square beads like unto the kinds of Asphodels.

4. This Spiderwort hath a root consisting of many thick, long, and white fibers, not much unlike the precedent, out of which it sends forth some five or six green and firm leaves, somewhat hollowed in the middle, and mutually involving each other at the root; amongst these there riseth up a round green stalk, bearing at the top thereof some nine or ten flowers, more or less; these consist of six leaves apiece, of colour white (the three innermost leaves are the broader, and more curled, and the three outmost are tipped with green, at the tops). The whole flower much resembles a white lily, but much smaller. Three-square heads, containing a dusky and unequal seed, follow after the flower.
5. This plant in my judgement cannot be fitlier ranked with any than these last described; therefore I have here given him the fifth place, as the last comer. This plant hath many creeping stringy roots, which here and there put up green leaves, in shape resembling those of the last described: amongst these there riseth up a pretty stiff stalk jointed, and having at each joint one leaf encompassing the stalk, and out of whose bosom oft times little branches arise: now the stalk at the top usually divides itself into two leaves, much after the manner of *Cyperus*; between which there come forth many flowers consisting of three pretty large leaves a piece, of colour deep blue, with reddish chives tipped with yellow standing in their middle. These fading (as usually they do the same day they show themselves) there succeed little heads covered with the three little leaves that sustained the flower. In these heads there is contained a long blackish seed.

**The Place.**

1, 2 & 3. These grow only in gardens with us, and that very rarely.

4. This grows naturally in some places of Savoy.

5. This Virginian is in many of our English gardens, as with Mr. Parkinson, Mr. Tradescant, and others.

**The Time.**

1, 4 & 5. These flower in June: the second about the beginning of May: and the third about August.

**The Names.**

1. The first is called *Phalangium ramosum*, Branched Spiderwort.

2. *Phalangium non ramosum*, Unbranched Spiderwort. Cordus calls it *Liliago*.

4. This is thought to be the *Phalangium* of the ancients, and that of Matthiolus: it is *Phalanagium Allobrogicum* of Clusius, Savoy Spiderwort.

5. This by Mr. Parkinson (who first hath in writing given the figure and description thereof) is aptly termed *Phalangium Ephemerum Virginianum*, Soon-fading Spiderwort of Virginia, or Tradescant's Spiderwort, for that Mr. John Tradescant first procured it from Virginia. Bauhin hath described it at the end of his *Pinax*, and very unfitly termed it *Allium, sive Moly Virginianum*.

**The Nature.**

Galen saith, *Phalangium* is of a drying quality, by reason of the tenuity of parts.

**The Virtues.**

A. Dioscorides saith, That the leaves, seed, and flowers, or any of them drunk in wine, prevaieth against the bitings of Scorpions, and against the stinging and biting of the Spider called *Phalangium*, and all other venomous beasts.

B. The roots tunned up in new ale, and drunk for a month together, expelleth poison, yea although it have universally spread itself through the body.
CHAP. 40. Of the Fleur-de-lys.

The Kinds.

There be many kinds of Iris or Fleur-de-lys, whereof some are tall and great, some little, small, and low; some smell exceeding sweet in the root, some have no smell at all: some flowers are sweet in smell, and some without; some of one colour, some of many colours mixed: virtues attributed to some, others not remembered: some have tuberous or knobby roots, others bulbous or onion roots, some have leaves like flags, others like grass or rushes.

Fig. 94. Fleur-de-lys (1)  Fig. 95. Water-flag or Water Fleur-de-lys (2)

The Description.

1. The common Fleur-de-lys hath long and large flaggy leaves like the blade of a sword, with two edges, amongst which spring up smooth and plain stalks two foot long, bearing flowers toward the top, compact of six leaves joined together, whereof three that stand upright are bent inward one toward another; and in those leaves that hang downward there are certain rough or hairy welts, growing or rising from the nether part of the leaf upward, almost of a yellow colour. The roots be thick, long, and knobby, with many hairy threads hanging thereat.

2. The water Fleur-de-lys, or Water Flag, or Bastard Acorus, is like unto the garden Fleur-de-lys in roots, leaves, and stalks, but the leaves are much longer, sometimes of the height of four cubits, and altogether narrower. The flower is of a perfect yellow colour, and the root knobby like the other; but being cut, it seemeth to be of the colour of raw flesh.
The Place.

The Water Fleur-de-lys or yellow flag prospereth well in moist meadows, and in the borders and brinks of rivers, ponds, and standing lakes. And although it be a water plant of nature, yet being planted in gardens it prospereth well.

The Names.

Fleur-de-lys is called in Greek by Athenæus and Theophrastus Consecratrix; by which name it is also called of the Latins Radix Mario, or rather Radix Naronica, of the river Naron [Neretva], by which the best and greatest store do grow. Whereupon Nicander in his Treacles commendeth it thus:

Iridem quam aluit Drilon, & Naronis ripa.

Which may thus be Englished:

Iris, which Drilon water feeds,
And Naron's banks with other weeds.


The second is called in Latin, Iris Palustris lutea, Pseudoacorus, and Acornus palustris: in English, Water-flags, Bastard Fleur-de-lys, or Water Fleur-de-lys: and in the North they call them Seggs.

The Nature.

1. The roots of the Fleur-de-lys being as yet fresh and green, and full of juice, are hot almost in the fourth degree. The dried roots are hot and dry in the third degree, burning the throat and mouth of such as taste them.

2. The bastard Fleur-de-lys his root is cold and dry in the third degree, and of an astringent or binding faculty.

The Virtues.

A. The root of the common Fleur-de-lys clean washed, and stamped with a few drops of rose-water, and laid plaster-wise upon the face of man or woman, doth in two days at the most take away the blackness or blueness of any stroke or bruise: so that if the skin of the same woman or any other person be very tender and delicate, it shall be needful that ye lay a piece of silk, sindall, or a piece of fine lawn between the plaster and the skin; for otherwise in such tender bodies it often causeth heat and inflammation.

B. The juice of the same doth not only mightily and vehemently draw forth choler, but most especially watery humors, and is a special and singular purgation for them that have the dropsy, if it be drunk in whey or some other liquor that may somewhat temper and allay his heat.

C. The dry roots attenuate or make thin thick and tough humours, which are hardly and with difficulty purged away.

D. They are good in a lohoch or licking medicine for shortness of breath, an old cough, and all infirmities of the chest which rise hereupon.

E. They remedy those that have evil spleens, and those that are troubled with convulsions or cramps, biting of serpents, and the running of the reins, being drunk
with vinegar, as saith Dioscorides; and drunk with wine it bringeth down the monthly
courses of women.

F. The decoction is good in women's baths, for it mollifieth and openeth the
matrix.

G. Being boiled very soft, and laid to plaster-wise it mollifieth or softeneth the
king's evil, and old hard swellings.

H. The roots of our ordinary flags are not (as before is delivered) cold and dry
in the third degree, nor yet in the second, as Dodonæus affirms; but hot and dry, and,
that at the least in the second degree, as any that throughly tastes them will confess.
Neither are the faculties and use (as some would persuade us) to be neglected; for as
Pena and Lobel affirm, though it have no smell nor great heat, yet by reason of other
faculties it is much to be preferred before the Galanga major, or foreign Acorus of
shops, in many diseases; for it imparts more heat and strength to the stomach and
neighbouring parts than the other, which rather preys upon and dissipates the innate
heat and implanted strength of those parts. It binds, strengthens, and condenses: it is
good in bloody fluxes, and stays the courses.
CHAP. 41. Of Fleur-de-lys of Florence.

The Description.

1. The Fleur-de-lys of Florence, whose roots in shops and generally everywhere are called *ireos*, or *orris* (whereof sweet waters, sweet powders, and such like are made) is altogether like unto the common Fleur-de-lys, saving that the flowers
of the *Ireos* is of a white colour, and the roots exceeding sweet of smell, and the other
of no smell at all.

2. The white Fleur-de-lys is like unto the Florentine Fleur-de-lys in roots,
flaggy leaves, and stalks; but they differ in that, that this Iris hath his flower of a bleak
white colour declining to yellowness; and the roots have not any smell at all; but the
other is very sweet, as we have said.

3. The great Fleur-de-lys of Dalmatia hath leaves much broader, thicker, and
more closely compact together than any of the other, and set in order like wings or the
fins of a whale fish, green toward the top, and of a shining purple colour toward the
bottom, even to the ground; amongst which riseth up a stalk of four foot high, as
myself did measure oft times in my garden: whereupon doth grow fair large flowers
of a light blue, or as we term it, a watchet colour. The flowers do smell exceeding
sweet, much like the Orange-Flower. The seeds are contained in square cods, wherein
are packed together many flat seeds like the former. The root hath no smell at all.
4. The small Fleur-de-lys of Dalmatia is in show like to the precedent, but rather resembling *Iris biflora*, being both of one stature, small and dwarf plants in respect of the greater. The flowers be of a more blue colour. They flower likewise in May as the others do; but beware that ye never cast any cold water upon them presently taken out of a well, for their tenderness is such, that they wither immediately, and rot away, as I myself have proved: but those which I left unwatered at the same time live and prosper to this day.
5. This kind of Fleur-de-lys came first from Portugal to us. It bringeth forth in the springtime flowers of a purple or violet colour, smelling like a violet, with a white hairy welt down the middle. The root is thick and short, stubborn or hard to break. In leaves and show it is like to the lesser Fleur-de-lys of Dalmatia, but the leaves be more spread abroad, and it commonly hath but one stalk, which in autumn flowereth again, and bringeth forth the like flowers; for which cause it was called *Iris biflora*.

6. *Iris violacea* is like unto the former, but much smaller, and the flower is of a more deep violet colour.

7. Carolus Clusius, that excellent and learned Father of herbarists, hath set forth in his *Pannonic Observations* the picture of this beautiful Fleur-de-lys, with great broad leaves, thick and fat, of a purple colour near unto the ground, like the great Dalmatian Flower-de-luce, which it doth very well resemble. The root is very sweet when it is dry, and striveth with the Florentine Iris in sweetness. The flower is of all the other most confusedly mixed with sundry colours, insomuch that my pen cannot set down every line or streak, as it deserveth. The three leaves that stand upright do clasp or embrace one another, and are of a yellow colour. The leaves that look downward, about the edges are of a pale colour, the middle part of white, mixed with a line of purple, and hath many small purple lines striped over the said white flower, even to the brim of the pale coloured edge. It smelleth like the Hawthorn flowers being lightly smelled unto.

8. The German Fleur-de-lys, which Camerarius hath set forth in his book named *Hortus Medicus*, hath great thick and knobby roots: the stalk is thick and full of juice: the leaves be very broad in respect of all the rest of the Fleur-de-lys. The flower groweth at the top of the stalk, consisting of six great leaves blue of colour, welted down the middle, with white tending to yellow; at the bottom next the stalk it
is white of colour, with some yellowness fringed about the said white, as also about the brims or edges, which greatly setteth forth his beauties the which Ioachimus Camerarius, the son of old Camerarius of Nuremberg, had sent him out of Hungary, and did communicate one of the plants thereof to Clusius; whose figure he hath most lively set forth with this description, differing somewhat from that which Ioachimus himself did give unto me at his being in London. The leaves, saith he, are very large, twice so broad as any of the others. The stalk is single and smooth; the flower groweth at the top, of a most bright shining blue colour, the middle rib tending to whiteness, the three upper leaves somewhat yellowish. The root is likewise sweet as Ireos.

The Place.

These kinds of Fleur-de-lys do grow wild in Dalmatia, Gorizia, and Piedmont; notwithstanding our London gardens are very well stored with every one of them.

The Time.

Their time of flowering answereth the other Fleur-de-lys.

The Names.

The Dalmatian Fleur-de-lys is called in Latin Iris, and in English Fleur-de-lys. Their several titles do sufficiently distinguish them, whereby they may be known one from another.

The Nature.

The nature of these Fleur-de-lys are answerable to those of the common kind; that is to say, the dry roots are hot and dry in the latter end of the second degree.

The Virtues.

The juice of these Fleur-de-lys doth not only mightily and vehemently draw forth choler, but most especially watery humors, and is a singular good purgation for them that have the dropsy, if it be drunk in sweet wort or whey.

The same are good for them that have evil spleens, or that are troubled with cramps or convulsions, and for such as are bit with serpents. It profitteth also much those that have the gonorrhea, or running of the reins, being drunk with vinegar, as Dioscorides saith, and drunk with wine they bring down the monthly terms.
CHAP 42. Of Variable Fleur-de-lys.

The Description.

1. That which is called the Fleur-de-lys of many colours loseth his leaves in winter, and in the springtime recovereth them anew. I am not able to express the sundry colours and mixtures contained in this flower: it is mixed with purple, yellow, black, white, and a fringe or black thrum down the middle of the lower leaves, of a whitish yellow, tipped or frizzed, and as it were a little raised up; of a deep purple colour near the ground.

2. The second kind hath long and narrow leaves of a blackish green, like the stinking Gladdon; among which rise up stalks two foot long, bearing at the top of every stalk one flower compact of six great leaves: the three that stand upright are confusedly and very strangely striped, mixed with white and a duskish black colour. The three leaves that hang downward are like a gaping hood, and are mixed in like manner, (but the white is nothing so bright as of the other) and are as it were shadowed over with a dark purple colour somewhat shining: so that according to my judgement the whole flower is of the colour of a Guinea hen: a rare and beautiful flower to behold.
3. The French, or rather Sea Fleur-de-lys (whereof there is also another of the same kind altogether lesser) have their roots without any savour. In show they differ little from the garden Fleur-de-lys, but that the leaves of these are altogether slenderer, and unpleasant in smell, growing plentifully in the rough crags of the rocks under the Alps, and near unto the seaside. The which Pena found in the grassy gravelly grounds of the sea coast near to Montpellier. The learned Doctor Assatius a long time supposed it to be Medium Diosc. Matthiulus deceived himself and others, in that he said, That the root of this plant hath the scent of the peach: but myself have proved it
to be without savour at all. It yieldeth his flowers in June, which are of all the rest most like unto the grass Fleur-de-lys. The taste of his root is hot, bitter, and with much tenuity of parts, as hath been found by physical proof.

4. This *Iris Byzantina* hath long narrow leaves like those of the last described; very narrow, sharp pointed, having no ungrateful smell; the stalks are some cubit and an half in length, and sometimes more; at the top they are divided into 2 or 3 branches that have 2 or 3 flowers apiece, like in shape to the flowers of the broad-leafed variegated bulbous Iris; they have also a good smell: the ends of the hanging-down leaves are of a dark colour; the other parts of them are variegated with white, purple, or violet colour. The three other leaves that stand up are of a deep violet or purple colour. The root is blackish, slender, hard, knotty.

5. Narrow-leaved Fleur-de-lys hath an infinite number of grassy leaves much like unto Reed, among which rise up many stalks: on the ends of the same spring forth two, sometimes three right sweet and pleasant flowers, compact of nine leaves. Those three that hang downward are greater than the rest, of a purple colour, striped with white and yellow; but those three small leaves that appear next, are of a purple colour without mixture: those three that stand upright are of an horse-flesh colour, tipped with purple, and under each of these leaves appear three small brown aglets like the tongue of a small bird.

6. The Small Grassy Fleur-de-lys differeth from the former in smallness and in thinness of leaves, and in that the stalks are lower than the leaves, and the flowers in shape and colour are like those of the Stinking Gladdon, but much less.

There are many other varieties of the broad-leaved Fleur-de-lys besides these mentioned by our author; as also of the narrow-leaved, which here we do not intend to insist upon, but refer such as are desirous to trouble themselves with these niceties, to Clusius and others.

Notwithstanding I judge it not amiss to give the figures and brief descriptions of some more of the Dwarf Fleur-de-lys, as also of one of the narrow-leaved.
7. This therefore which we give you in the seventh place is *Iris flore caeruleo obsoleto, &c. Lobelii*. The leaves of this are small and long like those of the wild Byzantine Fleur-de-lys; the root (which is not very big) hath many strong threads or fibres coming out of it: the stalk (which is somewhat tall) divides itself into two or three branches, whereon grow flowers in shape like those of the other Fleur-de-lys, but their colour is of an overworn blue, or ash colour.
8-11. Many are the differences of the *Chamaeirides latifoliae*, or Broad-leaved Dwarf Fleur-de-lys, but their principal distinction is in their flowers; for some have flowers of violet or purple colour, some of white, other some are variegated with yellow and purple, &c. Therefore I will only name the colour, and give you their figure, because their shapes differ little. This eighth therefore is *Chamaeiris nivea aut Candida*, White Dwarf Iris: The ninth, *Chamaeiris latifolia flore rubello*, Red flowered Dwarf Iris: The tenth, *Cameiris lutea*, Yellow Dwarf Iris: The eleventh, *Chamaeiris variegata*, Variegated Dwarf Iris. The leaves and stalks of these plants are usually about a foot high; the flowers, for the bigness of the plants, large, and they flower betimes, as in April. And thus much I think may suffice for the names and descriptions of these Dwarf varieties of Fleur-de-lys.

**The Place.**

These plants do grow in the gardens of London, amongst herbarists and other lovers of plants.

**The Times.**

They flower from the end of March to the beginning of May.

**The Names.**

The Turkey Fleur-de-lys is called in the Turkish tongue *Alaia Susiani*, with this additament from the Italians, *Fiore Belle pintate*: in English, Fleur-de-lys. The rest of the names have been touched in their titles and history.

**Their Nature and Virtues.**

The faculties and temperature of these rare and beautiful flowers are referred to the other sorts of Fleur-de-lys, whereunto they do very well accord.
A. There is an excellent oil made of the flowers and roots of Fleur-de-lys, of each a like quantity, called *Oleum Irinum*, made after the same manner that oil of roses, lilies, and such like be made: which oil profiteth much to strengthen the sinews and joints, helpeth the cramp proceeding of repletion, and the disease called in Greek *Peripneumonia*.

B. The flowers of French Fleur-de-lys distilled with *Diatrion sandalon*, and Cinnamon, and the water drunk, prevaileth greatly against the dropsy, as Hollerius and Gesner testify.
CHAP. 43. Of Stinking Gladdon.

The Description.

Stinking Gladdon hath long narrow leaves like *Iris*, but smaller, of a dark green colour, and being rubbed, of a stinking smell very loathsome. The stalks are many in number, and round toward the top, out of which do grow flowers like the Fleur-de-lys, of an overworn blue colour, or rather purple, with some yellow and red streaks in the midst. After the flowers be faded there come great husks or cods, wherein is contained a red berry or seed as big as a pease. The root is long, and thready underneath.

The Place.

Gladdon groweth in many gardens: I have seen it wild in many places, as in woods and shadowy places near the sea.

The Time.

The stinking Gladdon flowereth in August, the seed whereof is ripe in September.

The Names.

Stinking Gladdon is called in Latin *Spatula fœtida* among the apothecaries: it is called also *Xyris*: in English, stinking Gladdon, and Spurgewort.

The Nature.

Gladdon is hot and dry in the third degree.
The Virtues.

A. Such is the faculty of the roots of all the Irides before named, that being pounding they provoke sneezing, and purge the head: generally all the kinds have a heating & extenuating quality.

B. They are effectual against the cough; they easily digest and consume the gross humors which are hardly concocted: they purge choler and tough phlegm they procure sleep, and help the gripings within the belly.

C. It helpeth the king's evil, and buboes in the groin, as Pliny saith. If it be drunk in wine it provoketh the terms, and being put in baths for women to sit over, it provoketh the like effects most exquisitely. The root put in manner of a pessary hasteneth the birth. They cover with flesh bones that be bare, being used in plasters. The roots boiled soft, and used plasterwise, soften all old hard tumours, and the swellings of the throat called strumæ, that is, the king's evil; and emplastered with honey it draweth out broken bones.

D. The meal thereof healeth all the rifts of the fundament, and the infirmities thereof called Condilomata; and openeth hemorhoids. The juice sniffed or drawn up into the nose, provoketh sneezing, and draweth down by the nose great store of filthy excrements, which would fall into other parts by secret and hidden ways, and conveyances of the channels.

E. It profiteth being used in a pessary, to provoke the terms, and will cause abortion.

F. It prevaleth much against all evil affections of the breast and lungs, being taken in a little sweet wine, with some Spikenard; or in whey with a little mastick.

G. The Root of Xyris or Gladdon is of great force against wounds and fractures of the head; for it draweth out all thorns, stubs, pricks, and arrow-heads, without grief; which quality it effecteth (as Galen saith) by reason of his tenuity of parts, and of his attracting, drying, and digesting faculty, which chiefly consisteth in the seed or fruit, which mightily provoketh urine.

H. The root given in Wine, called in physic Passum, profiteth much against convulsions, ruptures, the pain of the huckle bones, the strangury, and the flux of the belly. Where note, That whereas it is said that the potion above named stayeth the flux of the belly, having a purging quality; it must be understood that it worketh in that manner as Rhabarbarum and Asarum do, in that they concoct and take away the cause of the lask; otherwise no doubt it moveth unto the stool, as Rhubarb, Asarum, and the other Irides do. Hereof the country people of Somersetshire have good experience, who use to drink the decoction of this root. Others do take the infusion thereof in ale or such like, wherewith they purge themselves, and that unto very good purpose and effect

I. The seed thereof mightily purgeth by urine, as Galen saith, and the country people have found it true.
CHAP. 44. Of Ginger.

The Description.

1. Ginger is most impatient of the coldness of these our Northern Regions, as myself have found by proof, for that there have been brought unto me at several times sundry plants thereof, fresh, green, and full of juice, as well from the West Indies, as from Barbary and other places; which have sprouted and budded forth green leaves in my garden in the heat of summer, but as soon as it hath been but touched with the first sharp blast of winter, it hath presently perished both blade and root. The true form or picture hath not before this time been set forth by any that hath written; but the world hath been deceived by a counterfeit figure, which the reverend and learned herbarist Matthias Lobel did set forth in his Observations. The form whereof notwithstanding I have here expressed, with the true and undoubted picture also, which I received from Lobel his own hands at the impression hereof. The cause of whose former error, as also the means whereby he got the knowledge of the true Ginger, may appear by his own words sent unto me in Latin, which I have here inserted. His words are these:

"How hard and uncertain it is to describe in words the true proportion of plants, (having no other guide than skilful, but yet deceitful forms of them, sent from friends, of other means) they best do know who have deepliest waded in this sea of simples. About thirty years past or more, an honest and expert apothecary William Dries, to satisfy my desire, sent me from Antwerp to London the picture of Ginger, which he held to be truly and lively drawn: I myself gave him credit easily, because I was not ignorant, that there had been often Ginger roots brought green, new, and full of juice, from the Indies to Antwerp; and further, that the same had budded and grown in the said Dries’ garden. But not many years after, I perceived that the picture
which was sent me by my friend was a counterfeit, and before that time had been
drawn and set forth by an old Dutch herbarist. Therefore not suffering this error any
further to spread abroad, (which I discovered not many years past at Flushing in
Zeeland, in the garden of William of Nassau Prince of Orange, of famous memory,
through the means of a worthy person, if my memory fail me not, called Vander Mill;
at what time he opened, and loosed his first young buds and shoots about the end of
summer, resembling in leaves, and stalks of a foot high, the young and tender shoots
of the common Reed, called Harundo vallatoria) I thought it convenient to impart
thus much unto Master John Gerard, an expert herbarist, and master of happy success
in surgery; to the end he might let posterity know thus much, in the painful and long
laboured travails which now he hath in hand, to the great good and benefit of his
country. The plant itself brought me to Middleborough, and set in my garden,
perished through the hardness of the winter."

Thus much have I set down, truly translated out of his own words in Latin
though too favourably by him done to the commendation of my mean skill.

The Place

Ginger groweth in Spain, Barbary, in the Canary Islands, and the Azores. Our
men which sacked Domingo in the Indies, digged it up there in sundry places wild.

The Time.

Ginger flourisheth in the hot time of summer, and loseth his leaves in winter.

The Names.

Ginger is called in Latin Zinziber and Gingiber: In French, Gigembre.

The Nature.

Ginger heateth and drieth in the third degree.

The Virtues.

A. Ginger, as Dioscorides reporteth, is right good with meat in sauces, or
otherwise in conditures: for it is of an heating and digesting quality; it gently looseth
the belly, and is profitable for the stomach, and effectually opposeth itself against all
darkness of the sight; answering the qualities and effects of Pepper. It is to be
considered, that candied, green or condited Ginger is hot and moist in quality,
provoking venery: and being dried, it heateth and drieth in the third degree.
CHAP. 45. Of Aromatical Reeds.

The Description.

1. This sweet-smelling Reed is of a dark dun colour, full of joints and knees, easy to be broken into small splinters, hollow, and full of a certain pith cobweb-wise, somewhat gummy in eating, and hanging in the teeth, and of a sharp bitter taste. It is of the thickness of the little finger, as Lobel affirmeth of some which he had seen in Venice.

2. Bastard Calamus hath flaggy leaves like unto the Water Fleur-de-lys or flag, but narrower, three foot long; of a fresh green colour, and aromatic smell, which they keep a long time, although they be dried. Now the stalk which bears the flower or fruit is much like another leaf, but only from the fruit downwards, whereas it is somewhat thicker, and not so broad; but almost triangular. The flower is a long thing resembling the Cat's-tails which grow on Hazels; it is about the thickness of an ordinary Reed, some inch and half long, of a greenish yellow colour, curiously chequered, as if it were wrought with a needle with green and yellow silk intermixt. I have not as yet seen it bear his tuft in my garden, and have read that it is barren, and by proof have seen it so: yet for all that I believe Clusius, who saith he hath seen it bear his flower in that place where it doth grow naturally, although in England it is altogether barren. The root is sweet in smell, and bitter in taste, and like unto the common Flag, but smaller, and not so red.
Gerard's Herbal

Fig. 110. The true Aromatical Reed of the ancients (3)

3. I think it very fitting in this place to acquaint you with a plant, which by the conjecture of the most learned (and that not without good reason) is judged to be the true *Calamus* of the ancients. Clusius gives us the history thereof in his *Notes upon Garcias ab Horto*, lib. 1. ca. 32., in these words: "Whenas (saith he) this History was to be the third time printed, I very opportunely came to the knowledge of the true *Calamus Aromaticus*; the which the learned Bernard Paludanus the Frisian, returning from Syria and Egypt, freely bestowed upon me, together with the fruit Habhel, and many other rare seeds, about the beginning of the year 1579. Now we have caused a figure to be exactly drawn by the fragments thereof (for that it seems so exquisitely to accord with Dioscorides his description.) In mine opinion it is rather to be judged an umbelliferous plant than a reedy; for it hath a straight stalk parted with many knots or joints, otherwise smooth, hollow within, and invested on the inside with a slender film like as a Reed, and it breaketh into shivers or splinters, as Dioscorides hath written: it hath a smell sufficiently strong, and the taste is grateful, yet bitter, and partaking of some astriction: The leaves, as by remains of them might appear, seem by couples at every joint to engirt the stalk: the root at the top is somewhat tuberous, and then ends in fibres. Twenty-five years after Paludanus gave me this *Calamus*, the learned Anthony Coline the apothecary (who lately translated into French these *Commentaries* the fourth time set forth, Anno 1593) sent me from Lyons pieces of the like Reed, certifying me withal, That he had made use thereof in his *Composition of Treacle*. Now these pieces, though in form they resembled those I had from Paludanus, yet had they a more bitter taste than his, neither did they partake of any astriction; which peradventure was to be attributed to the age of one of the two." Thus much Clusius.

**The Place.**

The true *Calamus Aromaticus* growth in Arabia, and likewise in Syria, especially in the moorish grounds between the foot of Libanus; and another little hill, not the mountain Antilibanus, as some have thought, in a small valley near to a lake, whose plashes are dry in summer. Pliny 12. 22.

Bastard or false *Calamus* grows naturally at the foot of a hill near to Prusa a city of Bithynia, not far from a great lake. It prospereth exceeding well in my garden, but as yet it beareth neither flowers nor stalk. It groweth also in Candia, as Pliny reporteth: in Galatia likewise, and in many other places.

**The Time.**

They lose their leaves in the beginning of winter, and do recover them again in the spring of the year. In May this year 1632, I received from the worshipful gentleman Mr. Thomas Glynn of Glynllifon in Caernarvonshire, my very good friend, the pretty *Iulus*, or flower of this plant; which I could never see here about London, though it groweth with us in many gardens, and that in great plenty.
The Names.

The want of the true Calamus being supplied by Acorus as a succedaneum, was the cause (as Pena and Lobel probably conjecture) that of a substitute it took the prime place upon it, and being as it were made a Viceroy, would needs be King. But the falseness of the title was discovered by Matthiolus, and others, and so it is sent back to its due place again; though notwithstanding it yet in shops retains the title of Calamus.

1. The figure that by our author was given for this, is supposed, and that (as I think truly) to be but a counterfeit, of Matthiolus his invention; who therein hath been followed (according to the custom of the world) by divers others. The description is of a small Reed called Calamus odoratus Libani, by Lobel in his Observations, and figured in his Icones, p. 54.

2. This is called in Latin Acorus and Acorum; and in shops, as I have formerly said, Calamus Aromaticus: for they usually take Galanga major, (described by me, Chap. 26.) for Acorus. It may besides the former names be fitly called in English, The sweet Garden Flag.

3. This is the true Calamus Aromaticus that should be used in compositions.

The Nature of the true Acorus, or our sweet garden Flag.

Dioscorides saith, the roots have an heating faculty: Galen and Pliny do affirm, that they have thin and subtle parts, both hot and dry.

The Virtues of the same.

A. The decoction of the root of Calamus drunk provoketh urine, helpeth the pain in the side, liver, spleen, and breast; convulsions, gripings, and burstings; it easeth and helpeth the pissing by drops.

B. It is of great effect, being put in broth, or taken in fumes through a close stool, to provoke women's natural accidents.

C. The juice strained with a little honey, taketh away the dimness of the eyes, and helpeth much against poison, the hardness of the spleen, and all infirmities of the blood.

D. The root boiled in wine, stamped and applied plasterwise unto the cods, doth wonderfully abate the swelling of the same, and helpeth all hardness and collections of humors.

E. The quantity of two scruples and an half of the root drunk in four ounces of Muscatel, helpeth them that be bruised with grievous beating, or falls.

F. The root is with good success mixed in counterpoisons. In our age it is put into eclegmes, that is, medicines for the lungs, and especially when the lungs and chest are oppressed with raw and cold humors.

G. The root of this preserved is very pleasant to the taste, and comfortable to the stomach and heart; so that the Turks at Constantinople take it fasting in the morning, against the contagion of the corrupt air. And the Tartars have it in such esteem, that they will not drink water (which is their usual drink) unless they have first steeped some of this root therein.
The choice.

The best Acorus, as Dioscorides saith, is that which is substantial, and well compact, white within, not rotten, full, and well smelling.

Pliny writeth, That those which grow in Candia are better than those of Pontus, and yet those of Candia worse than those of the Eastern countries, or those of England, although we have no great quantity thereof.

The faculties of the true Calamus out of Dioscorides.

H. It being taken in drink moveth urine; wherefore boiled with the roots of grass or Smallage seeds, it helpeth such as are hydropic, nephritic, troubled with the strangury, or bruised.

I. It moves the courses, either drunk or otherwise applied. Also the fume thereof taken by the mouth in a pipe, either alone or with dried turpentine, helps coughs.

K. It is boiled also in baths for women, and decoctions for clysters, and it enters into plasters and perfumes for the smell's sake.
CHAP. 46. Of Corn.

Thus far have I discoursed on Grasses, Rushes, Spartum, Flags, and Fleur-de-llys: my next labour is to set down for your better instruction, the history of Corn, and the kinds thereof; under the name of grain; which the Latins call Cerialia semina, or Bread-corn of which we purpose to discourse. There belong to the history of Grain all such things as be made of Corn, as Far, Condus, Alica, Tragus, Amylum, Ptisana, Polenta, Maza, Byrne or Malt, Zythum, and whatsoever are of that sort. There be also joined unto them many seeds, which Theophrastus has in his eighth book placeth among the grains; as Millet, Sorghum, Panic, Indian wheat, and such like. Galen in his first book of the Faculties of Nourishments, reckoneth up the diseases of grain, as well those that come of the grain itself degenerating, or that are changed into some other kind, and made worse through the fault of the weather, or of the soil; as also such as be cumbersome by growing among them, do likewise fitly succeed the grains. And beginning with corn, we will first speak of Wheat, and describe it in the first place, because it is preferred before all other corn.

The Description.

1. This kind of Wheat which Lobel, distinguishing it by the ear, calleth Spica Mutica, is the most principal of all other, whose ears are altogether bare or naked, without awns or chaffy beards. The stalk riseth from a thready root, compact of many strings, jointed or kneed at sundry distances; from whence shoot forth grassy blades and leaves like unto Rye, but broader. The plant is so well known to many, and so profitable to all, that the meanst and most ignorant need no larger description to know the same by.
2. The second kind of Wheat, in root, stalks, joints, and blades, is like the precedent, differing only in ear, and number of grains, whereof this kind doth abound, having an ear consisting of many ranks, which seemeth to make the ear double or square. The root and grain is like the other, but not bare and naked, but bristled or bearded, with many small and sharp ails or awns, not unlike to those of Barley.

3. Flat Wheat is like unto the other kinds of Wheat in leaves, stalks, and roots, but is bearded and bordered with rough and sharp ailes, wherein consists the difference. I know not what our author means by this flat Wheat, but I conjecture it to be the long rough eared Wheat, which hath bluish ears when as it is ripe, in other things resembling the ordinary red wheat.

4. The fourth kind is like the last described, and thus differeth from it, in that, that this kind hath many small ears coming forth of one great ear, & the beards hereof be shorter than of the former kind.
5. Bright wheat is like the second before described, and differeth from it in that, that this kind is four-square, somewhat bright and shining, the other not.

I think it a very fit thing to add in this place a rare observation, of the transmutation of one species into another, in plants; which though it have been observed of ancient times, as by Theophrastus, De caus. plant. lib. 3. cap. 6. whereas amongst others he mentioneth the change of Spelt into Oats: and by Virgil in these verses;

Grandia sæpe quibus mandavimas Hordea sulcis,
Infelix Lolium, & sterile dominantur avenue.

That is;

In furrows where great Barley we did sow,
Nothing but Darnel and poor Oats do grow;

yet none that I have read have observed, that two several grains, perfect in each respect, did grow at any time in one ear: the which I saw this year 1632, in an ear of white Wheat, which was found by my very good Friend Master John Goodyer, a man second to none in his industry and searching of plants, nor in his judgement or knowledge of them. This ear of wheat was as large and fair as most are, and about the middle thereof grew three or four perfect Oats in all respects: which being hard to be found, I held very worthy of setting down, for some reasons not to be insisted upon in this place.

The Place.

Wheat groweth almost in all the countries of the world that are inhabited and manured, and requireth a fruitful and fat soil, and rather sunny and dry, than watery grounds and shadowy: for in a dry ground (as Columella reporteth) it groweth harder
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and better compact: in a moist and dark soil it degenerateth sometime to be of another kind.

The Time.

They are most commonly sown in the fall of the leaf, or autumn: sometime in the spring.

The Names.


The Nature.

Wheat (saith Galen) is very much used of men, and with greatest profit. Those Wheats do nourish most which be hard, and have their whole substance so closely compact as they can scarcely be bit asunder; for such do nourish very much: and the contrary but little.

Wheat, as it is a medicine outwardly applied, is hot in the first degree, yet can it not manifestly either dry or moisten. It hath also a certain clamminess and stopping quality.

The Virtues.

A. Raw Wheat, saith Dioscorides, being eaten, breedeth worms in the belly: being chewed and applied, it doth cure the biting of mad dogs.

B. The flour of wheat being boiled with honey and water, or with oil and water, taketh away all inflammations, or hot swellings.

C. The bran of Wheat boiled in strong vinegar, cleanseth away scurf and dry scales, and dissolveth the beginning of all hot swellings, if it be laid unto them. And boiled with the decoction of Rue, it slaketh the swellings in women's breasts.

D. The grains of white Wheat, as Pliny writeth in his two and twentieth book, and seventh chapter, being dried brown, but not burnt, and the powder thereof mixed with white wine is good for watering eyes, if it be laid thereto.

E. The dried powder of red Wheat boiled with vinegar, helpeth the shrinking of sinews.

F. The meal of Wheat mingled with the juice of Henbane, and plasterwise applied, appeaseth inflammations, as *Ignis sacer*, or Saint Anthony's Fire, and such like, staying the flux of humors to the joints, which the Grecians call Rheumatismata. Paste made of fine meal, such as book-binders use, helpeth such as do spit blood, taken warm one spoonful at once. The bran of wheat boiled in sharp vinegar, and rubbed upon them that be scurvy and mangy, easeth the party very much.

G. The leaven made of Wheat hath virtue to heat and draw outward, it resolveth, concoceth, and openeth all swellings, bunches, tumors, and felons, being mixed with salt.
H. The fine flour mixed with the yolk of an egg, honey, and a little saffron, doth draw and heal boils and such like sores, in children and in old people, very well and quickly. Take crumbs of wheaten bread one pound and an half, barley meal ounces ii, Fenugreek and Linseed of each an ounce, the leaves of Mallows, Violets, Dwale, Sengreen, and Cotyledon, ana one handful: boil them in water and oil until they be tender: then stamp them very small in a stone mortar, and add thereto the yolks of three eggs, oil of Roses, and oil of Violets, ana ounces ii. Incorporate them all together; but if the inflammation grow to an Erysipelas, then add thereto the juice of Nightshade, Plantain, and Henbane, ana ounces ii. It easeth an Erysipelas, or Saint Anthony's fire, and all inflammations very speedily.

I. Slices of fine white bread laid to infuse or steep in Rose water, and so applied unto sore eyes which have many hot humors falling into them, doth easily defend the humour, and cease the pain.

K. The oil of wheat pressed forth between two plates of hot iron, healeth the chaps and chinks of the hands, feet, and fundament, which come of cold, making smooth the hands, face, or any other part of the body.

L. The same used as a balsam doth excellently heal wounds, and being put among salves or unguents, it causeth them to work more effectually, especially in old ulcers.
CHAP. 47. Of Rye

The Description.

The leaf of Rye when it first cometh up, is somewhat reddish, afterward green, as be the other grains. It groweth up with many stalks, slenderer than those of wheat, and longer, with knees or joints by certain distances like unto Wheat: the ears are orderly framed up in ranks, and compassed about with short beards, not sharp but blunt, which when it flowereth standeth upright, and when it is filled up with seed it leaneth and hangeth downward. The seed is long, blackish, slender, and naked, which easily falleth out of the husks of itself. The roots be many, slender, and full of strings.

The Place.

Rye groweth very plentifully in the most places of Germany and Polonia, as appeareth by the great quantity brought into England in times of dearth, and scarcity of corn, as happened in the year 1596, and at other times, when there was a general want of corn, by reason of the abundance of rain that fell the year before; whereby great penury ensued, as well of cattle and all other victuals, as of all manner of grain. It groweth likewise very well in most places of England, especially towards the north.

The Time.

It is for the most part sown in autumn, and sometimes in the spring, which proveth to be a grain more subject to putrefaction than that which was sown in the fall of the leaf, by reason the winter doth overtake it before it can attain to his perfect maturity and ripeness.
The Names.

Rye is called in high Dutch, Rocken, in Low-Dutch, Rogge: in Spanish, Centeno: in Italian, Segala: in French, Seigle: which soundeth after the old Latin name which in Pliny is Secale and Farrago, lib. 18. cap. 16.

The Temperature.

Rye as a medicine is hotter than wheat, and more forcible in heating, wasting, and consuming away that whereto it is applied. It is of a more clammy and obstructing nature than Wheat, and harder to digest, yet to rustic bodies that can well digest it, it yields good nourishment.

The Virtues.

A. Bread, or the leaven of Rye, as the Belgian physicians affirm upon their practice, doth more forcibly digest, draw, ripen, and break all apostumes, botches, and boils, than the leaven of Wheat.

B. Rye Meal bound to the head in a Linen Cloth, doth asswage the long continuing pains thereof.
CHAP. 48. Of Spelt corn.

Fig. 116. Spelt corn.

The Description.

Spelt is like to Wheat in stalks and ear: it groweth up with a multitude of stalks which are kneed and jointed higher than those of Barley: it bringeth forth a disordered ear, for the most part without beards. The corns be wrapped in certain dry husks, from which they cannot easily be purged, and are joined together by couples in two chaffy husks, out of which when they be taken they are like unto wheat corns: it hath also many roots as wheat hath, whereof it is a kind.

The Place.

It groweth in fat and fertile moist ground.

The Time.

It is altered and changed into Wheat itself, as degenerating from bad to better, contrary to all other that do alter or change; especially (as Theophrastus saith) if it be cleansed, and so sown, but that not forthwith, but in the third year.

The Names.

The Latins have called it *Spelta*: in the German tongue *Speltz*, and *Sinkel*: in low Dutch, *Spelte*: in French, *Espeautre*: of most Italians, *Pirra, Farra*: of the Tuscans, *Biada*: of the Millanois, *Alga*: in English, Spelt Corn. Dioscorides maketh mention of two kinds of Spelt: one of which he names *aplou*, or single: another, *dicoccus*, which brings forth two corns joined together in a couple of husks, as before in the description is mentioned. That Spelt which Dioscorides calls *Dicoccos*, is the same that Theophr. and Galen do name *Zea*. The most ancient Latins have called *Zea* or *Spelta* by the name of *Far*, as Dionysius Halicarnassæus doth sufficiently testify:
The old Romans (saith he) did call sacred marriages by the word *Pharrachis*, because the bride and bridegroom did eat of that *Far* which the Grecians do call *Zea*. The same thing Asclepiades affirmeth in Galen, in his ninth Book according to the places affected writing thus; *Farris quod Zea appellant*: that is to say, *Far* which is called *Zea*, &c. And this *Far* is also named of the Latins, *Ador, Adoreum*, and *Semen adoreum*.

**The Temperature.**

Spelt, as Dioscorides reporteth, nourisheth more than Barley. Galen writeth in his Books *Of the Faculties of simple Medicines*, Spelt is in all his temperature in a mean between Wheat and Barley, and may in virtue be referred to the kinds of Barley and Wheat, being indifferent to them both.

**The Virtues**

A. The flour or meal of Spelt corn boiled in water with the powder of red Saunders, and a little oil of Roses and Lilies, unto the form of a poultice, and applied hot, taketh away the swelling of the legs gotten by cold and long standing.

B. Spelt (saith Turner) is common about Weisenburgh in high Almany, eight Dutch miles on this side Strasbourg: and there all men use it for wheat; for there groweth no wheat at all: yet I never saw fairer and pleasanter bread in any place in all my life, than I have eaten there, made only of this Spelt. The corn is much less than Wheat, and somewhat shorter than Rye, but nothing so black.
CHAP. 49. Of Starch Corn.

Fig. 117. Starch Corn

The Description.

This other kind of Spelta or Zea is called of the German herbarists *Amyleum Frumentum*, or Starch Corn; and is a kind of grain sown to that end, or a three months grain; and is very like unto wheat in stalk and seed; but the ear thereof is set round about, and made up with two ranks, with certain beards almost after the manner of Barley, and the seed is closed up in chaffy husks, and is sown in the Spring.

The Place.

Amil corn, or Starch corn is sown in Germany, Polonia, Denmark, and other those eastern regions, as well to feed their cattle and pullen with, as also to make starch; for the which purpose it doth very fitly serve.

The Time.

It is sown in Autumn; or the fall of the leaf; and oftentimes in the Spring; and for that cause hath been called *Trimestre*, or three months grain: it bringeth his seed to ripeness in the beginning of August, and is sown in the Low-Countries in the spring of the year.

The Names.

Because the Germans have great use of it to make starch with, they do call it *Amelkorn*: We think good to name it in Latin *Amyleum frumentum*: in English it may be called Amelcorn, after the German word; and may likewise be called Starch Corn. Tragus and Fuchsius took it to be *Triticum trimestre*, or three months wheat; but it may rather be referred to the *Farra*: for Columella speaketh of a grain called *Far Halicastrum*, which is sown in the Spring; for that cause it is named *Trimestre* or three months *Far*. If any be desirous to learn the making of starch, let them read
Dodonæus last edition, where they shall be fully taught; myself not willing to spend time about so vain a thing, and not pertinent to the story. It is used only to feed cattle, pullen, and make starch, and is in nature somewhat like to Wheat or Barley.
CHAP. 50. Of Barley.

The Description.

Barley hath an haulm or straw which is shorter and more brittle than that of Wheat, and hath more joints; the leaves are broader and rougher; the ear is armed with long, rough, and prickly beards or ails, and set about with sundry ranks, sometimes two, otherwhiles three, four, or six at the most, according to Theophrastus; but eight according to Tragus. The grain is included in a long chaffy husk: the roots be slender, and grow thick together. Barley, as Pliny writeth, is of all grain the softest, and least subject to casualty, yielding fruit very quickly and profitably.

1. The most usual Barley is that which hath but two rows of corn in the ear, each grain set full opposite to other, and having his long awn at his end, is covered with a husk sticking close thereto.

2. This which commonly hath four rows of corn in the ear, and sometimes more, as we have formerly delivered, is not so usually sown with us; the ear is commonly shorter than the former, but the grain very like; so that none who knows the former but may easily know the later at the first sight.

The Place.

1. They are sown, as Columella teacheth, in loose and dry ground, and are well known all Europe through.

2. The second is sown commonly in some parts of Yorkshire and the Bishopric of Durham.
The Names.

1. The first is called in high Dutch, Gersten; in Low Dutch, Gerst; in Italian, Orzo; in Spanish, Cevada; in French, Orge; in English, Barley.

2. The second is called by Columella Galaticum; of our English Northern people, Big, and Big Barley. Crimmon (saith Galen in his Commentaries upon the second book of Hippocrates his Prognostics) is the grosser part of Barley meal being grossly ground. Malt is well known in England, insomuch that the word needeth no interpretation; notwithstanding because these works may chance into the hands of strangers, that never heard of such a word, or such a thing, by reason it is not everywhere made; I thought good to lay down a word of the making thereof. First, it is steeped in water until it swell; then is it taken from the water, and laid (as they term it) in a couch; that is, spread upon an even floor the thickness of some foot and an half; and thus is it kept until it come, that is, until it send forth two or three little strings or fangs at the end of each corn: then it is spread usually twice a day, each day thinner than other, for some eight or ten days' space, until it be pretty dry, and then it is dried up with the heat of the fire, and so used. It is called in high Dutch, Maltz; in low Dutch, Mout; in Latin of later time, Maltum; which name is borrowed of the Germans. Aetius a Greek Physician nameth Barley thus prepared, Bine; the which author affirmeth, That a plaster of the meal of malt is profitably laid upon the swellings of the dropsy. Zythum, as Diodorus Siculus affirmeth, is not only made in Egypt, but also in Galatia. The aire is so cold (saith he, writing of Galatia) that the country bringeth forth neither wine nor oil, and therefore men are compelled to make a compound drink of Barley, which they call Zythum. Dioscorides nameth one kind of Barley drink Zythum, another, Curmi. In English we call it Beer and Ale which is made of Barley Malt.

The Temperature.

Barley, as Galen writeth in his book of the Faculties of Nourishments, is not of the same temperature that Wheat is; for Wheat doth manifestly heat, but contrariwise what medicine or bread soever is made of Barley, is found to have a certain force to cool and dry in the first degree, according to Galen in his book of the Faculties of Simples. It hath also a little abstersive or cleansing quality, and doth dry somewhat more than Bean meal.

The Virtues.

A. Barley, saith Dioscorides, doth cleanse, provoke urine, breedeth windiness and is an enemy to the stomach.

B. Barley meal boiled in an honeyed water with figs, taketh away inflammations: with Pitch, Rosin, and Pigeons' dung, it softeneth and ripeneth hard swellings.

C. With Melilot and Poppy seeds it taketh away the pain in the sides; it is a remedy against windiness in the guts, being applied with Linseed, Fenugreek, and Rue: with tar, wax, oil, and the urine of a young boy, it doth digest, soften, and ripen hard swellings in the throat, called the king's evil.

D. Boiled with wine, myrtles, the bark of the pomegranate, wild pears, and the leaves of brambles, it stoppeth the lask.

E. Further, it serveth for ptisana, polenta, maza, malt, ale, and beer. The making whereof if any be desirous to learn, let them read Lobel's Adversaria, in the
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chapter of Barley. But I think our London beer-brewers would scorn to learn to make beer of either French or Dutch, much less of me that can say nothing therein of mine own experience more than by the writings of others. But I may deliver unto you a confection made thereof (as Columella did concerning sweet wine sodden to the half) which is this; Boil strong ale till it come to the thickness of honey, or the form of an unguent or salve; which applied to the pains of the sinews and joints (as having the property to abate aches and pains) may for want of better remedies be used for old and new sores, if it be made after this manner.

F. Take strong ale two pound, one ox gall, and boil them to one pound with a soft fire, continually stirring it; adding thereto of Vinegar one pound, of Olibanum one ounce, flowers of Camomile and Melilot of each 1 oz., Rue in fine powder 1 oz., a little honey, and a small quantity of the powder of Cumin seed; boil them all together to the form of an unguent, and so apply it. There be sundry sorts of confections made of Barley, as *polenta, ptisana*, made of water and husked or hulled barley, and such like. Polenta is the meal made of parched Barley; Maza is made of parched Barley tempered with water, after Hippocrates and Xenophon: Cyrus having called his soldiers together, exhorted them to drink water wherein parched barley hath been steeped, calling it by the same name, *maza*. Hesychius doth interpret *maza* to be barley meal mixed with water and oil.

G. Barley meal boiled in water with garden Nightshade, the leaves of garden Poppy, the powder of Fenugreek and Linseed, and a little Hog's grease, is good against all hot and burning swellings, and prevaileth against the dropsy, being applied upon the belly.
CHAP. 51. Of Naked Barley.

The Description.

_Hordeum nudum_ is called _Zeopyrum_, and _Tritico-speltum_, because it is like to _Zea_, otherwise called _Spelta_, and is like to that which is called French Barley, whereof is made that noble drink for sick folks, called _Ptisana_. The plant is altogether like unto Spelt, saving that the ears are rounder, the ails or beards rougher and longer, and the seed or grain naked without husks, like to wheat, the which in its yellowish colour it somewhat resembles.

The Place.

It is sown in sundry places of Germany, for the same uses as Barley is.

The Names.

It is called _Hordeum Nudum_, for that the corn is without husk, and resembleth Barley. In Greek it is called _Zeopuros_, because it participateth in similitude and nature with _Zea_, that is, Spelt, and _Puros_, (that is) wheat.

The Virtues.

A. This Barley boiled in water cooleth unnatural and hot burning choler. In vehement fevers you may add thereto the seeds of white Poppy and Lettuce, not only to cool, but also to provoke sleep.

B. Against the shortness the breath, and pains of the breast, may be added to all the foresaid, figs, raisins of the sun, liquorice, and Anise seed.
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C. Being boiled in the whey of milk, with the leaves of Sorrel, Marigolds, and Scabious, it quencheth thirst, and cooleth the heat of the inflamed liver, being drunk first in the morning, and last to bedward.
CHAP. 52. Of Wall Barley.

This kind of wild Barley, called of the Latins *Hordeum Spurium*; is called of Pliny, *Holcus*; in English, Wall Barley, Way Barley, or after old English Writers, Way Bennet. It groweth upon mud walls and stony places by the wayside; very well resembling self-sowed Barley, yet the blades are rather like Grass than Barley. This groweth some foot and better in height, with grassy leaves, the ear is very like that of Rye, and the corn both in colour and shape absolutely resembles it; so that it cannot be fittlier named than by calling it wild Rye, or Rye Grass.

The Virtues.

This Bastard Wild Barley stamped and applied unto places wanting hair, doth cause it to grow and come forth, whereupon in old time it was called *Ristida*.
CHAP. 53. Of Saint Peter's Corn.

The Description.

1. Briza is a Corn whose leaves, stalks, and ears are less than Spelt; the ear resembles our ordinary Barley, the corn growing in two rows, with awns at the top, and husks upon it not easily to be gotten off. In colour it much resembles Barley; yet Tragus saith it is of a blackish red colour.

2. This \textit{Ægilops} in leaves and stalks resembles Wheat or Barley, and it grows some two handfuls high, having a little ear or two at the top of the stalk, wherein are enclosed two or three seeds a little smaller than Barley, having each of them his awn at his end. These seeds are wrapped in a crested film or skin, out of which the awns put themselves forth.

Matthiolus saith, That he by his own trial hath found this to be true, That as \textit{Lolium}, which is our common Darnel, is certainly known to be a seed degenerate from wheat, being found for the most part among wheat, or where wheat hath been: so is \textit{Festuca} a seed or grain degenerating from Barley, and is found among Barley, or where Barley hath been.

The Place.

1. Briza is sown in some parts of Germany and France; and my memory deceives me if I have not oftentimes found many ears thereof amongst ordinary barley, when as I lived in the further side of Lincolnshire, and they there called it Brant Barley.
2. This *Ægilops* grows commonly amongst their Barley in Italy and other hot countries.

**The Names.**

1. *Briza Monococcos*, after Lobel, is called by Tabernamontanus, *Zea Monococcos*: in English, Saint Peter's Corn, or Brant Barley.


**The Nature.**

They are of quality somewhat sharp, having faculty to digest.

**The Virtues.**

A. The juice of *Festuca* mixed with Barley meal dried, and at times of need moistened with rose-water, applied plasterwise, healeth the disease called *Ægilops*, or fistula in the corner of the eye: it mollifieth and disperseth hard lumps, and assuageth the swellings in the joints.
CHAP. 54. Of Oats.

The Description.

1. *Avena Vesca*, Common Oats, is called *Vesca*, à *Vescendo*, because it is used in many countries to make sundry sorts of bread; as in Lancashire, where it is their chiefest bread corn for bannocks, haver cakes, tharf-cakes, and those which are called generally oaten cakes; and for the most part they call the grain Haver, whereof they do likewise make drink for want of Barley.

2. *Avena Nuda* is like unto the common Oats; differing in that, that these naked Oats immediately as they be threshed, without help of a mill become oatmeal fit for our use. In consideration whereof in Norfolk and Suffolk they are called unhulled and naked Oats. Some of those good house-wives that delight not to have anything but from hand to mouth, according to our English proverb, may (whiles their pot doth seethe) go to the barn, and rub forth with their hands sufficient for that present time, not willing to provide for tomorrow, according as the Scripture speaketh, but let the next day bring with it.

The Nature.

Oats are dry and somewhat cold of temperature, as Galen saith.

The Virtues.

A. Common Oats put into a linen bag, with a little bay salt quilted handsomely for the same purpose, and made hot in a frying pan, and applied very hot, easeth the pain in the side called the stitch, or colic in the belly.
B. If Oats be boiled in water, and the hands or feet of such as have the *serpigo* or *impetigo*, that is, certain chaps, chinks, or rifts in the palms of the hands or feet (a disease of great affinity with the pox) be holden over the fume or smoke thereof in some bowl or other vessel wherein the Oats are put, and the patient covered with blankets to sweat, being first anointed with that ointment or unction usually applied *contra Morbum Gallicum*: it doth perfectly cure the same in six times so anointing and sweating.

C. Oatmeal is good for to make a fair and well coloured maid to look like a cake of tallow, especially if she take next her stomach a good draught of strong vinegar after it.

D. Oatmeal used as a cataplasm dries and moderately discusses, and that without biting; for it hath somewhat a cool temper, with some astiction, so that it is good against scourings.
CHAP. 55. Of Wild Oats.

The Description.

1. *Bromos sterilis*, called likewise *Avena fatua*, which the Italians do call by a very apt name *Venavana*, and *Avena cassa*, (in English, Barren Oats, or wild Oats) hath like leaves and stalks as our Common Oats; but the heads are rougher, sharp, many little sharp husks making each ear.

2. There is also another kind of *Bromos* or wild Oats, which Dodonæus calleth *Festuca altera*, not differing from the former wild Oats in stalks and leaves, but the heads are thicker, and more compact, each particular ear (as I may term it) consisting of two rows of seed handsomely compact and joined together; being broader next the straw, and narrower as it comes to an end.

The Time and Place.

The first in July and August may be found almost in every hedge, the latter is to be found in great plenty in most Rye.

The Names.

1. This is called in Latin, *Bromos sterilis* by Lobel: *Ægylops prima* by Matthioulus: in English, Wild-Oats, or Hedge-Oats.

2. Lobel calls this *Bromos sterilis altera* Dodonæus tames it *Festuca altera*; in Brabant they call it Drauitch; in English, Drawk.
The Nature and Virtues.

A. It hath a drying faculty (as Dioscorides saith.) Boil it in water together with the roots until two parts of three be consumed; then strain it out, and add to the decoction a quantity of honey equal thereto: so boil it until it acquire the thickness of thin honey. This medicine is good against the ozæna and filthy ulcers of the nose, dipping a linen cloth therein, and putting it up into the nostrils; some add thereto Aloes finely powdered, and souse it.

B. Also boiled in wine with dried Rose leaves, it is good against a stinking breath.
CHAP. 56. Of Bearded Wild Oats.

Ægylops Bromoides Belgarum is a plant indifferently partaking of the nature of Ægilops and Bromos. It is in show like to the naked Oats. The seed is sharp, hairy, and somewhat long, and of a reddish colour, enclosed in yellowish chaffy husks like as Oats, and may be Englished, Crested or bearded Oats. I have found it often among Barley and Rye in sundry grounds. This is likewise unprofitable and hurtful to corn; whereof is no mention made by the ancients worthy the noting.
CHAP. 57. Of Burnt Corn.

1. *Hordeum ustum*, or *Ustilago Hordei*, is that burnt or blasted Barley which is altogether unprofitable and good for nothing, an enemy unto corn; for that instead of an ear with corn, there is nothing else but black dust, which spoileth bread, or whatsoever is made thereof.

2. Burnt Oats, or *Ustilago Avena*, or *Avenacea*, is likewise an unprofitable Plant, degenerating from Oats, as the other from Barley, Rye, and Wheat. It were in vain to make a long harvest of such evil corn, considering it is not possessed with one good quality. And therefore thus much shall suffice for the description.

3. Burnt Rye hath no one good property in physic, appropriate either to man, birds, or beast, and is a hurtful malady to all corn where it groweth, having an ear in shape like to corn, but instead of grain it doth yield a black powder or dust, which causeth bread to look black, and to have an evil taste: and that corn where it is, is called smooty corn, and the thing itself Burnt Corn, or blasted corn.

Fig. 129. Burnt Corn (1-3)
CHAP. 58. Of Darnel.

The Description.

1. Among the hurtful weeds Darnel is the first. It bringeth forth leaves or stalks like those of wheat or barley, yet rougher, with a long ear made up of many little ones, every particular one whereof containeth two or three grains lesser than those of wheat, scarcely any chaffy husk to cover them with, by reason whereof they are easily shaken out and scattered abroad.

2. Red Darnel is likewise an unprofitable corn or grass, having leaves like barley. The joints of the straw or stalk are sometimes of a reddish colour, bearing at the top a small and tender ear, flat, and much in form resembling the former.

The Place.

They grow in fields among wheat and barley, of the corrupt and bad seed, as Galen saith, especially in a moist and dankish soil.

The Time.

They spring and flourish with the corn, and in August the seed is ripe.

The Names.


**The Temperature.**

Darnel is hot in the third degree, and dry in the second. Red Darnel drieth without sharpness, as Galen saith.

**The Virtues**

A. The seed of Darnel, pigeons' dung, oil olive, and powder of linseed, boiled to the form of a plaster, consume wens, hard lumps, and such like excrescenses in any part of the body.

B. The new bread wherein Darnel is, eaten hot, causeth drunkenness: in like manner doth beer or ale wherein the seed is fallen, or put into the Malt.

C. Darnel taken with red wine stayeth the flux of the belly, and the overmuch flowing of women's terms.

D. Dioscorides saith, That Darnel meal doth stay and keep back eating sores, gangrenes, and putrefied ulcers; and being boiled with Radish roots, salt, brimstone, and vinegar, it cureth spreading scabs, and dangerous tetteres, and leprous or naughty scurf.

E. The seed of Darnel given in white or Rhenish wine, provoketh the flowers or menses.

F. A fume made thereof with parched barley meal, myrrh, saffron, and frankincense, made in form of a poultice, and applied upon the belly, helps conception, and causeth easy deliverance of childbearing.

G. Red Darnel (as Dioscorides writeth) being drunk in sour or harsh red wine, stoppeth the lask, and the overmuch flowing of the flowers or menses, and is a remedy for those that piss in bed.

**The danger.**

Darnel hurteth the eyes, and maketh them dim, if it happen in corn either for bread or drink; which thing Ovid in his first book Fastorum hath mentioned, in this verse:

*Et careant lolii oculos vitiantibus agri.*

[May the fields be free from darnel, that spoils the eyes.]

And hereupon it seemeth that the old proverb came, That such as are dim sighted should be said, Lolio victitare.
CHAP. 59. Of Rice.

Fig. 132. Rice

The Description.

Rice is like unto Darnel in show, as Theophrastus saith: it bringeth not forth an ear; like corn, but a certain mane or plume, as Mill, or Millet, or rather like Panic. The leaves, as Pliny writeth, are fat and full of substance, like to the blades of leeks, but broader: but (if neither the soil nor climate did alter the same) the plants of Rice that did grow in my garden had leaves soft and grassy like barley. The flower did not show itself with me, by reason of the injury of our unseasonable year 1596. Theophrastus conclueth, that it hath a flower of a purple colour. But, saith my author, Rice hath leaves like unto Dog's Grass or Barley, a small straw or stem full of joints like corn: at the top whereof growtheth a bush or tuft far unlike to barley or Darnel, garnished with round knobs like small gooseberries, wherein the seed or grain is contained: every such round knob hath one small rough ail, tail, or beard like unto barley hanging thereat. Aristobulus, as Strabo reporteth, showeth, That Rice grows in water in Bactria, and near Babylon, and is two yards high, and hath many ears, and bringeth forth plenty of seed. It is reaped at the setting of the seven stars, and purged as Spelt and Oatmeal, or hulled as French Barley.

The Place.

It growtheth in the territories of the Bactrians, in Babylon, in Susium, and in the lower part of Syria. It growtheth in those days not only in those countries before named, but also in the fortunate Islands, and in Spain, from whence it is brought unto us, purged and prepared as we see, after the manner of French Barley. It prospereth best in fenny and waterish places.

It is sown in the spring in India, as Eratosthenes witnesseth, when it is moistened with summer showers.
The Names.

The Latins keep the Greek word *Oryza*: in French it is called *Riz*: in the German tongue, *Risz*, and *Rys*; in English, Rice.

The Temperature and Virtues.

Galen saith, That all men use to stay the belly with this grain, being boiled after the same manner that *Chondrus* is. In England we use to make with milk and Rice a certain food or pottage, which doth both meanly bind the belly, and also nourish. Many other good kinds of food is made with this grain, as those that are skilful in cookery can tell.
CHAP. 60. Of Millet.

Fig. 133. Millet

The Description.

Milium riseth up with many hairy stalks knotted or jointed like wheat. The leaves are long, and like the leaves of the Common Reed. It bringeth forth on the top of the stalk a spoky bush or mane, like the plume or feather of the Pole reed, hanging downwards, of colour for the most part yellow or white; in which groweth the seed, small, hard, and glistering, covered with a few thin husks, out of which it easily falleth. The roots be many, and grow deep in the ground.

2. *Milium nigrum* is like unto the former, saving that the ear or plume of this plant is more loose and large, and the seed somewhat bigger, of a shining black colour.

The Place.

It loveth light and loose mould, and prospereth best in a moist and rainy time. And after Columella, it groweth in greatest abundance in Campania. I have of it yearly in my garden.

The Time.

It is to be sown in April and May, and not before, for it joyeth in warm weather.

The Names.

The temper.

It is cold in the first degree, as Galen writeth, and dry in the third, or in the later end of the second, and is of a thin substance.

The Virtues.

A. The meal of Mill mixed with tar is laid to the bitings of serpents, and all venomous beasts.

B. There is a drink made hereof bearing the name of Sirupus Ambrosii, or Ambrose his syrup, which procureth sweat, and quencheth thirst, used in the city of Milan in Tertian agues. The receipt whereof Henricus Rantszonius in his book Of the Government of Health setteth down in this manner: Take (saith he) of unhusked Mill a sufficient quantity, boil it till it be broken; then take five ounces of the hot decoction, and add thereto two ounces of the best white wine, and so give it hot unto the patient, being well covered with clothes, and then he will sweat throughly. This is likewise commended by Iohannes Heurneus, in his book of Practice.

C. Millet parched, and so put hot into a linen bag, and applied, helps the griping pains of the belly, or any other pain occasioned by cold.
CHAP. 61. Of Turkey Corn.

The Kinds.

Of Turkey Corn there be divers sorts, notwithstanding of one stock or kindred, consisting of sundry coloured grains, wherein the difference is easy to be discerned, and for the better explanation of the same, I have set forth to your view certain ears of different colours, in their full and perfect ripeness, and such as they show themselves to be when their skin or film doth open itself in the time of gathering.
The Description.

1. Corn of Asia beareth a long great stem or stalk, covered with great leaves like the great Cane Reed, but much broader, and of a dark brownish colour towards the bottom: at the top of the stalks grow idle or barren tufts like the common Reed, sometimes of one colour, and sometimes of another. Those ears which are fruitful do grow upon the sides of the stalks, among the leaves, which are thick and great, so covered with skins or films, that a man cannot see them until ripeness have discovered them. The grain is of sundry colours, sometimes red, and sometimes white, and yellow, as myself have seen in mine own garden, where it hath come to ripeness.

2. The stalk of Turkey Wheat is like that of the Reed, full of spongy pith, set with many joints, five or six foot high, big beneath, and now and then of a purple colour, and by little and little small above: the leaves are broad, long, set with veins like those of the Reed. The ears on the top of the stalk be a span long, like unto the feather top of the common Reed, divided into many plumes hanging downward, empty and barren without seed, yet blooming as Rye doth. The flower is either white, yellow, or purple, that is to say, even as the fruit will be. The fruit is contained in very big ears, which grow out of the joints of the stalk, three or four from one stalk, orderly placed one above another, covered with coats or films like husks and leaves, as if it were a certain sheath; out of which do stand long and slender beards, soft and tender, like those laces that grow upon Savory, but greater and longer, every one fastened upon his own seed. The seeds are great, of the bigness of common peason, cornered in that part whereby they are fastened to the ear, and in the outward part round: being of colour sometimes white, now and then yellow, purple, or red; of taste sweet and
pleasant, very closely joined together in eight or ten orders or ranks. This grain hath
many roots, strong, and full of strings.

The Place.

These kinds of grain were first brought into Spain, and then into other
provinces of Europe: not (as some suppose) out of Asia Minor, which is the Turk's
dominions, but out of America and the islands adjoining, as out of Florida and
Virginia, or Norembega, where they use to sow or set it, and to make bread of it,
where it groweth much higher than in other countries. It is planted in the gardens of
these Northern regions, where it cometh to ripeness when the summer falleth out to be
fair and hot, as myself have seen by proof in mine own garden.

The Time.

It is sown in these countries in March and April, and the fruit is ripe in
September.

The Names.

Turkey wheat is called of some *Frumentum Turcicum*, and *Milium Indicum*, as
also *Maizum*, and *Maiz*, or *Mays*. It in all probability was unknown to the ancient both
Greek and Latin authors. In English it is called Turkey Corn, and Turkey Wheat. The
Inhabitants of America and the Islands adjoining, as also of the East and West Indies,
do call it *Mais*: the Virginians, *Pagatowr*.

The Temperature and Virtues.

Turkey wheat doth nourish far less than either wheat, rye, barley, or oats. The
bread which is made thereof is meanly white, without bran: it is hard and dry as
biscuit is, and hath in it no clamminess at all; for which cause it is of hard digestion,
and yieldeth to the body little or no nourishment; it slowly descendeth, and bindeth
the belly, as that doth which is made of Mill or Panic. We have as yet no certain proof
or experience concerning the virtues of this kind of corn; although the barbarous
Indians, which know no better, are constrained to make a virtue of necessity, and
think it a good food: whereas we may easily judge, that it nourisheth but little, and is
of hard and evil digestion, a more convenient food for swine than for men.
CHAP. 62. Of Turkey Millet.

Fig. 139. Turkey Millet

The Description.

Turkey Millet is a stranger in England. It hath many high stalks, thick, and jointed commonly with some nine joints, beset with many long and broad leaves like Turkey Wheat: at the top whereof groweth a great and large tuft or ear like the great Reed. The seed is round and sharp pointed, of the bigness of a lentil, sometimes red, and now and then of a fuller black colour. It is fastened with a multitude of strong slender roots like unto threads: the whole plant hath the form of a Reed: the stalks and ears when the seed is ripe are red.

The Place.

It joyeth in a fat and moist ground: it groweth in Italy, Spain, and other hot regions.

The Time.

This is one of the summer grains, and is ripe in autumn.

The Names.

The Millanois and other people of Lombardy call it Mellegua, and Melega: in Latin, Melica: in Etruria, Saggina: in other places of Italy, Sorgho: in Portugal, Milium Saburrum; in English, Turkey Mill, or Turkey Hirse.

This seems to be the Milium which was brought into Italy out of India, in the reign of the Emperor Nero: the which is described by Pliny, lib. 18. cap. 7.
The Temperature and Virtues.

The seed of Turkey Mill is like unto Panic in taste and temperature. The country people sometimes make bread hereof; but it is brittle, and of little nourishment, and for the most part it serveth to fatten hens and pigeons with.
CHAP. 63. Of Panic.

There be sundry sorts of Panic, although of the ancients there have been set down but two, that is to say, the wild or field Panic, and the garden or manured Panic.

The descriptin.

The Panic of India groweth up like Millet, whose straw is knotty, or full of joints; the ears be round, and hanging downward, in which is contained a white or yellowish seed, like Canary Seed, or *Alpisti*.

2. Blue Panic hath a reddish stank like to Sugar Cane, as tall as a man, thicker than a finger, full of a fungous pith; of a pale colour: the stalks be upright and knotty; these that grow near the root are of a purple colour: on the top of the stalk cometh forth a spike or ear like the water Cat's Tail, but of a blue or purple colour. The seed is like to naked Oats: The roots are very small, in respect of the other parts of the plant.
3. To these may be added another West Indian Panic, sent to Clusius from Mr. James Garet of London. The ear hereof was thick, close, compact and made taper-fashion, smaller at the one end than at the other; the length thereof was more than a foot & half. The shape of the seed is much like the last described, but that many of them together are contained in one hairy husk, which is fastened to a very short stalk, as you may see represented apart by the side of the figure.
4. German Panic hath many hairy roots growing thick together like unto wheat, as is all the rest of the plant, as well leaves or blades, as straw or stalk. The ear growtheth at the top single, not unlike to Indian Panic, but much lesser. The grains are contained in chaffy scales, red declining to tawny.

5. The wild Panic growtheth up with long reed stalks, full of joints, set with long leaves like those of Sorghum, or Indian Panic: the tuft or feather-like top is like unto the common reed, or the ear of the grass called Ischæmon, or Manna grass. The root is small and thready.

The Place and Time.

The kinds of Panic are sown in the spring, and are ripe in the beginning of August. They prosper best in hot and dry regions, and wither for the most part with much watering, as doth Mill and Turkey wheat: they quickly come to ripeness, and may be kept good a long time.

The Names.

Diocles the Physician nameth it Mel Frugum: the Spaniards, Panizo: the Latins, Panicum, or Pannicula: in English, Indian Panic, or Oatmeal.

The Temperature.

Panic nourish little, and are driers, as Galen saith.

The Virtues.

A. Panic stoppeth the lask, as Millet doth, being boiled (as Pliny reporteth) in goat's milk, and drunk twice in a day. Outwardly in poultices or otherwise, it dries and cools.
B. Bread made of Panic nourisheth little, and is cold and dry, very brittle, having in it neither clamminess nor fatness; and therefore it drieth a moist belly.
CHAP. 64. Of Canary Seed, or Petty Panic.

The Description.

1. Canary Seed, or Canary Grass after some, hath many small hairy roots, from which arise small straawy stalks jointed like corn, whereupon do grow leaves like those of Barley, which the whole plant doth very well resemble. The small chaffy ear groweth at the top of the stalk, wherein is contained small seeds like those of Panic, of a yellowish colour, and shining.

2. Shakers, or Quaking Grass groweth to the height of half a foot, and sometimes higher, when it groweth in fertile meadows. The stalk is very small and benty, set with many grassy leaves like the common meadow grass, bearing at the top a bush or tuft of flat scaly pouches, like those of Shepherds Purse, but thicker, of a brown colour, set upon the most small and weak hairy foot-stalks that may be found, whereupon those small pouches do hang: by means of which small hairy strings, the knaps which are the flowers do continually tremble and shake, in such sort that it is not possible with the most steadfast hand to hold it from shaking.
3. There is also another Grassy plant which may fitly be referred to these: the leaves and stalks resemble the last described, but the heads are about the length and breadth of a small Hop, and handsomely compact of light scaly films much like thereto; whence some have termed it *Gramen Lupuli glumis*. The colour of this pretty head when it cometh to ripeness is white.

**The Place.**

1. Canary Seed groweth naturally in Spain, and also in the Fortunate or Canary Islands, and doth grow in England or any other of these cold regions, if it be sown therein.

2. Quaking Phalaris groweth in fertile pastures, and in dry meadows.

3. This grows naturally in some parts of Spain; and it is sown yearly in many of our London Gardens.

**The Time.**

1 & 3. These Canary Seeds are sown in May, and are ripe in August.

**The Names.**


2. *Phalaris pratensis* is called also *Gramen tremulum*: in Cheshire about Nantwich, Quakers and Shakers; in some places, Cow-quakes.
3. This by some is termed *Phalaris altera*: Clusius calleth it *Gramen Amourettes majus*: Baubine, *Gramen tremulum maximum*: In English they call it Pearl-Grass, and Garden-Quakers.

**The Nature and Virtues.**

I find not anything set down as touching the temperature of Phalaris, notwithstanding it is thought to be of the nature of Millet.

A. The juice and seed, as Galen saith, are thought to be profitably drunk against the pains of the bladder. Apothecaries for want of Millet do use the same with good success in fomentations; for in dry fomentations it serveth instead thereof, and is his *succeedaneum*, or *quid pro quo*. We use it in England also to feed the Canary birds.
CHAP. 65. Of Fox-Tail.

The Description

1. Fox-tail hath many grassy leaves or blades, rough and hairy, like unto those of Barley, but less and shorter. The stalk is likewise soft and hairy; whereupon doth grow a small spike or ear, soft, and very downy, bristled with very small hairs in shape, like unto a Fox-tail, whereof it took his name, which dieth at the approach of winter, and recovereth itself the next year by falling of his seed.

There is one or two varieties of this plant in the largeness and smallness of the ear.

2. Besides these forementioned strangers, there is also another which grows naturally in many watery salt places of this kingdom, as in Kent by Dartford, in Essex, &c. The stalks of this plant are grassy, and some two foot high, with leaves like Wheat or Dog's Grass. The ear is very large, being commonly four or five inches long, downy, soft like silk, and of a brownish colour.

The Place.

1. This kind of Fox-tail Grass groweth in England, only in gardens.

The Time.

1. This springeth up in May, of the seed that was scattered the year before, and beareth his tail with his seed in June.

2. This bears his head in July.
The Names.

1. There hath not been more said of the ancient or later writers, as touching the name, than is set down, by which they called it in Greek Alopecuros; that is in Latin, Cauda vulpis: in English, Fox-tail.

2. This by Lobel is called Alopecuros altera maxima Anglica paludosa that is, the large English Marsh Fox-tail.

The Temperature and Virtues.

I find not anything extant worthy the memory, either of his nature or virtues.
CHAP. 66. Of Job's Tears.

Fig. 149. Job's Tears

The Description.

Job's Tears hath many knotty stalks, proceeding from a tuft of thready roots, two foot high, set with great broad leaves like unto those of reed, amongst which leaves come forth many small branches like straw of corn: on the end whereof doth grow a grey shining seed or grain hard to break, and like in shape to the seeds of Gromwell, but greater, and of the same colour, whereof I hold it a kind: every of which grains are bored through the midst like a bead, and out of the hole cometh a small idle or barren chaffy ear like unto that of Darnel.

The Place.

It is brought from Italy and the countries adjoining, into these countries, where it doth grow very well, but seldom cometh to ripeness; yet myself had ripe seed thereof in my garden, the summer being very hot.

The Time.

It is sown early in the Spring, or else the winter will overtake it before it come to ripeness.

The Names.

Divers have thought it to be Lithospermi species, or a kind of Gromwell, which the seed doth very notably resemble, and doth not much differ from Dioscorides his Gromwell. Some think it Pliny's Lithospermum; and therefore it may very aptly be called in Latin, Arundo Lithospermos, that is in English, Gromwell reed, as Gesner saith. It is generally called Lachrima Job, and Lachrima Jobi: of some it is
called *Diospiros*: in English it is called Job's Tears, or Job's Drops, for that every grain resembleth the drop or teare that falleth from the eye.

**The Nature and Virtues.**

There is no mention made of this herb for the use of physic: only in France and those places (where it is plentifully growing) they do make beads, bracelets, and chains thereof, as we do with pomander and such like.
CHAP. 67. Of Buckwheat.

Buckwheat may very well be placed among the kinds of grain or corn, for that oftentimes in time of necessity bread is made thereof, mixed among other grain. It hath round fat stalks somewhat crested, smooth and reddish, which is divided in many arms or branches whereupon do grow smooth and soft leaves in shape like those of Ivy or one of the Bindweeds, not much unlike Basil, wherof Tabernamontanus called it *Ocymum Cereale*. The flowers be small, white, and clustered together in one or more tufts or umbels, slightly dashed over here & there with a flourish of light carnation colour. The seeds are of a dark blackish colour, triangle, or three-square like the seed of Black Bindweed. The root is small and thready.

The Place.

It prospereth very well in any ground, be it never so dry or barren, where it is commonly sown to serve as it were instead of a dunging. It quickly cometh up, and is very soon ripe: it is very common in and about the Nantwich in Cheshire where they sow it as well for food for their cattle, pullen, and such like, as to the use aforesaid. It groweth likewise in Lancashire, and in four parts of our South country, about London in Middlesex, as also in Kent and Essex.

The Time.

This base kind of grain is sown in April and the beginning of May, and is ripe in the beginning of August.
The Names.

Buckwheat is called of the high Almaines, Ἰερόβιον, of the base Almaines Buckenweidt; that is to say, Hirci triticum, or Goat's wheat: of some, Fagi triticum, Beech Wheat: In Latin, Fago triticum, taken from the fashion of the seed or fruit of the Beech tree. It is called also Fegopyrum, and Tragopyron: In English, French wheat, Bullimong, and Buckwheat: In French, Dragee aux cheveaux.

The temper.

Buckwheat nourisheth less than Wheat, Rye, Barley, or Oats, yet more than either Mill or Panic.

The Virtues.

Bread made of the meal of Buckwheat is of easy digestion, and speedily passeth through the belly, but yieldeth little nourishment.
CHAP. 68. Of Cow-Wheat.

The Description.

1. *Melampyrum* grows upright, with a straight stalk, having other small stalks coming from the same, of a foot long. The leaves are long and narrow, and of a dark colour. On the top of the branches grow bushy or spiky ears full of flowers and small leaves mixed together, and much jagged, the whole ear resembling a Fox-tail. This ear beginneth to flower below, and so upward by little and little unto the top: the small
leaves before the opening of the flowers, and likewise the buds of the flowers, are white of colour. Then come up broad husks, wherein are enclosed two seeds somewhat like wheat, but smaller and browner. The root is of a woody substance.

2, 3. These two are like the former in stalks and leaves, but different in the colour of their flowers, the which in the one are purple, and in the other blue. Clusius calls these, as also the *Crateogonon* treated of in the next Chapter, by the names of *Parietarie sylvestres*.

4. Of this kind there is another called *Melampyrum luteum*, which groweth near unto the ground, with leaves not much unlike Hartshorn; among which riseth up a small straw with an ear at the top like *Alopecuros*, the common Fox-tail, but of a yellow colour.

**The Place.**

1. The first groweth among corn, and in pasture grounds that be fruitful: it groweth plentifully in the pastures about London.

The rest are strangers in England.

**The Time.**

They flower in June and July.

**The Names.**

*Melampyrum* is called of some *Triticum vaccinium*: in English, Cow-wheat, and Horse-flower; The fourth is called *Melampyrum luteum*: in English, Yellow Cow-wheat.

**The danger.**

The seed of Cow-wheat raiseth up fumes, and is hot and dry of nature, which being taken in meats and drinks in the manner of Darnel, troubleth the brain; causing drunkenness and headache.
CHAP. 69. Of Wild Cow-wheat.

The Description.

1. The first kind of wild Cow-wheat Clusius in his *Pannonic History* calls *Parietaria sylvestris*, or wild Pellitory: which name, according to his own words, if it do not fitly answer the plant, he knoweth not what to call it, for that the Latins have not given any name thereunto: yet because some have so called it, he retaineth the same name. Notwithstanding he referreth it unto the kinds of *Melampyrum*, or Cow-wheat, or unto *Crataegonon*, the wild Cow-wheat, which it doth very well answer in divers points. It hath an hairy four-square stalk, very tender, weak, and easy to break, nor able to stand upright without the help of his neighbours that dwell about him, a foot high or more; whereupon do grow long thin leaves, sharp pointed, and oftentimes lightly snipped about the edges, of a dark purplish colour, sometimes greenish, set by couples one opposite against the other; among the which come forth two flowers at one joint, long and hollow, somewhat gaping like the flowers of a Dead-nettle, at the first of a pale yellow, and after of a bright golden colour; which do flower by degrees, first a few, and then more, by means whereof it is long in flowering. Which being past, there succeed small cups or seed vessels wherein is contained brown seed not unlike to wheat. The whole plant is hairy, not differing from the plant Stichwort.

2. Red-leaved wild Cow-wheat is like unto the former, sauing that the leaves be narrower, and the tuft of leaves more jagged. The stalks and leaves are of a reddish horse-flesh colour. The flowers in form are like the other, but in colour differing: for that the hollow part of the flower with the heel or spur is of a purple colour, the rest of the flower yellow. The seed and vessels are like the precedent.
3. This kind of wild Cow-wheat Tabernamontanus hath set forth under the title of *Odontites*: others have taken it to be a kind of *Euphrasia* or Eyebright, because it doth in some sort resemble it, especially in his flowers. The stalks of this plant are small, woody, rough, and square. The leaves are indented about the edges, sharp pointed, and in most points resembling the former Cow-wheat; so that of necessity it must be of the same kind, and not a kind of Eyebright, as hath been set down by some.

**The Place.**

These wild kinds of Cow-wheat do grow commonly in fertile pastures, and bushy copses, or low woods, and among bushes upon barren heaths and such like places.

The two first do grow upon Hampstead Heath near London, among the Juniper bushes and bilberry bushes in all the parts of the said heath, and in every part of England where I have travelled.

**The Time.**

They flower from the beginning of May, to the end of August.

**The Names.**

The first is called of Lobel, *Cratægonon*: and of Tabernamontanus, *Milium Sylvaticum*, or Wood Millet, and *Alsine sylvatica*, or Wood Chickweed.

2. The second hath the same titles: in English, Wild Cow-wheat.

3. The last is called by Tabernamontanus, *Odontites*: of Dodonæus, *Euphrasia altera*, and *Euphrosine*. Hippocrates called the wild Cow-wheat, *Polycarpum*, and *Polycritum*.

**The Nature and Virtues.**

There is not much set down either of the nature or virtues of these plants: only it is reported that the seeds do cause giddiness and drunkenness as Darnel doth.

The seed of *Cratægonon* made in fine powder, and given in broth or otherwise, mightily provoketh venery.

Some write, that it will likewise cause women to bring forth male children.

See the virtues attributed to *Cratægonon* by Dioscorides before, Chap. 38. B.
CHAP. 70. Of White Asphodel.

The Kinds.

Having finished the kinds of corn, it followeth to show unto you the sundry sorts of Asphodels, whereof some have bulbous roots, other tuberous or knobby roots, some of yellow colour, and some of mixed colours: notwithstanding Dioscorides maketh mention but of one Asphodel, but Pliny setteth down two; which Dionysius confirmeth, saying, That there is the male and female Asphodel. The latter age hath observed many more besides the bulbed one, of which. Galen maketh mention.

The Description.

1. The White Asphodel hath many long and narrow canes like those of leeks, sharp pointed. The stalk is round, smooth, naked, and without leaves, two cubits high, garnished from the middle upward with a number of flowers star-fashion, made of five leaves apiece; the colour white, with some dark purple streaks drawn down the back-side. Within the flowers be certain small chives. The flowers being past, there spring up little round heads, wherein are contained hard, black, and 3-square seeds like those of Buckwheat or Stavesacre. The root is compact of many knobby roots growing out of one head, like those of the Peony, full of juice, with a small bitterness and binding taste.

2. Branched Asphodel agreeth well with the former description, saving that this hath many branches or arms growing out of the stalk, whereon the flowers do grow, and the other hath not any branch at all, wherein consisteth the difference.
3. Asphodel with the reddish flower groweth up in roots, stalk, leaf, and manner of growing like the precedent, saving that the flowers of this be of a dark red color, & the others white, which setteth forth the difference, if there be any such difference, or any such plant at all: for I have conferred with many most excellent men in the knowledge of plants, but none of them can give me certain knowledge of any such, but tell me they have heard it reported that such a one there is, and so have I also, but certainly I cannot set down anything of this plant until I hear more certainly: for as yet I give no credit to my author, which for reverence of his person I forbear to name.

4. The Yellow Asphodel hath many roots growing out of one head, made of sundry tough, fat, and oleous yellow sprigs, or gross strings, from the which rise up many grassy leaves, thick and gross, tending to squariness, among the which cometh up a strong thick stalk set with the like leaves even to the flowers, but less: upon the which do grow star-like yellow flowers, otherwise like the white Asphodel.
Fig. 158. Dwarf Asphodel (5)

5. Besides these there is an Asphodel which Clusius for the smallness calls *Asphodelus minimus*. The roots thereof are knotty and tuberous, resembling those of the formerly described, but less: from these arise five or six very narrow and long leaves; in the midst of which grows up a stalk of the height of a foot, round and without branches, bearing at the top thereof a spoke of flowers, consisting of six white leaves apiece, each of which hath a streak running alongst, both on the inside and outside, like as the first described. It flowers in the beginning of July, when as the rest are past their flowers. It loseth the leaves in winter, and gets new ones again in the beginning of April.

**The Time and Place.**

They flower in May and June, beginning below; and so flowering upward: and they grow naturally in France, Italy, Spain, and most of them in our London gardens.

**The Names.**

Asphodel is called in Latin, *Asphodelus, Albucum, Albucus, and Hastula Regia*: in English, Asphodel, not Daffodil; for Daffodil is *Narcissus*, another plant differing from Asphodel. Pliny writeth, That the stalk with the flowers is called *Anthericos*; and the root, that is to say, the bulbs *Asphodelus*.

Of this Asphodel Hesiod maketh mention in his Works, where he saith, that fools know not how much good there is in the Mallow and in the Asphodel, because the roots of Asphodel are good to be eaten. Yet Galen doth not believe that he meant of this Asphodel, but of that bulbed one, whereof we will make mention hereafter. And he himself testifieth, that the bulbs thereof are not to be eaten without very long seething; and therefore it is not like that Hesiod hath commended any such; for he
seemeth to understand by the Mallow and the Asphodel, such kind of food as is easily prepared, and soon made ready.

**The Nature.**

These kinds of Asphodels be hot and dry almost in the third degree.

**The Virtues.**

A. After the opinion of Dioscorides and Aetius, the roots of Asphodel eaten, provoke urine and the terms effectually, especially being stamped and strained with wine, and drunk.

B. One dram thereof taken in wine in manner before rehearsed, helpeth the pain in the sides, ruptures, convulsions, and the old cough.

C. The roots boiled in dregs of wine cure foul eating ulcers, all inflammations of the ducts or stones, and easeth the felon, being put thereto as a poultice.

D. The juice of the root boiled in old sweet wine, together with a little myrrh and saffron, maketh an excellent collyre profitable for the eyes.

E. Galen saith, the roots burnt to ashes, and mixed with the grease of a duck, helpeth the alopecia, and bringeth hair again that was fallen by that disease.

F. The weight of a dram thereof taken with wine helpeth the drawing together of sinews, cramps, and burstings.

G. The like quantity taken in broth provoketh vomit, and helpeth those that are bitten with any venomous beasts.

H. The juice of the root cleanseth and taketh away the white morphew, if the face be anointed therewith: but first the place must be chafed and well rubbed with a coarse linen cloth.
CHAP. 71. Of the King's Spear.

The Description.

1. The leaves of the King's Spear are long, narrow, and chamfered or furrowed, of a bluish green colour. The stalk is round, of a cubit high. The flowers which grow thereon from the middle to the top are very many, in shape like to the flowers of the other; which being past, there come in place thereof little round heads or seed-vessels, wherein the seed is contained. The roots in like manner are very many, long, and slender, smaller than those of the other yellow sort. Upon the sides whereof grow forth certain strings, by which the plant itself is easily increased and multiplied.

2. There is found in these days a certain watery or marsh Asphodel like unto this last described, in stalk and flowers, without any difference at all. It bringeth forth leaves of a beautiful green somewhat chamfered, like to those of the Fleur-de-lys, or Corn-flag, but narrower, not full a span long. The stalk is strait, a foot high, whereupon grow the flowers, consisting of six small leaves: in the middle whereof come forth small yellow chives or threads. The seed is very small, contained in long sharp pointed cods. The root is long, jointed, and creepeth as grass doth, with many small strings.
3. Besides the last described (which our author I fear mistaking, termed *Asphodelus Lancastriæ*) there is another water Asphodel, which grows in many rotten moorish grounds in this kingdom, and in Lancashire is used by women to die their hair of a yellowish colour, and therefore by them it is termed Maiden-hair; if we may believe Lobel. This plant hath leaves of some two inches and an half, or three inches long, being somewhat broad at the bottom, and so sharper towards their ends. The stalk seldom attains to the height of a foot, and it is smooth without any leaves thereon; the top thereof is adorned with pretty yellow star-like flowers, whereto succeed longish little cods, usually three, yet sometimes four or five-square, and in these there is contained a small red seed. The root consists only of a few small strings.

**The Place.**

1. The small yellow Asphodel groweth not of itself wild in these parts, notwithstanding we have great plenty thereof in our London gardens.

2. The Lancashire Asphodel groweth in moist and marsh places near unto the town of Lancaster, in the moorish grounds there, as also near unto Maudsley and Martom, two villages not far from thence; where it was found by a worshipful and learned Gentleman, a diligent searcher of simples, and fervent lover of plants, Mr. Thomas Hesket, who brought the plants thereof unto me for the increase of my garden.

I received some plants thereof likewise from Master Thomas Edwards, apothecary in Exeter, learned and skilful in his profession, as also in the knowledge of plants. He found this Asphodel at the foot of a hill in the west part of England, called Bagshot Hill, near unto a village of the same name.
3. This Asphodel figured and described out of Dodonæus, and called *Asphodelus Lancastriæ*, by our author, grows in an heath some two miles from Bruges in Flanders, and divers other places of the Low-countries; but whether it grow in Lancashire or no, I can say nothing of certainty: but I am certain, that which I have described in the third place grows in many places of the West of England; and this year 1632, my kind friend Mr. George Bowles sent me some plants thereof, which I keep yet growing. Lobel also affirms this to be the Lancashire Asphodel.

**The Time.**

They flower in May and June: most of the leaves thereof remain green in the winter, if it be not extreme cold.

**The Names.**

1. Some of the later herbarists think this yellow Asphodel to be *Iphyon* of Theophrastus, and others judge it to be *Erizambac* of the Arabians. In Latin it is called *Asphodelus luteus*: of some it is called *Hastula Regia*. We have Englished it, the Spear for a King, or small yellow Asphodel.

2. The Lancashire Asphodel is called in Latin, *Asphodelus Lancastriæ*: and may likewise be called *Asphodelus palustris*, or *Pseudoasphodelus luteus*, or the Bastard yellow Asphodel.

3. This is *Asphodelus minimus lateus palustris Scoticus & Lancastriensis*, of Lobel; and the *Pseudoasphodelus pumilio foliis Iridis*, of Clusius, as far as I can judge; although Bauhin distinguisheth them.

**The Temperature and Virtues.**

It is not yet found out what use there is of them in nourishment or medicines.
The bulbed Asphodel hath a round bulbous or Onion root, with some fibres hanging thereat; from the which come up many grassy leaves, very well resembling the Leek; among the which leaves there riseth up a naked or smooth stem, garnished toward the top with many star-like flowers, of a whitish green on the inside, and wholly green without, consisting of six little leaves sharp pointed, with certain chives or threads in the middle. After the flower is past there succeedeth a small knop or head three-square, wherein lieth the seed.

The Place.

It groweth in the gardens of herbarists in London, and not elsewhere that I know of, for it is not very common.

The Time.

It flowereth in June and July, and somewhat after.

The Names.

The stalk and flowers being like to those of the Asphodel before mentioned do show it to be Asphodeli species, or a kind of Asphodel; for which cause also it seemeth to be that Asphodel of which Galen hath made mention in his second book of the Faculties of Nourishments, in these words; The root of Asphodel is in a manner like to the root of Squill, or Sea Onion, as well in shape as bitterness. Notwithstanding, saith Galen, myself have known certain countrymen, who in time of famine could not with many boilings and steepings make it fit to be eaten. It is called of Dodonæus, Asphodelus famine, and Asphodelus Bulbosus, Hyacintho-Asphodelus,
and *Asphodelus Hyacinthinus* by Lobel, and that rightly; for that the root is like the Hyacinth, and the flowers like the Asphodel: and therefore as it doth participate of both kinds, so likewise doth the name: in English we may call it Bulbed Asphodel. Clusius calls it *Ornithogalum majus*, and that fitly.

**The Nature.**

The round rooted Asphodel, according to Galen, hath the same temperature and virtue that *Aron, Arisarum*, and *Dracontium* have, namely an abstersive and cleansing quality.

**The Virtues.**

A. The young sprouts or springs thereof is a singular medicine against the yellow jaundice, for that the root is of power to make thin and open.

B. Galen saith, that the ashes of this bulb mixed with oil or hen's grease cureth the falling of the hair in an *Alopecia* or scalled head.
CHAP. 73. Of Yellow Lilies.

The Kinds.

Because we shall have occasion hereafter to speak of certain Cloved or Bulbed Lilies, we will in this chapter entreat only of another kind not bulbed, which likewise is of two sorts, differing principally in their roots; for in flowers they are Lilies, but in roots Asphodels, participating as it were of both, though nearer approaching unto Asphodels than Lilies.

The Description.

1. The yellow Lily hath very long flaggy leaves, chamfered or channelled, hollow in the midst like a gutter, among the which riseth up a naked or bare stalk, two cubits high, branched toward the top, with sundry brittle arms or branches, whereon do grow many goodly flowers like unto those of the common white Lily in shape and proportion, of a shining yellow colour; which being past, there succeed three-cornered husks or cods, full of black shining seeds like those of the Peony. The root consisteth of many knobs or tuberous clogs, proceeding from one head, like those of the white Asphodel or Peony.

2. The Day-Lily hath stalks and leaves like the former. The flowers be like the white Lily in shape, of an orange tawny colour: of which flowers much might be said which I omit. But in brief, this plant bringeth forth in the morning his bud, which at noon is full blown, or spread abroad, and the same day in the evening it shuts itself, and in a short time after becomes as rotten and stinking as if it had been trodden in a dunghill a month together, in foul and rainy weather: which is the cause that the seed
seldom followeth, as in the other of his kind, not bringing forth any at all that I could ever observe; according to the old proverb, *Soon ripe, soon rotten*. His roots are like the former.

**The Place.**

These Lilies do grow in my garden, as also in the gardens of herbarists, and lovers of fine and rare plants; but not wild in England, as in other countries.

**The Time.**

These Lilies do flower somewhat before the other Lilies, and the yellow Lily the soonest.

**The Names.**

Divers do call this kind of Lily, *Liliasphodelus, Liliago*, and also *Liliastrum*, but most commonly *Lilium non bulbosum*: In English, *Liriconfancy* and yellow Lily. The old herbarists name it *Hemerocallis*: for they have two kinds of *Hemerocallis*; the one a shrub or woody plant, as witnesseth Theophrastus, in his sixth book of the *History of Plants*. Pliny setteth down the same shrub among those plants, the leaves whereof only do some for garlands.

The other *Hemerocallis* which they set down, is a flower which perisheth at night, and buddeth at the sun rising, according to Athenaeus; and so we in English may rightly term it the Day-Lily, or Lily for a day.

**The Nature.**

The nature is rather referred to the Asphodels than to Lilies.

**The Virtues.**

A. Dioscorides saith, That the root stamped with honey, and a mother pessary made thereof with wool, and put up, bringeth forth water and blood.

B. The leaves stamped and applied do allay hot swellings in the dugs, after women's travail in child-bearing, and likewise taketh away the inflammation of the eyes.

C. The roots and the leaves be laid with good success upon burnings and scalings.
CHAP. 74. Of Bulbed Fleur-de-lys.

The Kinds.

Like as we have set down sundry sorts of Fleur-de-lys, with flaggy leaves, and tuberous or knobby roots, varying very notably in sundry respects, which we have distinguished in their proper chapters: it resteth that in like manner we set forth unto your view certain bulbous or Onion-rooted Fleur-de-lys, which in this place do offer themselves unto our consideration; whereof there be also sundry sorts, sorted into one chapter as followeth.

The Description.

1. The first of these, whose figure here we give you under the name of *Iris Bulbosa Latifolia*, hath leaves somewhat like those of the Day-Lily, soft, and somewhat palish green, with the undersides somewhat whiter; amongst which there riseth up a stalk bearing at the top thereof a flower a little in shape different from the formerly described Fleur-de-lys. The colour thereof is blue; the number of the leaves whereof it consists, nine: three of these are little, and come out at the bottom of the flower as soon as it is opened; three more are large, and being narrow at their bottom, become broader by little and little, until they come to turn downwards, whereas then they are shapen somewhat roundish or obtuse. In the midst of these there runs up a yellow variegated line to the place whereas they bend back. The three other leaves are arched like as in other flowers of this kind, and divided at their upper end, and contain in them three threads of a whitish blue colour.
This is called *Iris Bulbosa Latifolia*, by Clusius; and *Hyacinthus Poetarum Latifolius*, by Lobel.

It flowers in January and February, whereas it grows naturally, as it doth in divers places of Portugal and Spain. It is a tender plant, and seldom thrives well in our gardens.

2. Onion Fleur-de-lys hath long narrow blades or leaves, crested, chamfered, or streaked on the back side as it were welted; below somewhat round, opening itself toward the top, yet remaining as it were half round, whereby it resembleth an hollow trough or gutter. In the bottom of the hollowness it tendeth to whiteness; and among these teams do rise up a stalk of a cubit high; at the top whereof groweth a fair blue flower, not differing in shape from the common Fleur-de-lys: the which being past, there come in the place thereof long thick cobs or seed-vessels, wherein is contained yellowish seed of the bigness of a tare or fitch. The root is round like an onion, covered over with certain brown skins or films. Of this kind there are some five or six varieties, caused by the various colours of the flowers.

3. Changeable Fleur-de-lys hath leaves, stalks, and roots like the former, but lesser. The flower hath likewise the form of the Fleur-de-lys, that is to say, it consisteth of six greater leaves, and three lesser; the greater leaves fold backward and hang downward, the lesser stand upright; and in the middle of the leaves there riseth up a yellow welt, white about the brims, and shadowed all over with a wash of thin blue tending to a watchet colour. Toward the stalk they are striped over with a light purple colour, and likewise amongst the hollow places of those that stand upright (which cannot be expressed in the figure) there is the same fair purple colour; the
smell and favour very sweet and pleasant. The root is onion fashion, or bulbous like the other.

4. There is also another variegated Fleur-de-lys, much like this last described, in the colour of the flower; but each plant produceth more branches and flowers, whence it is termed *Iris Bulbosa versicolor polyclonos*, Many-branched Changeable Fleur-de-lys.

5. Of which kind or sort there is another in my garden, which I received from my brother James Garret apothecary, far more beautiful than the last described; the which is dashed over, instead of the blue or watchet colour, with a most pleasant gold yellow colour, of smell exceeding sweet, with bulbed roots like those of the other sort.
6. It is reported, that there is in the garden of the Prince Elector the Landgrave of Hesse, one of this sort or kind, with white flowers, the which as yet I have not seen.

Besides these sorts mentioned by our author, there are of the narrow leaved bulbous Fleur-de-lys, some twenty four or more varieties, which in shape of roots, leaves, and flowers differ very little, or almost nothing at all; so that he which knows one of these may presently know the rest. Wherefore because it is a thing no more pertinent to a general history of plants, to insist upon these accidental nicities, than for him that writes a history of Beasts to describe all the colours, and their mixtures, in Horses, Dogs, and the like; I refer such as are desirous to inform themselves of those varieties, to such as have only and purposely treated of flowers and their diversities, as De-Bry, Swerts, and our countryman Mr. Parkinson, who in his *Paradisus terrestris*, set forth in English, Anno 1629, hath judiciously and exactly comprehended all that hath been delivered by others in this nature.

**The Place.**

The second of these bulbbed Fleur-de-lys grows wild, or of itself, in the corn fields of the West parts of England, as about Bath and Wells, and those places adjacent; from whence they were first brought into London, where they be naturalised, and increase in great plenty in our London gardens.

The other sorts do grow naturally in Spain and Italy wild, from whence we have had plants for our London gardens, whereof they do greatly abound.

**The Time.**

They flower in June and July, and seldom after.
The Names.

The Bulbed Fleur-de-lys is called of Lobel, *Iris Bulbosa*, and also *Hyacinthus flore Iridis*: of some, *Hyacinthus Poetarum*; and peradventure it is the same that Apuleius mentioneth in the one and twentieth chapter, saying, That *Iris*, named among the old writers *Hieris*, may also be called, and not unproperly, *Hierobulbus*, or *Hieribulbus*: as though you should say, *Iris Bulbosa*, or Bulbed Ireos; unless you would have *Ierabulbos*, a greater or larger bulb: for it is certain, that great and huge things were called of the ancients, *Iera*, or *sacra*: in English, Holy.

The Nature.

The nature of these bulbed Fleur-de-lys are referred to the kinds of Asphodels.

The Virtues.

A. Take, saith Apuleius, of the herb *Hierobulbus* six ounces, goat's suet as much, oil of alcanna one pound; mix them together, being first stamped in a stone mortar, it taketh away the pain of the gout.

    B. Moreover, if a woman do use to wash her face with the decoction of the root, mixed with the meal of Lupines, it forthwith cleanseth away the freckles & morphew, and such like deformities.
CHAP. 75. Of Spanish Nut.

The Description.

1. Spanish Nut hath small grassy leaves like those of Star of Bethlehem, or *Ornithogalum* among which riseth up a small stalk of half a foot high, garnished with the like leaves, but shorter. The flowers grow at the top, of a sky colour, in shape resembling the Fleur-de-lys, or common Iris; but the leaves that turn down are each of them marked with a yellowish spot: they fade quickly, and being past, there succeed small cobs with seeds as small as those of Turnips. The root is round, composed of two bulbs, the one lying upon the other as those of the Corn-flag usually do and they are covered with a skin or film in shape like a net. The bulb is sweet in taste, and may be eaten before any other bulbed root.

2. There is set forth another of this kind, somewhat lesser, with flowers that smell sweeter than the former.
3. Velvet Fleur-de-lys hath many long square leaves, spongy or full of pith, trailing upon the ground, in shape like to the leaves of rushes: among which riseth up a spike of a foot high, bearing at the top a flower like the Fleur-de-lys. The lower leaves that turn downward are of a perfect black colour, soft and smooth as is black velvet; the blackness is welted about with greenish yellow, or as we term it a goose-turd green; of which colour the uppermost leaves do consist: which being past, there followeth a great knob or crested seed vessel of the bigness of a man's thumb, wherein is contained round white seed as big as the vetch or tare. The root consisteth of many knobby bunches like fingers.

The Place.

These bastard kinds of Fleur-de-lys are strangers in England, except it be among some few diligent herbarists in London, who have them in their gardens, where they increase exceedingly; especially the last described, which is said to grow wild about Constantinople, Morea, and Greece: from whence it hath been transported into Italy, where it hath been taken for *Hermodactylus*, and by same espressed or set forth in writing under the title *Hermodactylus*; whereas in truth it hath no semblance at all with *Hermodactylus*.

The Time.

The wild or bastard Fleur-de-lys do flower from May to the end of June.

The Names.

1, 2. These bulbed bastard Fleur-de-lys, which we have Englished Spanish Nuts, are called in Spain, *Nozelhas*; that is, little Nuts: the lesser sort are *Parva Nozelha*, and *Macuca*: we take it to be that kind of nourishing Bulb which is named of Pliny, *Sisynrichium*. 
3. Some, as Ulysses Aldroandus, would have this to be *Louchitis Prior*, of Dioscorides. Matthiolus makes it *Hermodactylus verus*, or the true Hermodactyl: Dodoneus and Lobel more fitly refer it to the Fleur-de-lys, and call it *Iris tuberosa*.

**The Nature and Virtues.**

Of these kinds of Fleur-de-lys there hath been little or nothing at all left in writing concerning their natures or virtues; only the Spanish nut is eaten at the tables of rich and delicious, nay vicious persons, in salads or otherwise, to procure lust and lechery.
CHAP. 76. Of Corn-Flag.

The Description.

1. French Corn-Flag hath small stiff leaves, ribbed or chamfered with long nerves or sinews running through the same, in shape like those of the small Fleur-de-llys, or the blade of a sword, sharp pointed, of an overworn green colour, among the which riseth up a stiff brittle stalk two cubits high, whereupon do grow in comely order many fair purple flowers, gaping like those of Snapdragon, or not much differing from the Foxglove, called in Latin *Digitalis*. After them come round knobby seed-vessels, full of chaffy seed, very light, of a brown reddish colour. The root consisteth of two bulbs, one set upon the other; the uppermost whereof in the beginning of the spring is lesser, and more full of juice; the lower greater, but more loose and lithy, which a little while after perisheth.

2. Italian Corn-Flag hath long narrow leaves with many ribs or nerves running through the same: the stalk is stiff and brittle, whereupon do grow flowers orderly placed upon one side of the stalk, whereas the precedent hath his flowers placed on both the sides of the stalk, in shape and colour like the former, as are also the roots, but seldom seen one above another as in the former.

3. There is a third sort of Corn-Flag which agreeth with the last described in every point, saving that the flowers of this are of a pale colour, as it were between white, and that which we call Maiden's Blush.
4. This Water Sword-Flag, described by Clusius in his *Cur. Post*, hath leaves about a span long, thick and hollow, with a partition in their middles, like as we see in the cods of Stock-Gillyflowers, and the like: their colour is green, and taste sweet, so that they are an acceptable food to the wild ducks ducking down to the bottom of the water; for they sometimes lie some ells underwater: which notwithstanding is over-topped by the stalk, which springs up from among these leaves, and bears flowers of colour white, larger than those of Stock-Gillyflowers, but in that hollow part that is next the stalk they are of a bluish colour, almost in shape resembling the flowers of the Corn-Flag, yet not absolutely like them. They consist of five leaves, whereof the two uppermost are reflected towards the stalk the three other being broader hang downwards. After the flowers there follow round pointed vessels filled with red seed. It flowers at the end of July.

It was found in some places of West-Friesland, by John Dortman a learned apothecary of Groningen. It grows in waters which have pure gravel at the bottom, and that bring forth no plant besides.

Clusius, and Dortman who sent it him, call it *Gladiolus Lacustris*, or *Stagnalis*.

**The Place.**

These kinds of Corn-flags grow in meadows, and in arable grounds among corn, in many places of Italy, as also in the parts of France bordering thereunto. Neither are the fields of Austria and Moravia without them, as Cordus writeth. We have great plenty of them in our London gardens, especially for the garnishing and decking them up with their seemly flowers.
The Time.

They flower from May to the end of July.

The Names.

Corn-Flag is called in Latin, *Gladiolus*; and of some, *Ensis*: of others, *Gladiolus Segetalis*. Theophrastus in his discourse of *Phasganum* maketh it the same with *Xiphion*. Valerius Cordus calleth Corn-flag *Victorialis fœmina*: others, *Victorialis rotunda*: in the German tongue, *Siegwurtz*: yet we must make a difference between *Gladiolus* and *Victorialis longa*; for that is a kind of Garlic found upon the highest Alpish mountains, which is likewise called of the Germans *Siegwurtz*. The flowers of Corn-flag are called of the Italians, *Monacuccio*: in English, Corn-flag, Corn-sedge, Sword-flag, Corn Gladin: in French, *Glais*.

The Nature.

The root of Corn-Flag, as Galen saith, is of force to draw, waste, or consume away, and dry, as also of a subtle and digesting quality.

The Virtues.

A. The root stamped with the powder of frankincense and wine, and applied, draweth forth splinters and thorns that stick fast in the flesh.

B. Being stamped with the meal of darnel and honeyed water, doth waste and make subtle hard lumps, nodes, and swellings, being emplastered.

C. Some affirm, that the upper root provoketh bodily lust, and the lower causeth barrenness.

D. The upper root drunk in water is profitable against that kind of bursting in children called *Enterocele*.

E. The root of Corn-flag stamped with hog's grease and wheaten meal, hath been found by late practitioners in physic and surgery, to be a certain and approved remedy against the *Struma Scrophula*, and such like swellings in the throat.

F. The cuds with the seed dried and beaten into powder, and drunk in Goat's milk or Ass's milk, presently taketh away the pain of the colic.
There be likewise bulbous or onion rooted plants that do orderly succeed, whereof some are to be eaten, as Onions, Garlic, Leeks, and Chives; notwithstanding I am first to entreat of those bulbed roots, whose fair and beautiful flowers are received for their grace and ornament in gardens and garlands: the first are the Hyacinths, whereof there is found at this day divers sorts, differing very notably in many points as be declared in their several descriptions.
Fig. 180. Starry Hyacinths (3, 4, 6)

The Description.

1. The first kind of Hyacinth hath three very fat thick brown leaves, hollow like a little trough, very brittle, of the length of a finger: among which shoot up fat, thick brownish stalks, soft and very tender, and full of juice; whereupon do grow many small blue flowers consisting of six little leaves spread abroad like a star. The seed is contained in small round bullets, which are so ponderous or heavy that they lie trailing upon the ground. The root is bulbous or onion fashion, covered with brownish scales or films.
2. There is also a white flowered one of this kind.

3. There is found another of this kind which seldom or never hath more than two leaves. The roots are bulbed like the other. The flowers be whitish, star-fashion, tending to blueness, which I received of Robinus of Paris.

4. This kind of Hyacinth hath many broad leaves spread upon the ground, like unto those of Garden Lily, but shorter. The stalks do rise out of the midst thereof bare, naked; and very smooth, an handful high; at the top whereof do grow small blue flowers star-fashion, very like unto the precedent. The root is thick and full of juice, compact of many scaly cloves of a yellow colour.

There are some ten or eleven varieties of starry Hyacinths, besides these two mentioned by our author. They differ each from other either in the time of flowering (some of them flowering in the spring, other some in summer) in their bigness, or the colours of their flowers. The leaves of most of them are much like to our ordinary Hyacinth, or Hare-bells, and lie spread upon the ground. Their flowers in shape resemble the last described, but are usually more in number, and somewhat larger. The colour of most of them are blue or purple, one of them excepted, which is of an ash colour, and is known by the name of Somers his Hyacinth. I think it not amiss to give you their usual names, together with some of their figures; for so you may easily impose them truly upon the things themselves whensoever you shall see them.
Fig. 181. Somers’ Starry Hyacinth (8)

Fig. 182. Greater Starry Summer Hyacinth (9)

Fig. 183. Lesser Starry Summer Hyacinth (10)

Fig. 184. Hyacinth of Peru (13)
5. *Hyacinthus stellaris Byzantinus nigra radice, flore caeruleo*. The blue starry Hyacinth of Constantinople, with the black root.


7. *Hyacinthus stellatus Byzantinus alter flore boraginis*. The other blue starry Hyacinth of Constantinople, with flowers somewhat resembling Borage.

8. *Hyacinthus stellaris aestivus, siue exoticus Someri flore cinereo*. Ash coloured starry Hyacinth, or Somers; Hyacinth.


13. There is another starry Hyacinth more large and beautiful than any of these before mentioned. The leaves are broad and not very long, spread upon the ground, and in the midst of them there riseth up a stalk which at the top beareth a great spike of fair starry flowers, which first begin to open themselves below, and to show themselves by little and little to the top of the stalk. The usual sort hereof hath blue or purple flowers. There is also a sort hereof which hath flesh-coloured flower, and another with white flowers: This is called *Hyacinthus stellatus Peruanus*, The starry Hyacinth of Peru.

Those who are studious in varieties of flower, and require larger descriptions of these, may have recourse to the works of the learned Carolus Clusius in Latin; or to M. Parkinson's work in English, where they may have full satisfaction.

**The Place.**

The three first mentioned Plants grow in many places of Germany in woods and mountains, as Fuchsius and Gesner do testify: In Bohemia also upon divers banks that are full of Herbes. In England we cherish most of these mentioned in this place, in our gardens, only for the beauty of their flower.

**The Time.**

The three first begin to flower in the midst of January, and bring forth their seed in May. The other flower in the spring.

**The Names.**

1. The first of these Hyacinths is called *Hyacinthus stellatus*, or *Stellaris Fuchsii*, of the star-like flowers: *Narcissus caeruleus Bockii*: of some, *Flos Martius stellatus*.

2. This by Lobel is thought to be *Hyacinthus Bifolius*, of Theophrastus: Tragus calls it *Narcissus caeruleus*: and Fuchsius, *Hyacinthus caeruleus minor mas*. We may call it in English, The small two leaved starry Hyacinth.
4. The Lily Hyacinth is called *Hyacinthus Germanicus Lilliflorus*, or German Hyacinth, taken from the country where it naturally groweth wild.

**The Virtues.**

The faculties of the starry Hyacinths are not written of by any. But the Lily-leaved Hyacinth, (which grows naturally in a hill in Aquitaine called Hos, where the herdmen call it Sarahug) is said by them to cause the heads of such cattle as feed thereon to swell exceedingly, and then kills them: which shows it hath a malign and poisonous quality. Clusius.
CHAP. 78. Of Autumn Hyacinths.

The Description

1. Autumn Hyacinth is the least of all the Hyacinths: it hath small narrow grassy leaves spread abroad upon the ground; in the midst whereof springeth up a small naked stalk an handful high, set from the middle to the top with many small star-like blue flowers, having certain small loose chives in the middle. The seed is black, contained in small husks: the root is bulbous.

2. The great Winter Hyacinth is like unto the precedent, in leaves, stalks, and flower, not differing in any one point but in greatness.

3. To these I think it not amiss to add another small Hyacinth, more different from these last described in the time of the flowering, than in shape. The root of it is little, small, white, longish, with a few fibres at the bottom; the leaves are small and long like the last described. The stalk, which is scarce an handful high, is adorned at the top with three or four starry flowers of a bluish ash colour, each flower consisting of six little leaves, with six chives and their pointels, of a dark blue, and a pistil in the midst. It flowers in April.

The Place.

1. The first or lesser grows wild in divers places of England, as upon a bank by the Thames side between Chelsea and London.

2. The greater Autumn Hyacinth grows not wild in England, but it is to be found in some gardens.
The Time.
They flower in the end of August, and in September, and sometimes after.

The Names.
1. The first is called *Hyacinthus Autumnalis minor*, or the Lesser Autumn Hyacinth, and Winter Hyacinth.

2. The second, *Hyacinthus Autumnalis major*, the Great Autumn Hyacinth, or Winter Hyacinth.

3. This is called by Lobel, *Hyacinthus parvulus stellaris vernus*, The Small Starry Spring Hyacinth.
CHAP. 79. Of the English Hyacinth, or Harebells.

**The Description**

1. The blue Harebell or English Hyacinth is very common throughout all England. It hath long narrow leaves leaning towards the ground, among the which spring up naked or bare stalks laden with many hollow blue flowers, of a strong sweet smell, somewhat stuffing the head: after which come the cods or round knobs, containing a great quantity of small black shining seed. The root is bulbous, full of a slimy gluish juice, which will serve to set feathers upon arrows instead of glue, or to paste books with: whereof is made the best starch next unto that of Wake-robin roots.

2. The white English Hyacinth is altogether like unto the precedent, saving that the leaves hereof are somewhat broader, the flowers more open, and very white of colour.

3. There is found wild in many places of England, another sort, which hath flowers of a fair carnation colour, which maketh a difference from the other.

There are also sundry other varieties of this sort, but I think it unnecessary to insist upon them, their difference is so little, consisting not in their shape, but in the colour of their flower.

**The Place.**

1. The blue Harebells grow wild in woods, copses, and in the borders of fields every where through England.
2. The other two are not so common, yet do they grow in the woods by Colchester in Essex in the fields and woods by Southfleet near unto Gravesend in Kent, as also in a piece of ground by Canturbury called the Clapper, in the fields by Bath, about the woods by Warrington in Lancashire, and other places.

The Time.

They flower from the beginning of May unto the end of June.

The Names.

1. The first of our English Hyacinths is called *Hyacinthus Anglicus*, for that it is thought to grow more plentifully in England than elsewhere of Dodonæus, *Hyacinthus non scriptus*, or the unwritten Hyacinth.

2. The second, *Hyacinthus Belgicus candidus*, or the Low-Country Hyacinth with white Flowers.

3. This third is called *Hyacinthus Anglicus, aut Belgicus Flore incarnato*, Carnation Harebells.

Of Oriental Hyacinths

4. The Oriental Hyacinth hath great leaves, thick, fat, and full of juice, deeply hollowed in the middle like a trough: from the middle of those leaves riseth up a stalk two hands high, bare without leaves, very smooth, soft, and full of juice, loaden toward the top with many fair blue flowers, hollow like a bell, greater than the English
Hyacinth, but otherwise like them. The root is great, bulbous, or Onion fashion, covered with many scaly reddish films or peelings, such as cover Onions.

5. The Hyacinth with many Flowers (for so doth the word *Polyanthos* import) hath very many large and broad leaves, short and very thick, fat, or full of slimy juice: from the middle whereof rise up strong thick gross stalks, bare and naked, set from the middle to the top with many blue or sky coloured flowers growing for the most part upon one side of the stalk. The root is great, thick, and full of slimy juice.
6. There is another like the former in each respect, saving that the flowers are wholly white on the inside, and white also on the outside, but three of the out-leaves are of a pale whitish yellow. These flowers smell sweet as the former, and the heads wherein the seeds are contained are of a lighter green colour.
7. There is come unto us from beyond the seas divers other sorts, whose figures are not extant with us; of which there is one like unto the sirst of these Oriental Hyacinths, saving that the flower thereof are purple coloured whence it is termed Hyacinthus purpuro rubeus.

8. Likewise there is another called orientalis albus, differing also from the others in colour of the flower, for that these are very white, and the others blue.

9. There is another called Hyacinthus Brumalis, or winter Hyacinth: it is like the others in shape, but differeth in the time of flowering.

10. There is another Hyacinth belonging rather to this place than any other, for that in root, leaves, flower, and seeds it resembles the first described Oriental Hyacinth; but in one respect it differs not only from them, but also from all other Hyacinths: which is, it hath a leaf having sometimes one, and otherwhiles two narrow long leaves coming forth at the bottom of the setting on of the flower. Whereupon Clusius calls it Hyacinthus Orientalis caule folioso: That is, the Oriental Hyacinth with leaves on the stalk.
Of Double flowered Oriental Hyacinths.

11. Of this kindred there are two or three more varieties, whereof I will give you the description of the most notable, and the names of the other two; which, with that I shall deliver of this, may settle for sufficient description. The first of these (which Clusius calls Hyacinthus Orientalis subvirescente flore, or, the Greenish Flowered Double Oriental Hyacinth) hath leaves, roots, and seeds like unto the formerly described Oriental Hyacinths; but the flower (wherein the difference consists) are at the first, before they be open, green, and then on the outside next to the stalk of a whitish blue; and they consist of six leaves whose tips are whitish, yet retaining some manifest greens: then out of the midst of the flower comes forth another flower consisting of three leaves, whitish on their inner side, yet keeping the great veine or streak upon the outer side, each flower having in the middle a few chives with blackish pendants. It flowers in April.

12. This variety of the last described is called Hyacinthus Orientalis flore caeruleo plena, The double blue Oriental. Hyacinth.


14. This, which Clusius calls Hyacinthus obsoletior Hispanicus, hath leaves somewhat narrower, and more flexible than the Muscari, with a white vein running amongst the inside of them: among these leaves there riseth up a stalk of some foot high, bearing some fifteen or sixteen flowers, more or less, in shape much like the ordinary English, consisting of six leaves, three standing much out and the other three little or nothing. These flowers are of a very dusky colour, as it were mixed with

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purple, yellow, and green: they have no smell. The seed, which is contained in triangular heads, is smooth, black, scaly, and round. It flowers in June.

15. The lesser Spanish Hyacinth hath leaves like the Grape-flower, and small flowers shaped like the Oriental Hyacinth, some are of colour blue, and other some white. The seeds are contained in three-cornered seed-vessels. I have given the figure of the white and blue together, with their seed-vessels.

16. This Indian Hyacinth with the tuberous root (saith Clusius) hath many long narrow sharp pointed leaves spread upon the ground, being somewhat like to those of Garlic, and in the midst of these rise up many round firm stalks of some two cubits high, and oft-times higher, sometimes exceeding the thickness of one's little finger; which is the reason that oftentimes, unless they be borne up by something, they lie along upon the ground. These stalks are at certain spaces ingirt with leaves which end in sharp points. The tops of these stalks are adorned with many white flowers, somewhat in shape resembling those of the Oriental Hyacinth. The roots are knotty or tuberous, with divers fibres coming out of them.

The Place.

These kinds of Hyacinths have been brought from beyond the seas, some out of one country, and some out of others, especially from the East countries, whereof they took their names Orientalis.

The Time.

They flower from the end of January unto the end of April.
The Nature.

The Hyacinths mentioned in this chapter do lightly cleanse and bind; the seeds are dry in the third degree; but the roots are dry in the first degree, and cold in the second.

The Virtues.

A. The root of Hyacinth boiled in wine and drunk, stoppeth the belly, provoketh urine, and helpeth against the venomous bitings of the field spider.

B. The seed is of the same virtue, and is of greater force in stopping the lask and bloody flux. Being drunk in wine it prevalleth against the falling sickness.

C. The roots, after the opinion of Dioscorides, being beaten and applied with white wine, hinder or keep back the growth of hairs.

D. The seed given with Southern-wood in wine is good against the jaundice.
CHAP. 80. Of Fair-haired Hyacinth.

The Description.

1. The Fair-haired Hyacinth hath long fat leaves, hollowed amongst the inside, trough fashion, as are most of the Hyacinths, of a dark green colour tending to redness. The stalk riseth out of the middest of the leaves, bare and naked, soft and full
of slimy juice, which are beset round about with many small flowers of an overworn purple colour: The top of the spike consisteth of a number of fair shining purple flowers, in manner of a tuft or bush of hairs, whereof it took his name Comosus, or Fair-haired. The seed is contained in small bullets, of a shining black colour, as are most of those of the Hyacinths. The roots are bulbous or Onion fashion, full of slimy juice, with some hairy threads fastened unto their bottom.

2. White haired Hyacinth differeth not from the precedent in roots, stalks, leaves, or seed. The flowers hereof are of a dark white colour, with some blackness in the hollow part of them, which setteeth forth the difference.

3. Of this kind I received another sort from Constantinople, resembling the first hairy Hyacinth very notably: but differeth in that, that this is altogether greater, as well in leaves, roots, and flower, as also is of greater beauty without all comparison.

4. There are two other more beautiful haired Hyacinths nourished in the gardens of our prime florists. The first of these hath roots and leaves resembling the last described: the stalk commonly riseth to the height of a foot, and it is divided into many branches on every side, which are small and thready and then at the end as it were of these thready branches there come forth many smaller threads of a dark purple colour, and these spread and divaricate themselves divers ways, much after the manner of the next described; yet the threads are neither of so pleasing a colour, neither so many in number, nor so finely curled. This is called Hyacinthus comosus ramosus purpureus, the fair-haired branched Hyacinth.

5. This is a most beautiful and elegant plant, and in his leaves and roots he differs little from the last described; but his stalk, which is as high as the former, is divided into very many slender branches, which subdivided into great plenty of curled threads variously spread abroad, make a very pleasant show. The colour also is a light blue, and the flowers usually grow so, that they are most dilated at the bottom, and so straiten by little and little after the manner of a pyramid. These flowers keep their beauty long, but are succeeded by no seeds that yet could be observed. This by Fabius Columna (who first made mention hereof in writing) is called Hyacinthus Sannesius panniculosa coma: By others, Hyacinthus comosus ramosus elegantior, The fair curled-hair Hyacinth.

These flower in May.
6. The Small Grape flower hath many long fat and weak leaves trailing upon the ground, hollow in the middle like a little trough, full of slimy juice like the other Hyacinths; amongst which come forth thick soft smooth and weak stalks, leaning this way and that way, as not able to stand upright by reason it is surcharged with very heavy flowers on his top, consisting of many little bottle-like blue flowers, closely thrust or packed together like a bunch of grapes, of a strong smell, yet not unpleasant, somewhat resembling the savour of the Orange. The root is round and bulbous, set about with infinite young cloves or roots, whereby it greatly increaseth.

7. The Great Grape-flower is very like unto the smaller of his kind. The difference consisteth, in that this plant is altogether greater, but the leaves are not so long.
8. The Sky-coloured Grape-flower hath a few leaves in respect of the other Grape-flowers, the which are shorter, fuller of juice, stiff and upright, whereas the others trail upon the ground. The flowers grow at the top, thrust or packed together like a bunch of Grapes, of a pleasant bright sky colour, every little bottle-like flower set about the hollow entrance with small white spots not easy to be perceived. The roots are like the former.

9. The White Grape-flower differeth not from the Sky-coloured Hyacinth, but in colour of the flower: for this Hyacinth is of a pleasant white colour tending to yellowness, tipped about the hollow part with white, whiter than white itself, otherwise there is no difference.

The Place.

These plants are kept in gardens for the beauty of their flowers, wherewith our London gardens do abound.

The Time.

They flower from February to the end of May.

The Names.

The Grape-flower is called *Hyacinthus Botryoides*, and *Hyacinthus Neoticorum Dodonæi*; of some, *Bulbus Esulentus*, *Hyacinthus sylvestris cordi*, *Hyacinthus exiguis Tragi*. Some judge them to be *Bulbine*, of Pliny.

The Fair-haired Hyacinth described in the first place is the *Hyacinthus* of Dioscorides and the ancients.
The Nature and Virtues.

The virtues set down in the precedent Chapter properly belong to that kind of Hyacinth which is described in the first place in this Chapter.
CHAP. 81. Of Muscari or Musked Grape-flower.

Fig. 201. Yellow Musked Grape-flower

Fig. 202 Ash-coloured Grape-flower (2)

Fig. 203. The stalk of Muscari with seed-vessels.
Gerard's Herbal

The Description.

1. Yellow *Muscari* hath five or six long leaves spread upon the ground, thick, fat, and full of slimy juice, turning and winding themselves crookedly this way & that way, hollowed alongst the middle like a trough, as are those of Fair-haired Hyacinth, which at the first budding or springing up are of a purplish colour: being grown to perfection, become of a dark green colour: amongst the which leaves rise up naked, thick, and fat stalks, infirm and weak in respect of the thickness and greatness thereof, lying also upon the ground as do the leaves; set from the middle to the top on every side with many yellow flowers, every one made like a small pitcher or little box, with a narrow mouth, exceeding sweet of smell like the savour of musk, whereof it took the name *Muscari*. The seed is enclosed in puffed or blown up cods, confusedly made without order, of a fat and spongy substance, wherein is contained round black seed. The root is bulbous or onion fashion, whereunto are annexed certain fat and thick strings like those of Dogs-grass.

2. Ash-coloured *Muscari* or Grape-flower, hath large and fat leaves like the precedent, not differing in any point, saving that these leaves at their first springing up are of a pale dusky colour like ashes. The flowers are likewise sweet, but of a pale bleak colour, wherein consisteth the difference.

The Place.

These Plants came from beyond the Thracian Bosphorus, out of Asia, and from about Constantinople, and by the means of friends have been brought into these parts of Europe, whereof our London gardens are possessed.

The Time.

They flower in March and April, and sometimes after.

The Names.

They are called generally *Muscari*: In the Turkey Tongue, *Muschoromi*, *Muscurimi*, *Tipcadi*, and *Dipcadi*, of their pleasant sweet smell: Of Matthiolus, *Bulbus Vomitorius*. These plants may be referred unto the Hyacinths, whereof undoubtedly they be kinds.

The Nature and Virtues.

There hath not as yet any thing been touched concerning the nature or virtues of these plants, only they are kept and maintained in gardens for the pleasant smell of their flowers, but not for their beauty, for that many stinking field flowers do in beauty far surpass them. But it should seem that Matthiolus called them *Vomitorius*, in that he supposed they procure vomiting, which of other authors hath not been remembered.
CHAP. 82. Of Woolly Bulbus.

The Description.

There hath fallen out to be here inferred a bulbous plant consisting of many bulbs, which hath passed current amongst all our late writers. The which I am to set forth to the view of our nation, as others have done in sundry languages to theirs, as a kind of the Hyacinths, which in roots and leaves it doth very well resemble; called in Latin, *Laniferus*, because of his abundance of wool-resembling substance, wherewith the whole plant is in every part full fraught, as well roots, leaves, as stalks. The leaves are broad, thick, fat, full of juice, and of a spider-like web when they be broken. Among these leaves riseth up a stalk two cubits high, much like unto the stalk of Squilla or Sea-Onion; and from the middle to the top it is beset round about with many small star-like blue flowers without smell, very like to the flowers of Asphodel; beginning to flower at the bottom, and so upward by degrees, whereby it is long before it hath done flowering: which flowers the learned Physician of Vienna, Johannes Aicholzius, desired long to see; who brought it first from Constantinople, and planted it in his garden, where he nourished it some years with great curiosity: which time being expired, thinking it to be a barren plant, he sent it to Carolus Clusius, with whom in some few years it did bear such flowers as before described, but never fine to this day. This painful herbarist would gladly have seen the seed that should succeed these flowers; but they being of a nature quickly subject to perish, decay, and fade, began presently to pine away, leaving only a few chaffy and idle seed-vessels without fruit. Myself hath been possessed with this plant at the least twelve years, whereof I have yearly great increase of new roots, but I did never see any token of budding or flowering to this day: notwithstanding I shall be content to suffer it in some base place or other of my garden, to stand as the cipher 0 at the end of the figures, to attend his
Gerard's Herbal

time and leisure, as those men of famous memory have done. Of whose temperature
and virtues there hath not anything been said, but kept in gardens to the end aforesaid.
CHAP. 83. Of two feigned Plants.

Fig. 205. False Bombast Hyacinth (1)          Fig. 206. Flower of Tigris (2)

The Description

1. I have thought it convenient to conclude this history of the Hyacinths with these two bulbous Plants, received by tradition from others, though generally holden for feigned and adulterine. Their pictures I could willingly have omitted in this history, if the curious eye could elsewhere have found them drawn and described in our English tongue: but because I find them in none, I will lay them down here, to the end that it may serve for excuse to others who shall come after, which list not to describe them, being as I said condemned for feigned and adulterine, nakedly drawn only. And the first of them is called Bulbus irophoros: by others, Bulbus Bombicinus Commentitius. The description consisteth of these points, viz. The flowers (saith the author) are no less strange than wonderful. The leaves and roots are like to those of Hyacinths, which hath caused it to occupy this place. The flowers resemble the Daffodils or Narcissus. The whole plant consisteth of a woolly or flocky matter: which description with the picture was sent unto Dodonæus by Iohannes Aicholzius. It may be that Aicholzius received instructions from the Indies, of a plant called in Greek Teizado, which groweth in India, whereof Theophrastus and Athenæus do write in this manner, saying, The flower is like the Narcissus, consining of a flocky or woolly substance, which by him seemeth to be the description of our bombast Hyacinth.

2. The second feigned picture hath been taken of the discoverer and others of later time, to be a kind of dragons not seen of any that have written thereof; which hath moved them to think it a feigned picture likewise notwithstanding you shall
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receive the description thereof as it hath come to my hands. The root (saith my author) is bulbous or Onion fashion, outwardly black; from the which spring up long leaves, sharp pointed, narrow, and of a fresh green colour: in the midst of which leaves rise up naked or bare stalks, at the top whereof growtheth a pleasant yellow flower, stained with many small red spots here and there confusedly cast abroad: and in the midst of the flower thrusteth forth a long red tongue or stile, which in time growtheth to be the cod or seed-vessel, crooked or wreathed, wherein is the seed. The virtues and temperature are not to be spoken of, considering that we assuredly persuade ourselves that there are no such plants, but mere fictions and devices, as we term them, to give his friend a gudgeon.

Though these two have been thought commentitious or feigned, yet Bauhin seemeth to vindicate the latter, and John Theodore de Bry in his Florilegium hath set it forth. He gives two figures thereof, this which we here give you being the one; but the other is far more elegant, and better resembles a natural plant. The leaves (as Bauhin saith) are like the sword-flag, the root like a leek, the flowers (according to De Bries' figure) grow sometimes two or three of a stalk: the flower consists of two leaves, and a long style or pistil: each of these leaves is divided into three parts, the uttermost being broad and large, and the innermost much narrower and sharper: the tongue or style that comes forth of the midst of the flower is long, and at the end divided into three crooked forked points. All that De Bry saith thereof is this; Flos Tigridis rubet egregie circa medium tamen pallet, albusque est & maculatus: ex Mexico a Casparo Bauhino. That is; Flos Tigridis is wondrous red, yet is it pale and whitish about the middle, and also spotted; it came from about Mexico, I had it from Caspar Bauhin.
CHAP. 84. Of Daffodils.

The Kinds.

Daffodil, or Narcissus according to Dioscorides, is of two sorts: the flowers of both are white, the one having in the middle a purple circle or coronet; the other with a yellow cup circle or coronet. Since whose time there hath been sundry others described, as shall be set forth in their proper places.

Fig. 207. Purple Circled Daffodil

Fig. 208. Late many-flowered Daffodil with the Saffron-coloured middle.

The Description.

1. The first of the Daffodils is that with the purple crown or circle, having small narrow leaves, thick, fat, and full of slimy juice; among which riseth up a naked stalk, smooth and hollow, of a foot high, bearing at the top a fair milk-white flower growing forth of a hood or thin film, such as the flowers of onions are wrapped in: in the midst of which flower is a round circle or small coronet of a yellowish colour, purfled or bordered about the edge of the said ring or circle with a pleasant purple colour; which being past, there followeth a thick knob or button, wherein is contained black round seed. The root is white, bulbous or Onion fashion.

2. The second kind of Daffodil agreeth with the precedent in every respect, saving that this Daffodil flowereth in the beginning of February, and the other not until April, and is somewhat lesser. It is called Narcissus medio purpureus præcox; that is, Timely purple ringed Daffodil. The next may have the addition præcocior, More timely: and the last in place, but first in time, præcosissimus, Most timely, or very early flowering Daffodil.
3. The third kind of Daffodil with the purple ring or circle in the middle, hath many small narrow leaves, very flat, crookedly bending toward the top; among which riseth up a slender bare stalk, at whose top doth grow a fair and pleasant flower, like unto those before described, but lesser, and flowereth sooner, wherein consisteth the difference.

There is also another somewhat less, and flowering somewhat earlier than the last described.

4. This in roots, leaves, and stalks differeth very little from the last mentioned kinds; but it bears many flowers upon one stalk, the out-leaves being like the former, white, but the cup or ring in the middle of a saffron colour, with divers yellow threads contained therein.
5. To these may be added another mentioned by Clusius, which differs from these only in the flowers; for this hath flowers consisting of six large leaves fairly spread abroad, within which are other six leaves not so large as the former, and then many other little leaves mixed with threads coming forth of the middle. Now there are purple welts which run between the first and second rank of leaves, in the flower, and so in the rest. This flowers in May and it is *Narcissus pleno flore quintus*, of Clusius.
6. This late flowering Daffodil hath many fat thick leaves, full of juice, among the which riseth up a naked stalk, on the top whereof groweth a fair white flower, having in the middle a ring or yellow circle. The seed groweth in knobby seed vessels. The root is bulbous or Onion fashion. It flowereth later than the others before described, that is to say, in April and May.

7. The seventh kind of Daffodil is that sort of Narcissus or Primrose Peerless that is most common in our country gardens, generally known every where. It hath long fat and thick leaves, full of a slimy juice; among which riseth up a bare thick stalk, hollow within and full of juice. The flower groweth at the top, of a yellowish white colour, with a yellow crown or circle in the middle; and flowereth in the month of April, and sometimes sooner. The root is bulbous fashion.

8. The eighth Daffodil hath many broad and thick leaves, fat and full of juice, hollow and spongeous. The stalks, flowers, and roots are like the former, and differeth in that, that this plant bringeth forth many flowers upon one stalk, and the other fewer, and not of so perfect a sweet smell, but more offensive and stuffing the head. It hath this addition, Polyanthos, that is, of many flowers, wherein especially consisteth the difference.
9. The Italian Daffodil is very like the former, the which to distinguish in words, that they may be known one from another, is impossible. Their flowers, leaves, and roots are like, saving that the flowers of this are sweeter and more in number.

10. The double white Daffodil of Constantinople was sent into England unto the right honourable the Lord Treasurer, among other bulbed flowers: whose roots
when they were planted in our London gardens, did bring forth beautiful flowers, very white and double, with some yellowness mixed in the middle leaves, pleasant and sweet in smell, but since that time we never could by any industry or manuring bring them unto flowering again. So that it should appear, when they were discharged of that birth or burthen which they had begotten in their own country, and not finding that matter, soil, or climate to beget more flowers, they remain ever since barren and fruitless. Besides, we found by experience, that those plants which in autumn did shoot forth leaves, did bring forth no flowers at all; and the others that appeared not until the spring, did flourish and bear their flowers. The stalks, leaves, and roots are like unto the other kinds of Daffodils. It is called of the Turks, *Giul Catamer lale*; That is, *Narcissus* with double flowers. Notwithstanding we have received from beyond the seas, as well from the Low Countries, as also from France, another sort of greater beauty, which from year to year doth yield forth most pleasant double flowers, and great increase of roots, very like as well in stalks as other parts of the plant, unto the other sorts of Daffodils. It differeth only in the flowers, which are very double and thick thrust together, as are the flowers of our double Primrose, halting in the middle of the flower some few chives or welts of a bright purple colour, and the other mixed with yellow as aforesaid.

11. This also with double white flowers, which Clusius sets forth in the sixth place, is of the same kind with the last described; but it bears but one or two flowers upon a stalk, whereas the other hath many.

12. This, which is Clusius his *Narcissus flore plena* 2, is in roots, leaves, and stalks very like the precedent; but the flowers are composed of six large white out-leaves; but the middle is filled with many fair yellow little leaves much like to the double yellow wall-flower. They smell sweet like as the last mentioned.
13. This differs from the last mentioned only in that it is less, and that the middle of the flower within the yellow cup is filled with longish narrow little leaves, as it were crossing each other. Their colour is white, but mixed with some green on the outside, and yellow on the inside.

14. The Milk-white Daffodil differeth not from the common white Daffodil, or Primrose peerless, in leaves, stalks, roots, or flowers, saving that the flowers of this plant hath not any other colour in the flower but white, whereas all the others are mixed with one colour or other.
15. The Rush Daffodil hath long, narrow, and thick leaves, very smooth and flexible, almost round like Rushes, whereof it took his surname \textit{luncifolius} or Rushy. It springeth up in the beginning of January, at which time also the flowers do shoot forth their buds at the top of small rushy stalks, sometimes two, and often more upon one stalk, made of six small yellow leaves. The cup or crown in the middle is likewise yellow, in shape resembling the other Daffodils, but smaller, and of a strong sweet smell. The root is bulbed, white within, and covered with a black skin or film.

16. This Rush Daffodil is like unto the precedent in each respect, saving that it is altogether lesser, and longer before it come to flowering. There is also a white flowered one of this kind.
17. There is also another Rush Daffodil or \textit{Iunquilia}, with flowers not sharp pointed but round with a little cup in the middle: the colour is yellow or else white. This is Lobel's \textit{Narcissus juncifolius flore rotundæ circinitatis roseo}.

18. There is also another \textit{Iunquilia} whose leaves and stalks are like those of the first described Rushy Daffodil, but the cup in the midst of the flower is much larger. The colour of the flower is commonly white. Clusius calls this \textit{Narcissus juncifolius amplo calice}. 

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Fig. 215. Rose or round flowered \textit{Iunquilia} (17)

Fig. 216. White \textit{Iunquilia} with the large cup. (18)
19. There are three or four reflex Iunquilia, whose cups hang down, and the six encompassing leaves turn up or back, whence they take their names. The flowers of the first are yellow; those of the second all white, the cup of the third is yellow, and the reflex leaves white. The fourth hath a white cup, and yellow reflex leaves. This seems to be Lobel's Narcissus montanus minimus coronatus.
20. This is like to the ordinary lesser *Iunquilia*, but that the flowers are very double, consisting of many long and large leaves mixed together; the shorter leaves are obtuse, as if they were clipped off. They are wholly yellow.

21. The Persian Daffodil hath no stalk at all, but only a small and tender foot stalk of an inch high, such as the Saffron flower hath: upon which short and tender stalk doth stand a yellowish flower consisting of six small leaves; of which the three innermost are narrower than those on the outside. In the middle of the flower doth grow forth a long style or pointel, set about with many small chives or threads. The whole flower is of an unpleasant smell, much like to Poppy. The leaves rise up a little before the flower; long, smooth, and shining. The root is bulbèd, thick, and gross, blackish on the outside, and pale within, with some threads hanging at the lower part.
22. The autumn Daffodil bringeth forth long smooth, glittering leaves, of a deep green colour: among which riseth up a short stalk, bearing at the top one flower and no more, resembling the flower of Mead Saffron or Common Saffron, consisting of six leaves of a bright shining yellow colour; in the middle whereof stand six threads or chives, and also a pistil or clapper yellow likewise. The root is thick and gross like unto the precedent.

23. To this last may be adjoined another which in shape somewhat resembles it. The leaves are smooth, green, growing straight up, and almost a finger's breadth; among which riseth up a stalk a little more than half a foot in height, at the top of which groweth forth a yellow flower not much unlike that of the last described autumn *Narcissus*: it consisteth of six leaves some inch and half in length, and some half inch broad, sharp pointed, the three inner leaves being somewhat longer than the outer. There grow forth out of the midst of the flower three whitish chives, tipped with yellow, and a pistil in the midst of them longer than any of them. The root consists of many coats, with fibres coming forth of the bottom thereof like others of this kind. It flowers in February.
24. Small Winter Daffodil hath a bulbous root, much like unto the root of Rush Daffodil, but lesser: from the which riseth up a naked stalk without leaves, on the top whereof groweth a small white flower with a yellow circle in the middle, sweet in smell, something stuffing the head as do the other Daffodils.

The Place.

The Daffodils with purple coronets do grow wild in sundry places of France, chiefly in Burgundy, and in Switzerland in meadows.

The Rush Daffodil groweth wild in sundry places of Spain, among grass and other herbs. Dioscorides saith, That they be especially found upon mountains. Theocritus affirmeth the Daffodils to grow in meadows, in his nineteenth Idyll or twentieth, according to some editions: where he writeth, That the fair Lady Europa entering with her Nymphs into the meadows, did gather the sweet smelling Daffodils; in verses which we may English thus:

But when the girls were come into
The meadows flowering all in sight,
That wench with these, this wench with those
Trim flowers, themselves did all delight:
She with the Narcissus good in scent,
And she with Hyacinths content.

But it is not greatly to our purpose particularly to seek out their places of growing wild, seeing that we have them all and every of them in our London gardens, in great abundance. The common white Daffodil groweth wild in fields and sides of woods in the west parts of England.
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The Time.

They flower for the most part in the Spring, that is, from the beginning of February unto the end of April.

The Persian and winter Daffodils do flower in September and October.

The Names.

Although their names be set forth in their several titles, which may serve for their appellations and distinctions; notwithstanding it shall not be impertinent to add a supply of names, as also the cause why they are so called.

The Persian Daffodil is called in the Sclavonian or Turkish tongue, Zaremcada Persiana, and Zaremcatta, as for the most part all other sorts of Daffodils are. Notwithstanding the double flowered Daffodil they name Giul catamer lale, which name they generally give unto all double flowers.

The common white Daffodil with the yellow circle they call Serin cade, that is to say, the king's Chalice; and Deue bohini, which is to say, Camel's neck, or as we do say of a thing with long spindle-shins, Long-shanks, urging it from the long neck of the flower.

The Rush Daffodil is called of some Ionquillæ, of the similitude the leaves have with Rushes. Of Dioscorides, Bulbus Vomitorius, or Vomiting Bulb, according to Dodoneus.

Generally all the kinds are comprehended under this name Narcissus, called in Dutch, Narcissen: in Spanish, Jennetten: in English, Daffodilly, Daffodowndilly, and Primrose Peerless.

Sophocles nameth them the garland of the infernal gods, because they that are departed and dulled with death, should worthily be crowned with a dulling flower.

Of the first and second Daffodil Ovid hath made mention in the third book of his Metamorphosis, where he descripteth the transformation of the fair boy Narcissus into a flower of his own name; saying,

Nusquam corpus erat, croceum pro corpore florem
Inveniunt, folis medium cingentibus albis.

But as for body none remain'd; instead whereof they found
A yellow flower, with milk white leaves ingirting of it round.

Pliny and Plutarch affirm, as partly hath been touched before, that their narcotic quality was the very cause of the name Narcissus, that is, a quality causing sleepiness; which in Greek is narkesis, or of the fish Torpedo, called in Greek, narke which benumbs the hands of them that touch him, as being hurtful to the sinews; and bringeth dullness to the head, which properly belongeth to the Narcissus, whose smell causeth drowsiness.

The Nature.

The roots of Narcissus are hot and dry in the second degree.

The Virtues.

A. Galen saith, That the roots of Narcissus have such wonderful qualities in drying, that they confound and glue together very great wounds, yea and such gashes
or cuts as happen about the veins, sinews, and tendons. They have also a certain cleansing and attracting faculty.

B. The roots of Narcissus stamped with honey, and applied plaster-wise, helpeth them that are burned with fire, and joineth together sinews that are cut in sunder.

C. Being used in manner aforesaid, it helpeth the great wrenches of the ankles, the aches and pains of the joints.

D. The same applied with honey and nettle seed helpeth sun burning and the morphew.

E. The same stamped with barrow's grease and leaven of rye bread, hasteneth to maturation hard impostumes which are not easily brought to ripeness.

F. Being stamped with the meal of Darnel and honey, it draweth forth thorns and stubs out of any part of the body.

G. The root, by the experiment of Apulius, stamped and strained, and given in drink, helpeth the cough and colic, and those that be entred into a phthisic.

H. The roots whether they be eaten or drunken, do move vomit; and being mingled with vinegar and nettle seed, taketh away lentils and spots in the face.
CHAP. 85. Of the Bastard Dafodill.

The Description.

1. The double yellow Daffodil hath small smooth narrow leaves, of a dark green colour; among which riseth up a naked hollow stalk of two hands high, bearing at the top a fair and beautiful yellow flower, of a pleasant sweet smell: it sheddeth his
flower but there followeth no seed at all, as it happeneth in many other double
flowers. The root is small, bulbous, or onion fashion, like unto the other Daffodils, but
much smaller.

2. The common yellow Daffodil or Daffadowndilly is so well known to all that
it needeth no description.

3. We have in our London gardens another sort of this common kind, which
naturally groweth in Spain, very like unto our best known Daffodil in shape and
proportion, but altogether fairer, greater, and lasteth longer before the flower doth fall
or fade.

4. This hath leaves and roots like the last described, but somewhat less; the
flower also is in shape not unlike that of the precedent, but less, growing upon a weak
slender green stalk, of some fingers' length: the seed is contained in three-cornered,
yet almost round heads. The root is small, bulbous, and black on the outside.

5. This hath a longish bulbous root, somewhat black on the outside, from
which rise up leaves not so long nor broad as those of the last described: in the midst
of these leaves springs up a stalk, slender, and some half foot in height; at the top of
which, forth of a whitish film, breaks forth a flower like in shape to the common
Daffodil, but less and wholly white, with the brim of the cup welted about. It flowers
April, and ripens the seeds in June.

The Place.

The double yellow Daffodil I remitted from Robinus of Paris, which he
procured by means of friends from Orleans and other parts of France.
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The yellow English Daffodil groweth almost everywhere through England. The yellow Spanish Daffodil doth likewise deck up our London gardens, where they increase infinitely.

The Time.

The double Daffodil sendeth forth his leaves in the beginning of February, and his flowers in April.

The Names.

The first is called *Pseudonarcissus multiplex*, and *Narcissus luteus Polyanthos*: in English, the double yellow Daffodil, or *Narcissus*.

The common sort are called in Dutch, *Geel Sporken Blumen*: in English, yellow Daffodill, Daffodily, and Daffodowndilly.

The Temperature.

The temperature is referred unto the kinds of Narcissus.

The Virtues.

Touching the virtues hereof, it is found out by experiment of some of the later Physicians, that the decoction of the roots of this yellow Daffodil do purge by siege tough and phlegmatic humors, and also waterish, and is good for them that are full of raw humors, especially if there be added thereto a little anise seed and ginger, which will correct the churlish hardness of the working.

The distilled water of Daffodils doth cure the Palsy, if the patient be bathed and rubbed with the said liquor by the fire. It hath been proved by an especial and trusty friend of mine, a man learned, and a diligent searcher of nature, Mr. Nicholas Belson, sometimes of King's College in Cambridge.
CHAP. 86. Of divers other Daffodils or Narcissuss.

There are besides the forementioned sorts of Daffodils, sundry others, some of which may be referred to them; other some not. I do not intend an exact enumeration of them, it being a thing not so fitting for a history of plants, as for a Florilegie, or book of flowers. Now those that require all their figures, and more exact descriptions, may find satisfaction in the late work of my kind friend Mr. John Parkinson, which is intitled Paradisus terrestris: for in other Florilegies, as in that of De Bry, Swertz, &c. you have barely the names and figures, but in this are both figures, and an exact history or declaration of them. Therefore I in this place will but only briefly describe and name some of the rarest that are preserved in our choice gardens, and a few others whereof yet they are not possesssed.

The Descriptions.

1. The first of these, which for the largeness is called Nonpareil, hath long broad leaves and roots like the other Daffodils. The flower consists of six very large leaves of a pale yellow colour, with a very large cup, but not very long: this cup is yellower than the encompassing leaves, narrower also at the bottom than at the top, and unevenly cut about the edges. This is called Narcissus omnium maxima, or Nonpareil; the figure well expresseth the flower, but that it is somewhat too little. There is a variety of this with the open leaves & cup both yellow, which makes the difference. There is also another Nonpareil, whose flowers are all white, and the six leaves that stand spread abroad are usually a little folded, or turned in at their ends.

2. Besides these former there are four or five double yellow Daffodils, which I cannot passe over in silence; the first is that, which is vulgarly amongst Florists
known by the name of Robine's Narcissus; and it may be was the same our author in the precedent chapter mentions he received from Robine; but he giving the figure of another and a description not well fitting this, I can affirm nothing of certainty. This double Narcissus of Robine grows with a stalk some foot in height, and the flower is very double, of a pale yellow colour, and it seems commonly to divide itself into some six partitions, the leaves of the flower lying one upon another even to the middle of the flower. This may be called Narcissus pallidus multiplex Robini, Robine's double pale Narcissus.

3. The next to this is that which from our author, the first observer thereof, is vulgarly called Gerard's Narcissus: the leaves and root do not much differ from the ordinary Daffodil; the stalk is scarce a foot high, bearing at the top thereof a flower very double; the six outmost leaves are of the same yellow colour as the ordinary one is; those that are next are commonly as deep as the tube or trunk of the single one, and amongst them are mixed also other paler coloured leaves, with some green stripes here & there among those leaves: these flowers are sometimes all contained in a trunk like that of the single one, the six out-leaves excepted: other whiles this inclosure is is broke, and then the flower stands fair open like as that of the last described. Lobel in the second part of his Adversaria tells, That our author Master Gerard found this in Wiltshire, growing in the garden of a poor old woman; in which place formerly a cunning man (as they vulgarly term him) had dwelt.

This may be called in Latin, according to the English, Narcissus multiplex Gerardi, Gerard's double Narcissus.

The figure we here give you is expressed some what too tall, and the flower is not altogether so double as it ought to be.

4. There are also two or three double yellow Daffodils yet remaining. The first of there is called Wilmot's Narcissus, (from Master Wilmot, late of Bow) and this hath a very fair double & large yellow flower composed of deeper and paler yellow leaves orderly mixed.

The second (which is called Tradescant's Narcissus, from Master John Tradescant of South Lambeth) is the largest and stateliest of all the rest; in the largeness of the flowers it exceeds Wilmot's, which otherwise it much resembles; some of the leaves whereof the flower consists are sharp pointed, and these are of a paler colour; other some are much more obtuse, and these are of a deeper and fairer yellow.

This may be called Narcissus Roseus Tradescanti, Tradescant's Rose Daffodil.

The third Mr. Parkinson challengeth to himself; which is a flower to be respected, not so much for the beauty, as for the various composure thereof, for same of the leaves are long and sharp pointed, others obtuse and curled, a third sort long and narrow, and usually some few hollow, and in shape resembling a horn; the utmost leaves are commonly streaked, and of a yellowish green; the next to them fold themselves up round, and are usually yellow, yet sometimes they are edged with green. There is a deep yellow pistil divided into three parts, usually in the midst of this flower. It flowers in the end of March. I usually (before Mr. Parkinson set forth his Florilegy, or Garden of Flowers) called this flower Narcissus Polymorphos, by reason of its various shape and colour: but since I think it fitter to give it to the author, and term it Narcissus multiplex varius Parkinsoni, Parkinson's various double Narcissus.
5. Now come I to treat of some more rarely to be found in our gardens, if at all. That which takes the first place is by Clusius called *Narcissus Iacobæus Indicus*, the Indian or Jacobean Narcissus. The root hereof is much like to an ordinary onion, the leaves are broad like the other Narcisses, the stalk is smooth, round, hollow, and without knots, at the top whereof, out of a certain skinny husk comes forth a fair red flower like that of the flowering Indian reed, but that the leaves of this are somewhat larger, and it hath six chives or threads in the middle thereof of the same colour as the flower, and they are adorned with brownish pendants; in the cilia of these there stands a little farther out than the rest, a three forked style, under which succeeds a triangular head, after the falling of the flower.

This gives his flower in June or July.

6. This Lobel calls *Narcissus montanus juncifolius minimus*, The Least Rush-leaved mountain Narcissus. The leaves of this are like the *Iunquilia*; the stalk is short, the flower yellow with the six winged leaves small and paler coloured, the cup open and large to the bigness of the flower.
7. This also is much like the former; but the six encompassing leaves are of a greenish faint yellow colour; the cup is indented, or unequally curled about the edges, but yellow like the precedent. Lobel calls this *Narcissus montanus juncifolius flore fimbriato*, The mountain Rush-leaved Narcissus with an indented or curled cup.

8. The leaves of this are as small as the autumn Hyacinth, the stalk some handful high, and the flower like the last described, but it is of a whitish colour. Lobel calls this last described, *Narcissus omnium minimus montanus albus*, The least mountain white Narcissus. These three last usually flower in February.
CHAP. 87. Of Tulip, or the Dalmatian Cap.

The Kinds

Tulip, or the Dalmatian Cap is a strange and foreign flower, one of the number of the bulbous flowers, whereof there be sundry sorts, some greater, some lesser with which all studious and painful herbarists desire to be better acquainted, because of that excellent diversity of most brave flowers which it beareth. Of this there be two
chief and general kinds, viz. *Præcox* and *Serotina*; the one doth bear his flowers timely, the other later. To these two we will add another sort called *Media*, flowering between both the others. And from these three sorts, as from their heads, all other kinds do proceed, which are almost infinite in number. Notwithstanding, my loving friend Mr. James Garret, a curious searcher of simples, and learned apothecary of London, hath undertaken to find out, if it were possible, the infinite sorts, by diligent sowing of their seeds, and by planting those of his own propagation, and by others received from his friends beyond the seas for the space of twenty years, not being yet able to attain to the end of his travail, for that each new year bringeth forth new plants of sundry colours, not before seen: all which to describe particularly were to roll Sisyphus' stone, or number the sands. So that it shall suffice to speak of and describe a few, referring the rest to some that mean to write of Tulips a particular volume.

**The Description.**

1. The Tulip of Bologna hath fat, thick, and gross leaves, hollow, furrowed or channelled, bending a little backward, and as it were folded together: which at their first coming up seem to be of a reddish colour, and being thoroughly grown turn into a whitish green. In the midst of those leaves riseth up a naked fat stalk a foot high, or something more, on the top whereof standeth one or two yellow flowers, sometimes three or more, consisting of six small leaves, after a sort like to a deep wide open cup, narrow above, and wide in the bottom. After it hath been some few days flowered, the points and brims of the flower turn backward, like a Dalmatian or Turkish cap, called *Tulipan*, *Tolepan*, *Turban*, and *Turfan*, whereof it took his name. The chives or threads in the middle of the flowers be sometimes yellow, otherwheres blackish or purplish, but commonly of one overworn colour or other, Nature seeming to play more with this flower than with any other that I do know. This flower is of a reasonable pleasant smell, and the other of his kind have little or no smell at all. The seed is flat, smooth, shining, and of a gristly substance. The root is bulbous, and very like to a common onion of Saint Omers.

2. The French Tulip agreeth with the former, except in the black bottom which this hath in the middle of the flower, and is not so sweet of smell, which setteth forth the difference.

3. The yellow Tulip that flowereth timely hath thick and gross leaves full of juice, long, hollow, or gutter fashion, set about a tender stalk, at the top whereof doth grow a fair and pleasant shining yellow flower, consisting of six small leaves without smell. The root is bulbous or like an onion.

4. The fourth kind of Tulip, that flowereth later, hath leaves, stalks and roots like unto the precedent. The flowers hereof be of a scarlet colour, welted or bordered about the edges with red. The middle part is like unto a heart tending to whiteness, spotted in the same whiteness with red speckles or spots. The seed is contained in square cods, flat, tough, and sinewy.
5. The fifth sort of Tulip, which is neither of the timely ones, nor of the later flowering sort, but one that buddeth forth his most beautiful flowers between both. It agreeth with the last described Tulip, in leaves, stalks, roots, and seed, but differeth in flowers. The flower consisteth of six small leaves joined together at the bottom: the middle of which leaves are of a pleasant bloody colour, the edges be bordered with white, and the bottom next unto the stalk is likewise white; the whole flower resembling in colour the blossoms of an Apple tree.
6. The sixth hath leaves, roots, stalks, and seed like unto the former, but much greater in every point. The flowers hereof are white, dashed about the brims or edges with a red or blush colour. The middle part is striped confusedly with the same mixture, wherein is the difference.

7. Carolus Clusius setteth forth in his *Pannonic History* a kind of Tulip that beareth fair red flowers, black in the bottom, with a pistil in the middle of an overworn greenish colour; of which sort there happeneth some to have yellow flowers, agreeing with the others before touched: but this bringeth forth increase of root in the bosom of his lowest leaf next to the stalk, contrary to all the other kinds of Tulip.

8. Lobel in his learned *Observations* hath set forth many other sorts; one he calleth *Tulipa Chalcedonica*, or the Turkey Tulip, saying it is the least of the small kinds or Dwarf Tulips, whose flower is of a sanguine red colour, upon a yellow ground, agreeing with the others in root, leaf, and stalk.

9. He hath likewise set forth another; his flower is like the Lily in proportion, but in colour of a fine purple.

10. We may also behold another sort altogether greater than any of the rest, whose flower in colour like the stone called Amethyst, not unlike to the flowers of Peony.
11. We have likewise another of greater beauty, and very much desired of all, with white flowers dashed on the backside, with a light wash of watchet colour.

12. There is another also in our London gardens, of a snow white colour; the edges slightly washed over with a little of that we call blush colour.

13. We have another like the former, saving that his flower is of a straw colour.
14. There is another to be seen with a flower mixed with streaks of red and yellow, resembling a flame of fire, whereupon we have called it Flambant.

There be likewise so many more differing so notably in colour of their flowers, although in leaves, stalk, and roots for the most part one like another, that (as I said before) to speak of them severally would require a peculiar volume.

Therefore not to trouble you any further, I have given you only the figures and names of the not ablest differences which are in shape; as, the dwarf Tulips, and the branched ones, together with the colour of their flowers, contained in their titles, that you need not far to seek it.

There be a sort greater than the rest, which in form are like; the leaves whereof are thick, long, broad, now and then somewhat folded in the edges; in the midst whereof doth rise up a stalk a foot high, or something higher, upon which standeth only one flower bolt upright, consisting of six leaves, after a sort like to a deep wide cup of this form, viz. the bottom turned upwards, with threads or chives in the middle, of the colour of Saffron. The colour of the flower is sometimes yellow, sometimes white, now and then as it were of a light purple, and many times red; and in this there is no small varieties of colours, for the edges of the leaves, and oftentimes the nails or lower part of the leaves are now & then otherwise coloured than the leaves themselves, and many times there doth run all along these streaks some other colours. They have no smell at all that can be perceived. The roots of these are likewise bulbed, or Onion fashion; every of the which to set forth severally would trouble the writer, and weary the reader; so that, what hath been said shall suffice touching the description of Tulips. True it is that our author here affirms, the varieties of these flowers are so infinite, that it would both tire the writer and reader to recount them. Yet for that some are more in love with flowers than with plants in general, I have thought good to direct them where they may find somewhat more at large of this plant: Let such therefore as desire further satisfaction herein have recourse to the Florilegies of De Bry, Swerts, Robin, or to Mr. Parkinson, who hath not only largely treated of the flowers in particular, but also of the ordering of them.
Fig. 237. Tulips (17-21)
Fig. 238. Vermilion Tulip (22)

Fig. 239. White and red striped Tulip (23)
Fig. 240. Red and Yellow Fool's Coat. (24)

Fig. 241. Sulphur-coloured Tulip (25)

Fig. 242. Red Tulip with Pale Edges (26)

Fig. 243. Late-flowering Yellow Tulip (27)
Fig. 244. Late flowering Yellow Tulip with sanguine spots and a black bottom. (28)

Fig. 245. White Holias with sanguine spots and streaks (29)
John Gerard and Thomas Johnson

Fig. 246. A middle Tulip of a deep purple colour with a bluish bottom.

The Place.

Tulip groweth wild in Thracia, Cappadocia, and Italy; in Byzantia about Constantinople, at Tripoli and Aleppo in Syria. They are now common in all the gardens of such as affect flowers, all over England.

The Time.

They flower from the end of February unto the beginning of May, and somewhat after; although Augerius Busbequius in his journey to Constantinople, saw between Hadrianople and Constananople, great abundance of them in flower everywhere, even in the midst of winter, in the month of January, which that warm and temperate climate may seem to perform.

The Names.

The later herbarists by a Turkish and strange name call it *Tulipa*, of the Dalmatian Cap called Tulipa, the form whereof, the flower when it is open seemeth to represent.

It is called in English after the Turkish name Tulip, or it may be called Dalmatian Cap, or the Turk's Cap. What name the ancient writers gave it is not certainly known. Conradus Gesnerus and divers others have taken Tulip to be that *Satyrium* which is surnamed *Erythronium*, because one kind hath a red four; or altogether a certain kind of *Satyrium*: with which it doth agree reasonable well. In the Turkey Tongue it is called *Café lalé*, *Cauálé lalé*, and likewise *Turban* and *Turfan*, of the Turks Cap so called, as before said of Lobel.
Gerard's Herbal

I do verily think that these are the Lilies of the field mentioned by our Saviour, Mat. 6. 28, 29; for he saith, That Solomon in all his royalty was not arrayed like one of these. The reasons that induce me to think thus are these: First, their shape; for their flowers resemble Lilies, and in these places whereas our Saviour was conversant they grow wild in the fields. Secondly, the infinite variety of colour, which is to be found more in this than any other sort of flower: and thirdly, the wondrous beauty and mixtures of these flowers. This is my opinion, and these my reasons, which any may either approve of or gainsay as he shall think good.

The Temperature and Virtues.

There hath not been anything set down of the ancient or later writers as touching the nature or virtues of the Tulips, but they are esteemed especially for the beauty of their flowers.

A. The roots preserved with sugar, or otherwise dressed, may be eaten, and are no unpleasant nor any way offensive meat, but rather good and nourishing.
The Kinds.

Theophrastus hath mentioned one kind of bulbous Leucoion, which Gaza translates Viola alba, or the white Violet. Of this Viola Theophrasti, or Theophrustus his Violet, we have observed three sorts, whereof some bring forth many flowers and leaves, others fewer; some flower very early, and others later, as shall be declared.

The Description.

1. The first of these bulbous Violets riseth out of the ground, with two small leaves flat and crested, of an overworn green colour, between the which riseth up a small and slender stalk of two hands high; at the top whereof cometh forth of a skinny hood a small white flower of the bigness of a Violet, compact of six leaves, three bigger, and three lesser, tipped at the points with a light green: the smaller are fashioned into the vulgar form of a heart, and prettily edged about with green; the other three leaves are longer, and sharp pointed. The whole flower hangeth down his head, by reason of the weak foot stalk whereon it groweth. The root is small, white, and bulbous.

2. There are two varieties of this kind which differ little in shape, but the first hath a flower as big again as the ordinary one, and Clusius calls it Leucomium bulbosum precox Byzantium, The greater early Constantinopolitan bulbous Violet. The other is mentioned by Lobel, and differs only in colour of flowers; wherefore he calls it Leucomium triphyllum flore caeruleo, The blue flowered bulbous Violet.
3. The third sort of bulbed Violets hath narrow leaves like those of the leek, but lesser and smoother, not unlike to the leaves of the bastard Daffodil. The stalks be slender and naked, two hands high, whereupon do grow fair white flowers, tipped with a yellowish green colour, with many small chives or threads in the midst of the flower. The seed is contained in small round buttons. The root is white and bulbous

4. The great bulbed Violet is like unto the third in stalk and leaves, yet greater and higher. It bringeth forth on every stalk not one flower only, but five or six, blowing or flowering one after another, altogether like the other flowers in form and bigness.
Fig. 251. Least Autumn Bulbous Violet (5)

5. This small bulbous plant may be annexed to the former, the root is small, compact of many coats: the leaves are also small, and the stalk an handful high, at the top whereof there hang down one or two small white flowers consisting of six leaves apiece, much resembling the last described, but far less. It flowers in autumn.

6. Besides these, Clusius makes mention of a small one much like this, and it flowers in the Spring, and the flowers are somewhat reddish nigh the stalk, and smell sweet. Clusius calls this, *Leucoium bulbosum vernum minimum*, The smallest spring bulbous Violet.

The Place.

These plants do grow wild in Italy and the places adjacent. Notwithstanding our London gardens have taken possession of most of them many years past.

The Time.

The first flowereth in the beginning of January; the second in September; and the third in May; the rest at their seasons mentioned in their descriptions.

The Names

The first is called of Theophrastus, *Leukion*; which Gaza renders *Viola alba*, and *Viola bulbosa*, or Bulbed Violet. Lobel hath from the colour and shape called it *Leuconarcissolirion*, and that very properly, considering how it doth as it were participate of two sundry plants, that is to say, the root of the *Narcissus*, the leaves of the small Lily, and the white colour; taking the first part *Leuco*, of his whiteness; *Narcisso*, of the likeness the roots have unto Narcissus; and *Lirium*, of the leaves of Lilies, as aforesaid. In English we may call it the bulbous Violet; or after the Dutch name, *Somer sottekens* that is, summer fools, and *Druyfkens*. Some call them also
Snowdrops. This name *Leucoium*, without his epithet *Bulbosum*, is taken for the Wallflower, and Stock-Gillyflower, by all modern writers.

**The Nature and Virtues.**

Touching the faculties of these bulbous Violets we have nothing to say, seeing that nothing is set down hereof by the ancient writers, nor anything observed by the modern, only they are maintained and cherished in gardens for the beauty and rareness of the flowers, and sweetness of their smell.
CHAP. 89. Of Turkey or Guinea-hen flower.

Fig. 252. Chequered Daffodil (1)  
Fig. 253. Changeable Chequered Daffodil (2)

The Description.

1. The Chequered Daffodil, or Guinea-hen Flower, hath small narrow grassy leaves; among which there riseth up a stalk three hands high, having at the top one or two flowers, and sometimes three, which consisteth of six small leaves chequered most strangely: wherein Nature, or rather the Creator of all things, hath kept a very wonderful order, surpassing (as in all other things) the curiousest painting that art can set down. One square is of a greenish yellow colour, the other purple, keeping the same order as well on the backside of the flower, as on the inside, although they are blackish in one square, and of a violet colour in an other; insomuch that every leaf seemeth to be the feather of a Guinea-hen, whereof it took his name. The root is small, white, and of the bigness of half a garden bean.

2. The second kind of Chequered Daffodil is like unto the former in each respect, saving that this hath his flower dashed over with a light purple, and is somewhat greater than the other, wherein consisteth the difference.

There are sundry differences and varieties of this flower, taken from the colour, largeness, doubleness, earliness and latenes of flowering, as also from the many or few branches bearing flowers. We will only specify their varieties by their names, seeing their form differs little from those you have here described.

5. *Fritillaria flore purpureo pleno*. The double purple flowered chequered Daffodil.


7. *Fritillaria lutea Someri*. Somers his yellow Chequered Daffodil.

8. *Fritillaria alba purpureo tessulata*. The white Fritillary chequered with purple.


10. *Fritillaria minor flore luteo absoleto*. The lesser dark yellow Fritillary.

11. *Fritillaria angustifolia lutea variegata parvo flore, & altera flore majore*. Narrow leaved yellow variegated Fritillary with small flowers; and another with a larger flower.

12. *Fritillaria minima pluribus floribus*. The least Fritillary with many flowers.

13. *Fritillaria Hispanica umbellifera*. The Spanish Fritillary with the flowers standing as it were in an umbel.
The Names.

The Guinea hen flower is called of Dodonæus, *Flos Meleagris*: of Lobel, *Lilio-narcissus variegata*, for that it hath the flower of a Lily, and the root of Narcissus: it hath been called *Fritillaria*, of the table or bord upon which men play at Chess, which square checkers the flower doth very much resemble; some thinking that it was named *Fritillus*: whereof there is no certainty; for Martial seemeth to call *Fritillus, Abacus*, or the tables whereat men play at dice, in the fifth Book of his Epigrams, writing to Galla.

\[
\begin{align*}
&\text{iam tristis, nucibus per relictis,} \\
&\text{Clamoso revocatur a magistro} \\
&\text{Et blandó male prodíitus Fritillo} \\
&\text{Arcana modo raptus e popína} \\
&\text{Aedílem rogát uðus aélator. \&c.}
\end{align*}
\]

The sad boy now his nuts cast by,
Called unto school by master's cry
And the drunk dicer now betray'd
By flattering tables as he play'd,
Is from his secret tipling house drawn out,
Although the officer he much besought. \&c.

In English we may call it Turkey-hen or Guinea-hen Flower, and also Chequered Daffodil, and Fritillary, according to the Latin.

The Temperature and Virtues.

Of the faculty of these pleasant flowers there is nothing set down in the ancient or later writers, but are greatly esteemed for the beautifying of our gardens, and the bosoms of the beautiful.
CHAP. 90. Of True Saffron, and the wild or Spring Saffrons.

The Description.

Although I have expressed two pictures of Saffron, as you see, yet are you to understand that these two do but set forth one kind of plant, which could not so easily be perceived by one picture as by two, because his flower doth first rise out of the ground nakedly in September, and his long small grassy leaves shortly after the flower, never bearing flower and leaf at once. The which to express, I thought it convenient to set down two pictures before you, with this description, viz. The root is small, round, and bulbous. The flower consisteth of six small blue leaves tending to purple, having in the middle many small yellow strings or threads; among which are two, three, or more thick fat chives of a fiery colour somewhat reddish, of a strong smell when they be dried, which doth stuff and trouble the head. The first picture setteth forth the plant when it beareth flowers, and the other expresseth nothing but leaves.

The Place.

Common, or the best known Saffron groweth plentifully in Cambridgeshire, Saffron-Walden, and other places thereabout, as corn in the fields.

The Time.

Saffron beginneth to flower in September, and presently after spring up the leaves, and remain green all the winter long.

The Names.

The Temperature.

Saffron is a little astringent or binding, but his hot quality doth so over-rule in it, that in the whole essence it is in the number of those herbs which are hot in the second degree, and dry in the first: therefore it also hath a certain force to concoct, which is furthered by the small astriction that is in it, as Galen saith.

The Virtues.

A. Avicenna affirmeth that it causeth head-ache, and is hurtful to the brain, which it cannot do by taking it now and then, but by too much using of it: for too much using of it cutteth off sleep, through want whereof the head and senses are out of frame. But the moderate use of it is good for the head, and maketh the senses more quick and lively, shaketh off heavy and drowsy sleep, and maketh a man merry.

B. Also Saffron strengtheneth the heart, concocteth crude and raw humors of the chest, openeth the lungs, and removeth obstructions.

C. It is also such a special remedy for those that have consumption of the lungs, and are, as we term it, at death's door, and almost past breathing, that it bringeth breath again, and prolongeth life for certain days, if ten, or twenty grains at the most be given with new or sweet wine. For we have found by often experience, that being taken in that sort, it presenty and in a moment removeth away difficulty of breathing, which most dangerously and suddenly happeneth.

D. Dioscorides teacheth, That being given in the same sort it is also good against a surfeit.

E. It is commended against the stoppings of the liver and gall, and against the yellow jaundice: And hereupon Dioscorides writeth, That it maketh a man well coloured. It is put into all drinks that are made to help the diseases of the entrails, as the same author affirmeth, and into those especially which bring down the flowers, the birth, and the after-burden. It provoketh urine, stirreth fleshly lust, and is used in cataplasms and poultices for the matrix and fundament, and also in plasters and cerecloths which serve for old swellings and aches, and likewise for hot swellings that have also in them, S. Anthony's fire.

F. It is with good success put into compositions for infirmities of the ears.

G. The eyes being anointed with the same dissolved in milk, or fennel or rose water, are preserved from being hurt by the smallpox and measles, and are defended thereby from humours that would fall into them.

H. The chives steeped in water, serve to illumine or (as we say) limn pictures and imagery, as also to colour sundry meats and confections. It is with good success given to procure bodily lust. The confections called Crocomagna, Oxyroceum, and Diacurcama, with divers other emplasters and electuaries cannot be made without this Saffron.

I. The weight of ten grains of Saffron, the kernels of Walnuts two ounces, Figs two ounces, Mithridate one dram, and a few sage leaves, stamped together with a sufficient quantity of Pimpernel water, and made into a mass or lump, and kept in a glass for your use, and thereof twelve grains given in the morning fasting, preserveth from the pestilence, and expelleth it from those that are infected.
Wild or Spring Saffron

The Kinds of Spring Saffron

Of wild Saffrons there be sundry sorts, differing as well in the colour of the flowers, as also in the time of their flowering. Of which, most of the figures shall be set forth unto you.

The Description of Wild Saffron.

1. The first kind of wild Saffron hath small short grassy leaves, furrowed or channelled down the midst with a white line or streak: among the leaves rise up small flowers in shape like unto the common Saffron, but differing in colour; for this hath flowers of mixed colours; that is to say, the ground of the flower is white, striped upon the back with purple, and dashed over on the inside with a bright shining murrey colour; the other not. In the middle of the flowers come forth many yellowish chives, without any smell of saffron at all. The root is small, round, and covered with a brown skin or film like unto the roots of common Saffron.

2. The second wild Saffron in leaves, roots, and flowers is like unto the precedent, but altogether lesser and the flowers of this are of a purple violet colour.
3. We have likewise in our London gardens another sort, like unto the other wild Saffrons in every point, saving that this hath flowers of a most perfect shining yellow colour, seeming afar off to be a hot glowing coal of fire, which maketh the difference.

4. There is found among herbarists another sort, not differing from the others, saving that this hath white flowers, contrary to all the rest.
5. Lovers of plants have gotten into their gardens one sort hereof with purple or Violet coloured flowers, in other respects like unto the other.

6. Of these we have another that flowereth in the fall of the leaf, with flowers like to the common Saffron, but destitute of those chives which yield the colour, smell, or taste that the right manured Saffron hath.

7. And of this last kind there is another with broader leaves, and the flower also is larger, with the leaves thereof not so sharp pointed, but more round; the colour being at the first whitish, but afterwards intermixt with some blueness.

8. There is also another of autumn wild Saffrons with white flowers, which sets forth the distinction.

Many sorts there are in our gardens besides those before specified, which I thought needless to entreat of, because their use is not great.

Therefore I will only give the figures and names of some of the chief of them, and refer such as delight to see or please themselves with the varieties for they are no specific differences) of these plants, to the gardens and the books of florists, who are only the preservers and admirers of these varieties, not sought after for any use but delight.
John Gerard and Thomas Johnson

Fig. 262. Narrow Leaved Spring Saffron with a violet flower (9)

Fig. 263. Broad Leaved Spring Saffron with a yellow flower and purple streaks (10)
Fig. 264. Double flowered streaked Spring Saffron (11)

Fig. 265. Broad-leaved purple-flowered Saffron (12)

Fig. 266. Spring Saffron with an ash-coloured streaked flower (13)

Fig. 267. Broad-leaved Spring Saffron with a double yellow streaked flower (14)

The Place.

All these wild Saffrons we have growing in our London gardens. Those which do flower in autumn do grow upon certain craggy rocks in Portugal, not far from the seaside. The other have been sent over unto us, some out of Italy, and some out of Spain, by the labour and diligence of that notable learned herbarist Carolus; out of whose observations, and partly by seeing them in our own gardens, we have set down their descriptions.

That pleasant plant that bringeth forth yellow flowers was sent unto me from Robinus of Paris, that painful and most curious searcher of simples.

The Time.

They flower for the most part in January and February; that of the mountain excepted, which flowereth in September.

The Names.

All these Saffrons are unprofitable, and therefore they be truly said to be *Crocus sylvestres*, or wild Saffrons: in English, spring Saffrons, and vernal Saffrons.
John Gerard and Thomas Johnson

The Temperature and Virtues.

Of the faculties of these we have nothing to set down, for that as there is no known use of them in Physic.
CHAP. 91. Of Meadow Saffron.

The Kinds.

There be sundry sorts of Meadow Saffrons differing very notably as well in the colour of their flowers, as also in stature and country, from whence they had their being, as shall be declared.

The Description.

1. Meadow Saffron hath three or four leaves rising immediately forth of the ground, long, broad, smooth, fat, much like to the leaves of the white Lily in form and smoothness: in the middle whereof spring up three or four thick cobs of the bigness of a small walnut, standing upon short tender foot-stalks three-square, and opening themselves when they be ripe, full of seed something round, and of a blackish red colour: and when this seed is ripe, the leaves together with the stalks do fade and fall away. In September the flowers bud forth, before any leaves appear, standing upon short tender and whitish stems, like in form and colour to the flowers of Saffron, having in the middle small chives or threads of a pale yellow colour, altogether unfit for meat or medicine. The root is round or bulbous, sharper at the one end than at the other, flat on the one side, having a deep cleft or furrow in the same flat side when it flowereth, and not at any time else: it is covered with blackish coats or films; it sendeth down unto the lowest part certain strings or threads. The root itself is full of a white substance, yielding a juice like milk, whilst it is green and newly digged out of
the earth. It is in taste sweet, with a little bitterness following, which draweth water out of the mouth.

2. The second kind of Meadow Saffron is like the precedent, differing only in the colour of the flowers, for that this plant doth bring forth white leaves, which of some hath been taken for the true *Hermodactylus*; but in so doing they have committed the greater error.

![Fig. 270. Hungary Meadow Saffron (3)](image)

3. These two figures express both but one and the self same plant, which is distinguished because it never beareth flowers and leaves both at one time. So that the first figure sets it forth when it is in leaves and seed, and the other when it flowereth; and therefore one description shall suffice for them both. In the spring of the year it bringeth forth his leaves, thick, fat, shining, and smooth, not unlike the leaves of Lilies, which do continue green unto the end of June; at which time the leaves do wither away, but in the beginning of September there shooteth forth of the ground naked milk-white flowers without any green leaf at all: but so soon as the plant hath done bearing of flowers, the root remains in the ground, not sending forth anything until February in the year following.

It bears plentiful store of reddish seed in loose triangular heads. The root hereof is bigger than that of the last described.
4. The small meadow Saffron hath three or four thick fat leaves narrower than any of the rest. The flower appeareth in the fall of the leaf, in shape, colour, and manner of growing like the common Meadow Saffron, but of a more reddish purple colour, and altogether lesser. The leaves in this, contrary to the nature of these plants, presently follow after the flower; and so continue all the winter and spring, even until May or June. The root is bulbous, and not great; it is covered with many blackish red coats, and is white within.
5. This meadow Saffron hath roots and leaves like to those of the last described, but the leaves of the flower are longer and narrower, and the colour of them is white on the inside, green on the middle of the back part, and the rest thereof of a certain flesh colour.

6. The meadow Saffron of Illyria hath a great thick and bulbous root, full of substance: from which riseth up a fat, thick, and gross stalk, set about from the lower part to the top by equal distances, with long, thick, and gross leaves, sharp pointed, not unlike to the leaves of leeks; among which leaves do grow yellowish flowers like unto the English meadow Saffron, but smaller.
7. The Assyrian Meadow Saffron hath a bulbous root, made as it were of two pieces; from the middle cleft whereof riseth up a soft and tender stalk set with fair broad leaves from the middle to the top: among which cometh forth one single flower like unto the common meadow Saffron, or the white Anemone of Matthiolus’ description.

8. The Mountain Wild Saffron is a base and low plant, but in shape altogether like the common meadow Saffron, but much lesser. The flowers are smaller, and of a yellow colour, which setteth forth the difference. The leaves and roots (as Clusius affirms) are more like to the Narcissus; and therefore he calls this *Narcissus Autumnalis minor*, The lesser autumn Narcissus.
9. This, whose figure we here give you, is by Clusius called *Colchicum Byzantium latifolium*, The broad leaved *Colchicum* of Constantinople. The leaves of this are not in form and magnitude much unlike to those of the white Hellebore, neither less nervous, yet more green. It bears many flowers in autumn, so that there come sometimes twenty from one root. Their form and colour are much like the ordinary sort, but that these are larger, and have thicker stalks. They are of a lighter purple without, and of a deeper on the inside, and they are marked with certain veins running amongst these leaves. The roots and seeds of this plant are thrice as large as those of the common kind.

10. This hath roots and leaves like to the first described, but the flower is shorter, and grows upon a shorter stalk; so that it rises but little above the earth: the three inner leaves are of a reddish purple; the three outer leaves are either wholly white, or purplish on the middle in the inside, or streaked with fair purple veins, or spotted with such coloured spots: all the leaves of the flower are blunter and rounder than in the common kind.
11. This in leaves, roots, manner and time of growing, as also in the colour of the flowers, differs not from the first described, but the flowers, as you may perceive by the figure here expressed, are very double, and consist of many leaves.

12. This Colchicum differs little from the first ordinary one, but that the flowers are somewhat less, and the three out-leaves are somewhat bigger than the
three inner leaves; the colour is a little deeper also than that of the common one; but that wherein the principal difference consists, is, That this flowers twice in a year; to wit, in the spring and autumn; and hence Clusius hath called it *Colchicum biflorum*, Twice-flowering Meadow Saffron.

13. This also in the shape of the root and leaves is not much different from the ordinary, but the leaves of the flower are longer and narrower, the colour also when they begin to open and show themselves, is white, but shortly after they are changed into a light purple: each leaf of the flower hath a white thread tipped with yellow growing out of it, and in the middle stands a white three forked one longer than the rest. The flower grows up between three or four leaves narrower than those of the ordinary one, and broader than those of the small Spanish kind. Clusius, to whom we are beholden for this, as also for most of the rest, calls it *Colchicum vernum*, or spring Meadow Saffron, because it then flowers together with the spring Saffrons and Dog's Tooth.

14. There are other Meadow-Saffrons besides these I have mentioned, but because they may be referred easily to same of these, for that their difference chiefly consists either in the doubleness or colour of the flowers, whereof some are striped, some fraided, others variegated, I will not insist upon them, but refer such as desire their further acquaintance to look into the gardens of our florists, as Mr. Parkinson's, Mr. Tuggies, &c. or else into the book of flowers set forth not long since by Mr. Parkinson, where they shall find them largely treated of. Yet I cannot pass over in silence that curious *Colchicum* which is called by some, *Colchicum variegatum Chiense*. The flower thereof is very beautiful, consisting of six pretty broad and sharp pointed leaves, all curiously checkered over with deep blue or purple, the rest of the flower being of a light whitish colour: the leaves, that rise up in the Spring, are not very long, but somewhat broad und sharp pointed; the root is like others of this kind. I have given you an exact and large figure of this, as I took it from the growing flower some three years ago, it being at that time amongst her Majesty's flowers kept at Edgcombe in Surry, in the garden of my much honoured friend Sir John Tunstall, Gentleman usher unto her Majesty.
15. I give you here in this place the true Hermodactyl of the shops, which probably by all is adjudged to this tribe, though none can certainly say what flowers or leaves it bears: the roots are only brought to us, and from what place I cannot tell; yet I conjecture from some part of Syria or the adjacent countries. Now how hard it is to judge of plants by one part or particle, I shall show you more at large when I come to treat of *Pistolochia*, wherefore I will say nothing thereof in this place. These roots, which wanting the malign quality of *colchicum*, either of their own nature, or by dryness, are commonly about the bigness of a chestnut, smooth, flattish, and sharp at the one end, but somewhat full at the other, and on the one side there is a little channel or hollowness, as is in the roots of Meadow-Saffron where the stalk of the flower comes up. Their colour is either white, brown, or blackish on the outside, and very white within, but those are the best that are white both without and within, and may easily be made into a fine white meal or powder.

**The Place.**

Meadow Saffron, or *Colchicum*, growth in Messenia, and in the Isle of Colchis, whereof it took his name. The titles of the rest do set forth their native countries notwithstanding our London gardens are possessed with the most part of them.

The two first do grow in England in great abundance, in fat and fertile meadows, as about Vilford [*sic*: does he mean Alford?] and Bath, as also in the meadows near to a small village in the West part of England, called Shepton Mallet, in the meadows about Bristol, in Kingsthorpe meadow near unto a water-mill as you go from Northampton to Holdenby House, upon the right hand of the way, and likewise in great plenty in Nobottle wood two miles from the said town of
Northampton, and many other places. The rest for the most part may be found in the
gardens of the florists among us.

The Time.

The leaves of all the kinds of Meadow-Saffron do begin to show themselves in
February; the seed is ripe in June. The leaves, stalks, and seed do perish in July, and
their pleasant flowers do come forth of the ground in September.

The Names.

Divers name it in Latin Bulbus agrestis, or wild Bulb: in high Dutch it is
called Zeitloosen; in low Dutch, Titteloosen; in French, Mort au Chien. Some have
taken it to be the true Hermodactyl, yet falsely. Other some call it Filius ante Patrem,
although there is a kind of Lysimachia or Loosestrife so called, because it first
bringeth forth his long cods with seed, and then the flower after, or at the same time at
the end of the said cod. But in this Meadow Saffron it is far otherwise, because it
bringeth forth leaves in February, seed in May, and flowers in September, which is a
thing clean contrary to all other plants whatsoever, for that they do first flower, and
after seed; but this Saffron seedeth first, and four months after brings forth flowers
and therefore some have thought this a fit name for it, Filius ante Patrem; and we
accordingly may call it, The Son before the Father.

Our author in this chapter was of many minds; for first, in the description of
Colchicum Anglicum, being the second, he reproves such as make that white flowered
Colchicum the true Hermodactyl. Then in the description of the eighth he hath these
words, which being omitted in that place I here set down. Of all these kinds (saith he)
of Meadow Saffrons it hath not been certainly known which hath been the true
Hermodactyl; notwithstanding we have certain knowledge that the Illyrian Colchicum
is the physical Hermodactyl. Yet when he comes to speak of the names, after that out
of Dodonæus he had set down the truth in these words; But notwithstanding that
Hermodactyl which we do use in compound medicines, differeth from this (to wit,
Colchicum) in many notable points, for that the true Hermodactyl hath a bulb or
round root, which being dried continueth very white within, and without not wrinkled
at all, but full and smooth, of a mean hardness; and that he had out of the same author
alleged the words Valerius Cordes and Avicenna, (which are here omitted) he
concludes contrary to the truth, his first admonition, and second assertion, That the
white Meadow Saffron which we bave in the West part of England, growing
especially about Shepton Mallet, is the Hermodactyl used in shops.

Those we have in shops seem to be the Hermodactyls of Paulus Ægineta; yet
not those of Nicholaus and Actuarius, which were cordial, and increasers of sperm;
the which the authors of the Adversaria, pag. 55. think to be the Behen album &
rubrum of the Arabians. And to these unknown ones are the virtues set down by our
author in the third place under C, to be referred.

The Temperature.

Meadow Saffron is hot and dry in the second degree.

The Virtues of Hermodactyls.

A. The roots of Hermodactyls are of force to purge, and are properly given
(saith Paulus) to those that have the Gout, even then when the humors are in flowing.
And they are also hurtful to the stomach.
B. The same stamped, and mixed with the whites of eggs, barley meal, and crumbs of bread, and applied plasterwise, ease the pain of the Gout, swellings and aches about the joints.

C. The same strengtheneth, nourisheth, and maketh good juice, increaseth sperm or natural seed, and is also good to cleanse ulcers or rotten sores.

**The correction.**

The powder of Ginger, long Pepper, Aniseed or Cumin seed, and a little mastic, correcteth the churlish working of that Hermodactyl which is used in shops. But those which have eaten of the common meadow Saffron must drink the milk of a cow, or else death presently ensueth.

**The Danger.**

The roots of all the sorts of Meadow Saffrons are very hurtful to the stomach, and being eaten they kill by choking, as Mushrooms do, according unto Dioscorides; whereupon some have called it *Colchicum strangulatorium.*
CHAP. 92. Of Star of Bethlehem.

The Kinds.

There be sundry sorts of wild field Onions called Stars of Bethlehem, differing in stature, taste, and smell, as shall be declared.

The Description.

1. Our common Star of Bethlehem hath many narrow leaves, thick, fat, full of juice, and of a very green colour, with a white streak down the middle of each leaf: among the which rise up small naked stalks, at the top whereof grow flowers compact of six little leaves, striped on the backside with lines of green, the inside being milk-white. These flowers open themselves at the rising of the sun, and shut again at the sun setting; whereupon this plant hath been called by some, *Bulbus Solsequius*. The flowers being past, the seed doth follow enclosed in three-cornered husks. The root is bulbous, white both within and without.

2. The second sort hath two or three grassy leaves proceeding from a cloven bulbous root. The stalk riseth up in the midst naked, but toward the top there do thrust forth more leaves like unto the other, but smaller and shorter; among which leaves do step forth very small, weak, and tender foot-stalks. The flowers of this are on the backside of a pale yellow striped with green, on the inside of a bright shining yellow colour, with saffron coloured threads in their middles. The seed is contained in triangular vessels.
3. This Star of Hungary, contrary to the custom of other plants of this kind, sendeth forth before winter five or six leaves spread upon the ground, narrow, and of some fingers length, somewhat whitish green, and much resembling the leaves of Gillyflowers, but somewhat roughish. In April the leaves beginning to decay, amongst them rises up a stalk bearing at the top a spoke of flowers, which consisting of six leaves apiece show themselves open in May; they in colour are like the first described, as also in the green streak on the lower side of each leaf. The seed is black, round, and contained in triangular heads. The root is bulbous, long, and white.

4. This fourth, which is the *Ornithogalum Hispanicum minus* of Clusius, hath a little white root which sends forth leaves like the common one, but narrower, and destitute of the white line wherewith the other are marked. The stalk is some two handfuls high, bearing at the top thereof some seven or eight flowers growing each above other, yet so, as that they seem to make an umbel each of these flowers hath six leaves of a whitish blue colour, with so many white chives or threads, and a little bluish umbone in the midst. This flowers in April.
5. This fifth first sends up one only leaf two or three inches long, narrow, and of a whitish colour, and of an acid taste: nigh whereto riseth up a small stalk some inch or two high, having one or two leaves thereon, between which come forth small star-flowers, yellow within, and of a greenish purple without. The seed, which is reddish and small, is contained in triangular heads. The root is white, round, and covered with an ash-coloured film.

6. I think it not amiss, hereto to add another small bulbous plant, which Clusius calls *Bulubu monophyllos*, the one leaved Bulb. This from a small root sends forth one rush-leaf of some foot in length, which about two inches above the earth being somewhat broader than in the other places, and guttered, sends forth a little stalk some three inches long, whose top is set with three little flowers, each standing above other, about the bigness here presented unto your view in the figure: each of those consisteth of six very white leaves, and are not much unlike the flowers of the grass of Parnassus, but yet without leaves to sustain the flower, as it hath: six white threads tipped with yellow, and a three-square head with a white pointel possess the midst of the flower; the smell thereof is somewhat like that of the flowers of the Hawthorn. It flowers in the midst of June.
7. Having done with these two small plants, I must acquaint you with three or four larger, belonging also to this Classis. The first of these is that which Dodonæus calls *Ornithogalum major*, and Clusius, *Ornithogalum Arabicum*: This by Lobel and some others is called *Lilium Alexandrinum*, or the Lily of Alexandria, as our author calls it in the chapter of Cotton-Grass. This fair, but tender plant, hath broad green leaves coming from a large white flat bottomed root, amongst which rises up a stalk some cubit high, whose top is garnished with sundry pretty large flowers made of six very white leaves, with a shining blackish head, engirt with six white threads tipped with yellow. This flowers in May.

8. This, which is commonly called *Ornithogalum spicatum*, hath large leaves and roots, and the stalk grows some cubit or more high, whereon grow many star-flowers in shape and colour like those of the ordinary, but larger, and they begin to flower below, and flower upwards to the top. There is a larger sort of this *spicatum*, whose flowers are not streaked with green on their backs. There is also a lesser, differing from the first of these only in bigness.
9. This Neapolitan hath three or four long leaves not much unlike those of the Hyacinths, but narrower, the stalk is pretty thick, some foot high, and hath usually growing thereon some five or six flowers hanging one way, though their stalks grow alternately out of each side of the main stem. These flowers are composed of six leaves, being about an inch long, and some quarter of an inch broad, white within, and of an ash-coloured green without, with white edges, the middle of the flower is possessed by another little flower, consisting also of six little leaves, having in them six threads headed with yellow, and a white pointel. A black wrinkled seed is contained in three-cornered heads, which by reason of their bigness weigh down the stalk. This flowers in April.

The Place.

Stars of Bethlehem, or Star-flowers, especially the first and second, grow in sundry places that lie open to the air, not only in Germany and the Low-countries, but also in England, and in our gardens very common. The yellow kind Lobel found in Somersetshire in the corn fields. The rest are strangers in England; yet we have most of them, as the third, fourth, eighth, and ninth, in some of our choice gardens.

The Time.

These kinds of bulbed plants do flower from April to the end of May.

The Names.

Touching the names; Clusius calls it *Ornithogalos*: Pliny calls it *Ornithogale*: in high Dutch it is called *Feld; Wibel, Ackers Wibel*: as you should say, *Cepa agraria*: in English, Stars of Bethlehem.
The rest are named in their titles and history; but Clusius questions whether the *Bulbus unifolius* be not *Bulbine* of Theophrastus, 7. Hist. 13. Bauhin seems to affirm the *Spicatum* to be *Moly* of Dioscorides and Theophrastus, and *Epimedium* of Pliny.

**The Nature.**

These are temperate in heat and dryness.

**The Virtues.**

A. The virtues of most of them are unknown; yet Hieronymus Tragus writeth, That the root of the Star of Bethlehem roasted in hot embers, and applied with honey in manner of a cataplasm or poultice, healeth old eating ulcers, and softens and discusses hard tumors.

The roots, saith Dioscorides, are eaten both raw and boiled.
CHAP. 93. Of Onions.

The Kinds.

There be, saith Theophrastus, divers sorts of Onions, which have their surnames of the places where they grow: some also lesser, others greater; some be round, and divers others long; but none wild, as Pliny writeth.

The Description.

1. The Onion hath narrow leaves, and hollow within; the stalk is single, round, biggest in the middle, on the top whereof groweth a round head covered with a thin skin or film, which being broken, there appear little white flowers made up in form of a ball, and afterward black seed three-cornered, wrapped in thin white skins. Instead of the root there is a bulb or round head compact of many coats, which oftentimes becometh great in manner of a Turnip, many times long like an egg. To be brief, it is covered with very fine skins for the most part of a whitish colour.

2. The red Onion differeth not from the former but in sharpness and redness of the roots, in other respects there is no difference at all.

3. There is also a Spanish kind, whose root is longer than the other, but in other respects very little different.
4. There is also another small kind of Onion, called by Lobel, Ascalonitis Antiquorum, or Scallions; this hath but small roots, growing many together: the leaves are like to Onions, but less. It seldom bears either stalk, flower, or seed. It is used to be eaten in salads.

The Place

The Onion requireth a fat ground well digged and dunged, as Palladius saith. It is cherished everywhere in kitchen gardens: it is now and then in beds sown alone, and many times mixed with other herbs, as with Lettuce, Parsnips, and Carrots. Palladius liketh well that it should be sown with Savory, because, saith Pliny, it prospereth the better, and is more wholesome.

The Time.

It is sown in March or April, and sometimes in September.

The Names.

The Onion is called in Latin, Cepa, and many times Cepe in the neuter gender: the shops keep that name. The old writers have given unto this many surnames of the places where they grow, for some are named Cipriæ, Sardiæ, Samothraciæ, Ascalonieæ, of a town in Judea, otherwise called Pompeiana: in English, Onions. Moreover, there is one named Marisca, which the country-men call Unio saith Columella; and thereupon it cometh that the Frenchmen call it Oignon, as Ruellius thinkth: and peradventure the Low-Dutch men name it Aueuim, of the French word corrupted: they are called Setaniæ which are very little and sweet; and these are thought to be those which Palladius nameth Cepullæ, as though he called them parvæ Cepæ, or little Onions.
There is an Onion which is without an head or bulb, and hath as it were a long neck, and spends itself wholly in the leaves, and it is often cropped or cut for the pot like the Leeks. Of this Pliny writeth, in his nineteenth book, and sixth chapter. There is with us two principal sorts of Onions, the one serving for a sauce, or to season meat with, which some call Gethyon, and others Pallacana; and the other is the headed or common Onion, which the Germans call Ονίος βοιβέλ: the Italians, cipolla: the Spaniards, Cebolla, Ceba, and Cebola.

The Temperature.

All Onions are sharp, and move tears by the smell. They be hot and dry, as Galen saith, in the fourth degree, but not so extreme hot as Garlic. The juice is of a thin watery and airy substance: the rest is of thick parts.

The Virtues.

A. The Onions do bite, attenuate, or make thin, and cause dryness: being boiled they do lose their sharpeness, especially if the water be twice or thrice changed, and yet for all that they do not lose their attenuating quality.

B. They also break wind, provoke urine, and be more soluble boiled than raw; and raw they nourish not at all, and but a little though they be boiled.

C. They be naught for those that are choleric, but good for such as are replete with raw and phlegmatic humours: and for women that have their terms stayed upon a cold cause, by reason they open the passages that are stopped.

D. Galen writeth, That they provoke the haemorrhoids to bleed if they be laid unto them, either by themselves, or stamped with vinegar.

E. The juice of Onions sniffed up into the nose, purgeth the head, and draweth forth raw phlegmatic humors.

F. Stamped with salt, rue, and honey, and so applied, they are good against the biting of a mad dog.

G. Roasted in the embers, and applied, they ripen and break cold apostumes, boils, and such like.

H. The juice of Onions mixed with the decoction of Pennyroyal, and anointed upon the gouty member with a feather, or a cloth wet therein, and applied, easeth the same very much.

I. The juice anointed upon a pilled or bald head in the sun, bringing again the hair very speedily.

K. The juice taketh away the heat of scalding with water or oil, as also burning with fire and gun-powder, as is set forth by a very skilful Chirurgeon named Master William Clowes, one of the Queen's Chirurgeons; and before him by Ambrose Parey, in his Treatise of Wounds made by Gunshot.

L. Onions diced, and dipped in the juice of Sorrel, and given unto the sick of a tertian ague, to eat, take away the fit in once or twice so taking them.

The Hurts.

The Onion being eaten, yea though it be boiled, causeth head-ache, hurteth the eyes, and maketh a man dim lighted, dulleth the senses, engendereth windiness, and provoketh overmuch sleep, especially being eaten raw.
CHAP. 94. Of Squills, or Sea-Onions.

The Description.

1. The ordinary Squill or Sea Onion hath a pretty large root, composed of sundry white coats filled with a certain viscous humidity, and at the bottom thereof grow forth sundry white and thick fibres. The leaves are like those of Lilies, broad, thick, and very green, lying spread upon the ground, and turned up on the sides. The stalk growth some cubit or more high, straight, naked without leaves, beautified at the top with many star-fashioned flowers, very like those of the bigger *Ornitholagum*. The seed is contained in chaffy three-cornered seed-vessels, being itself also black, smooth, and chaffy. It flowers in August and September, and the seed is ripe in October. The leaves spring up in November and December, after that the seed is ripe, and stalk decayed.
2. The great Sea Onion, which Clusius hath set forth in his *Spanish History*, hath very great and broad leaves, as Dioscorides saith, longer than those of the Lily, but narrower. The bulb or headed root is very great, consisting of many coats or scaly films of a reddish colour. The flower is sometimes yellow, sometimes purple, and sometimes of a light blue. Clusius saith it is like that of the former, I think he means both in shape and colour.

3. The Sea Onion of Valencia, or rather the Sea Daffodil, hath many long and fat leaves, and narrow like those of Narcissus, but smoother and weaker, lying upon the ground; among which riseth up a stalk a foot high, bare and naked, bearing at the top a tuft of white flowers, in shape like unto our common yellow Daffodil. The seed is enclosed in thick knobby husks, black, flat, and thick, very soft, in shape like unto the seeds of *Aristolochia longa*, or long Birth-wort. The root is great, white, long, and bulbous.
4. Red flowered Sea Daffodil, or Sea Onion, hath a great bulb or root like to the precedent; the leaves long, fat, and sharp pointed, the stalk bare and naked, bearing at the top sundry fair red flowers in shape like to the last described.

5. The yellow flowered sea Daffodil, or Sea Onion, hath many thick fat leaves like unto the common Squill or Sea Onion, among which riseth up a tender straight stalk full of juice, bearing at the top many flowers like the common yellow Daffodil. The seed and root is like the precedent.

6. To these may fitly be added that elegant plant which is known by the name of *Narcissus tertius* of Matthiolus, and may be called White Sea Daffodil. This plant hath large roots, as big sometimes as the ordinary Squill; the leaves are like those of other Daffodils, but broader, rounder pointed, and not very long. The stalk is pretty thick, being sometimes round, otherwhiles cornered, at the top whereof grow many large white flowers: each flower is thus composed: it hath six long white leaves, in the midst grows forth a white pointel which is encompassed by a welt or cap divided into six parts, which six are again by threes divided into eighteen jags or divisions, a white thread tipped with green of an inch long, coming forth of the middle of each division. This flowereth in the end of May. It is said to grow naturally about the sea coast of Illyria.

**The Place.**

1. The first is found in Spain and Italy, not far from the seaside.

2. The second also near unto the sea, in Italy, Spain, and Valencia. I have had plants of them brought me from sundry parts of the Mediterranean seaside, as also from Constantinople, where it is numbered among the kinds of *Narcissus*. 
Gerard's Herbal

3. The third groweth in the sands of the sea, in most places of the coast of Narbonne, and about Montpellier.

4. The fourth groweth plentifully about the coasts of Tripoli and Aleppo, near to the sea, and also in the salt marshes that are sandy and lie open to the air.

The Time.

They flower from May to the end of July, and their seed is ripe in the end of August.

The Names.


2. The second is called *Scilla rubra major*.

3, 4, 5. These are all figures of the same plant, but the least (which is the worst) is the figure of the *Adversaria*, where it is called *Pancratium marimum*: Dodonaeus calls it *Narcissus marinus*: and Clusius, *Hemerocallis Valentina*: and it is judged to be the *Emerochalis* of Theophrastus, *Lib. 6. Hist. Cap. 1*. The Spaniards call this *Amores mios*: the Turks, *Con zambach*: the Italians, *Giglio marino*. These three (as I said) differ no otherwise than in the colour of their flowers.

6. The sixth is *Narcissus tertius*, or *Constantinopolitanus*, of Matthiolus: Clusius calls it *Lilionarcissus Hemerocallidis facie*.

The Temperature.

The Sea Onion is hot in the second degree, and cutteth very much, as Galen saith. It is best when it is taken baked or roasted, for so the vehemency of it is taken away.

The Virtues of Squills.

A. The root is to be covered with paste or clay, (as Dioscorides teacheth) and then put into an oven to be baked, or else buried in hot embers till such time as it be thoroughly roasted: for not being so baked or rosted it is very hurtful to the inner parts.

B. It is likewise baked in an earthen pot close covered and set in an oven. That is to be taken especially which is in the midst, which being cut in pieces must be boiled, but the water is still to be changed, till such time as it is neither bitter nor sharp: then must the pieces be hanged on a thread, and dried in the shadow, so that no one piece touch another. Thus used it loseth most of the strength; therefore it is better to use it lightly dried, without any other preparation.

C. These slices of the Squill are used to make oil, wine, or vinegar of Squill. Of this vinegar of Squills is made an Oxymel. The use whereof is to cut thick, tough, and clammy humors, as also to be used in vomits.

D. This Onion roasted or baked is mixed with potions and other medicines which provoke urine, and open the stoppings of the liver and spleen, and is also put into treacles. It is given to those that have the dropsy, the yellow jaundice, and to such as are tormented with the gripings of the belly, and is used in a licking medicine against an old rotten cough, and for shortness of breath.
E. One part of this Onion being mixed with eight parts of salt, and taken in the morning fasting to the quantity of a spoonful or two, looseth the belly.

F. The inner part of Squills boiled with oil and turpentine, is with great profit applied to the chaps or chilblains of the feet or heels.

G. It driveth forth long and round worms if it be given with honey and oil.

The *Pancratium marinum*, or *Hemerocallis Valentina* (saith Clusius) when as I lived with Rondeletius, at Montpellier, was called *Scilla*; and the apothecaries thereof made the trochisks for the composition of treacle: afterwards it began to be called *Pancratium flora Lilii*. Rondeletius also was wont to tell this following story concerning the poisonous and malign quality thereof. There were two Fishermen, whereof the one lent unto the other (whom he hated) his knife, poisoned with the juice of this *Hemerocallis*, for to cut his meat withal; he suspecting no treachery cut his victuals therewith, and so eat them, the other abstaining therefrom, and saying that he had no stomach. Some few days after, he that did eat the victuals died; which showed the strong and deadly quality of this plant: which therefore (as Clusius saith) cannot be the *Scilla Epimenidia* of Pliny, which was eatable, and without malignity.
CHAP. 95. Of Leeks.

The Description.

1. The leaves or the blades of the Leek be long, somewhat broad, and very many, having a keel or crest in the backside, in smell and taste like to the Onion. The stalks, if the blades be not often cut, do in the second or third year grow up round, bringing forth on the top flowers made up in a round head or ball as doth the Onion. The seeds are like. The bulb or root is long and slender, especially of the unset Leek. That of the other Leek is thicker and greater.

2. Most Writers distinguish the common Leek into Porrum capitatum & sectivum; and Lobel gives these two figures wherewith we here present you. Now both these grow of the same seed, and they differ only in culture; for that which is often cut for the use of the kitchen is called sectivum: the other, which is headed, is not cut, but spared, and removed in Autumn.

The Place.

It requireth a mean earth, fat, well dunged and digged. It is very common everywhere in other countries, as well as in England.

The Time.

It may be sown in March or April, and it to be removed in September or October.

The Names.

The Latins call it Porrum. The Emperor Nero had great pleasure in this root, and therefore he was called in scorn, Porrophagus [Leek-eater]. But Palladius in the

**The Temperature.**

The Leek is hot and dry, and doth attenuate or make thin as doth the Onion.

**The Virtues.**

Being boiled it is less hurtful, by reason that it loseth a great part of his sharpness: and yet being so used it yieldeth no good juice. But being taken with cold herbs his too hot quality is tempered.

A. Being boiled and eaten with ptisan or barley cream; it concocteth and bringeth up raw humours that lie in the chest. Some affirm it to be good in a lohoc or licking medicine, to cleanse the pipes of the lungs.

B. The juice drunk with honey is profitable against the bitings of venomous beasts, and likewise the leaves, stamped and laid thereupon.

C. The same juice, with vinegar, frankincense, and milk, or oil of roses, dropped into the ears, mitigateth their pain, and is good for the noise in them.

D. Two drams of the seed, with the like weight of myrtle berries drunk, stop the spitting of blood which hath continued a long time. The same ingredients put into wine keep it from souring, and being already sour, amend the same, as divers write. It cutteth and attenuateth gross and tough humours.

E. Lobel commends the following Loch as very effectual against phlegmatic quinsies, and other cold catarrhs which are like to cause suffocation. This is the description thereof; Take blanched almonds three ounces, four figs, soft *Bdellium* half an ounce, juice of Liquorice, two ounces, of sugar candy dissolved in a sufficient quantity of juice of Leeks, and boiled in *Balneo* to the height of a syrup, as much as shall be requisite to make the rest into the form of an eclegma.

**The Hurts.**

It heateth the body, engendereth naughty blood, causeth troublesome and terrible dreams, offendeth the eyes, dulleth the sight, hurtesth those that are by nature hot and choleric, and is noisome to the stomach, and breedeth windiness.
CHAP. 96. Of Chives and Wild Leeks.

The Kinds.

There be divers kinds of Leeks, some wild, and some of the garden, as shall be declared. Those called Chives have been taken of some for a kind of wild Onion: but all the authors that I have been acquainted with, do accord that there is not any wild Onion.

The Description.

1. Chives bring forth many leaves about a hand-full high, long, slender, round, like to little rushes; amongst which grow up small and tender stalks, sending forth certain knops with flowers like those of the Onion, but much smaller. They have many little bulbs or headed roots fastened together: out of which grow down into the earth a great number of little strings, and it hath both the smell and taste of the Onion and Leek, as it were participating of both.

2. The Vine Leek or French Leek growth up with blades like those of Leeks: the stalk is a cubit high, on the top whereof standeth a round head or button, covered at the first with a thin skin, which being broken, the flowers and seeds come forth like those of the Onion. The bulb or headed root is round, hard, and sound, which is quickly multiplied by sending forth many bulbs.
3. The wild Leek hath leaves much like unto those of Crow-garlic, but larger, and more acrid. The flowers and seeds also resemble those of the Crow-garlic, the seeds being about the bigness of corns of wheat, with small strings coming forth at their ends.

The Time and Place.

1. Chives are set in gardens, they flourish long, and continue many years, they suffer the cold of winter. They are cut and polled often, as is the unset Leek.

2. The Vine Leek growth of itself in vineyards, and near unto vines in hot regions, wherof it both took the name Vine Leek, and French Leek. It beareth his green leaves in winter, and withereth away in the summer. It groweth in most gardens of England.

3. Thus far our author describes and intimates to you a garden Leek, much like the ordinary in all respects, but somewhat larger. But the following names belong to the wild Leek which here we give you in the third place.

The Names.


2. The Vine leek, or rather wild Leek, is called in Greek *Ampeloprason*, of that place where it naturally groweth: it may be called in Latin, *Porrum Vitium*, or *Vitigineum Porrum*: in English, after the Greek and Latin, Vine Leek, or French Leek.
Gerard's Herbal

The Temperature.

Chives are like in faculty unto the Leek, hot and dry. The Vine Leek heateth more than doth the other Leek.

The Virtues.

A. Chives attenuate or make thin, open, provoke urine, engender hot and gross vapours, and are hurtful to the eyes and brain. They cause troublesome dreams, and work all the effects that the Leek doth.

B. The Vine-leek, or Ampeloprason, provoketh urine mightily, and bringeth down the flowers. It cureth the bitings of venomous beasts, as Dioscorides writeth.
The Description.

1. The bulb or head of Garlic is covered with most thin skins or films of a very light white purple colour, consisting of many cloves severed one from another, under which in the ground below groweth a tassel of thready fibres: it hath long green leaves like those of the Leek, among which riseth up a stalk at the end of the second or third year, whereupon doth grow a tuft of flowers covered with a white skin, in which, being broken when it is ripe, appeareth round black seeds.

2. There is also another Garlic which grows wild in some places of Germany and France, which in shape much resembles the ordinary, but the cloves of the roots are smaller and redder. The flower is also of a more dusky and dark colour than the ordinary.

The Place and Times.

Garlic is seldom sown of seed, but planted in gardens of the small cloves in November and December, and sometimes in February and March.

The Names.

It is called in Latin, Allium: The apothecaries keep the Latin name: the Germans call it Knoblauch; the Low Dutch, Look; the Spaniards, Aios, Alho: the Italians, Aglio: the French, Ail or Aux: the Bohemians, Czesnek: the English, Garlic, and Poor Man's Treacle.
The Temperature.

Garlic is very sharp, hot, and dry, as Galen saith, in the fourth degree, and exulcerateth the skin by raising blisters.

The Virtues.

A. Being eaten, it heateth the body extremely, attenuateth and maketh thin thick and gross humors; cutteth such as are tough and clammy, digesteth and consumeth them; also openeth obstructions, is an enemy to all cold poisons, and to the bitings of venomous beasts: and therefore Galen nameth it Theriaca Rusticorum, or the husbandman's Treacle.

B. It yieldeth to the body no nourishment at all, it engendereth naughty and sharp blood. Therefore such as are of a hot complexion must especially abstain from it. But if it be boiled in water until such time as it hath lost his sharpness, it is the less forcible, and retaineth no longer his evil juice, as Galen saith.

C. It taketh away the roughness of the throat, it helpeth an old cough, it provoketh urine, it breaketh and consumeth wind, and is also a remedy for the dropsy which proceedeth of a cold cause.

D. It killeth worms in the belly, and driveth them forth. The milk also wherein it hath been sodden is given to young children with good success against the worms.

E. It helpeth a very cold stomach, and is a preservative against the contagious and pestilent air.

F. The decoction of Garlic used for a bath to sit over, bringeth down the flowers and secondines or after-burden, as Dioscorides saith.

G. It taketh away the morphew, tetters, or ringworms, scabbed heads in children, dandruff and scurf, tempered with honey, and the parts anointed therewith.

H. With Fig leaves and Cumin it is laid on against the bitings of the mouse called in English, a shrew.
CHAP. 98. Of Crow-Garlic and Ramsons.

The Description.

1. The wild Garlic or Crow-garlic hath small tough leaves like unto rushes, smooth and hollow within; among which growth up a naked stalk, round, slippery, hard and sound: on the top whereof, after the flowers be gone, grow little seeds made up in a round cluster like small kernels, having the smell and taste of Garlic. Instead of a root there is a bulb or round head without any cloves at all.

2. Ramsons do send forth two or three broad longish leaves sharp pointed, smooth, and of a light green colour. The stalk is a span high, smooth and slender, bearing at the top a cluster of white star-fashioned flowers. Instead of a root it hath a long slender bulb, which sendeth down a multitude of strings, and is covered with skins or thick coats.

The Time.

They spring up in April and May. Their seed is ripe in August.

The Place

The Crow Garlic groweth in fertile pastures in all parts of England. I found it in great plenty in the fields called the Mantels, on the back side of Islington by London.

Ramsons grow in the woods and borders of fields under hedges, among the bushes. I found it in the next field unto Boobies Barn, under that hedge that bordereth
upon the lane; and also upon the left hand, under an hedge adjoining to a lane that leadeth to Hampstead, both places near London.

The Names.

Both of them be wild Garlic, and may be called in Latin, *Alliua sylvestria*: The first, by Dodonæus and Lobel is called *Allium sylvestrenifolium*.

Ramsions are named of the later practioners, *Allium ursinum*, or Bear's Garlic: *Allium latifolium*, and *Moly Hippocraticum*: in English, Ramsions, Ramsies, and Buckrams.

The Nature.

The temperatures of these wild Garlicks are referred unto those of the gardens.

The Virtues.

A. Wild Garlic, or Crow-Garlic, as Galen saith, is stronger and of more force than the garden Garlic.

B. The leaves of Ramsions be stamped and eaten of divers in the Low-countries, with fish for a sauce, even as we do eat green-sauce made with sorrel.

C. The same leaves may very well be eaten in April and May with butter, of such as are of a strong constitution, and labouring men.

D. The distilled water drunk breaketh the stone, and driveth it forth, and provoketh urine.

The Description.

1,2. The great Mountain Garlic hath long and broad leaves like those of Leeks, but much greater and longer, embracing or clasping about a great thick stalk, soft and full of juice, bigger than a man's finger, and bare toward the top; upon which is set a great head bigger than a tennis ball, covered with a skin after the manner of an Onion. The skin when it cometh to perfection breaketh, and discovereth a great multitude of whitish flowers; which being past, black seeds follow, enclosed in a three-cornered husk. The root is bulbous, of the bigness of a great Onion. The whole plant smelleth very strong like unto Garlic, and is in show a Leek, whereupon it was called scorodoprasum, as if we should say, Garlic Leek; participating of the Leek and Garlic, or rather a degenerate Garlic grown monstrous.

I cannot certainly determine what difference there may be between the plants expressed by the first figure, which is our author's, and the second figure which is taken out of Clusius. Now the history which Clusius gives us to the second, the same is (out of him) given by our author to the first so that by this reason they are of one and the same plant. To the which opinion I rather incline, than affirm the contrary with Bauhin, who distinguishing them, puts the first amongst the Leeks, under the name of Porrum folio latissimo: following Tabernamontanus, who first gave this figure, under the name of Porrum Syriacum.
3. This plant is lesser in all the parts than the former; the root is set about with longer and slenderer bulbs wrapped in brownish skins; the flowers and leaves are like, yet smaller than Garlic.

4. The third, which Clusius makes his second *Scorodoprasum*, hath stalks some two cubits high, having many leaves like those of Leeks from the bottom of the stalk to the middle thereof; their smell is between that of Leeks and Garlic; the rest of the stalk is naked, green, smooth, sustaining at the top a head composed of many bulbs, covered with a whitish skin ending a long green point; which skin by the growth of the bulbs being broken, they show themselves, being first of a purplish, and afterwards of a whitish colour, amongst which are some flowers. The top of the stalk at first twines itself, so that it in some sort represents a serpent; then by little it untwines again, and bears the head straight up. The root consists of many cloves much like that of Garlic.
5. The Broad-leaved Mountain Garlic, or rather the Mountain Ramsons, riseth up with a stalk a cubit high, a finger thick, yet very weak, full of a spongy substance, near to the bottom of a purplish colour, and green above, bearing at the top a multitude of small whitish flowers, somewhat gaping, star-fashion. The leaves are three or four, broad ribbed like the leaves of great Gentian, resembling those of Ramsons, but greater. The root is great and long, covered with many scaly coats and hairy strings.

The Place.

The great mountain Garlic grows about Constantinople, as saith Clusius. I received a plant of it from Mr. Thomas Edwards apothecary of Exeter, who found it growing in the West parts of England.

Victorialis groweth in the mountains of Germany, as saith Carolus Clusius, and is yet a stranger in England for anything that I do know.

The Time.

Most of these plants flower in the months of June and July.

The Names.

Of the first and second I have spoken already. The third is Scorodoprasum minus of Lobel. The fourth is Allium sativum secundum of Dodonæus, and Scorodoprasum secundum of Clusius. The fifth is Allium anguinum of Matthiolus; Ophioscoridon of Lobel, and Victorialis of Clusius and others, as also Allium Alpinum. The Germans call it Steigwurtz.

The Temper.

They are of a middle temper between Leeks and Garlic.
The Virtues.

*Scorodoprasum*, as it partakes of the temper, so also of the virtues of Leeks and Garlic; that is, it attenuates gross and tough matter, helps expectoration, &c.

*Victorialis* is like Garlic in the operation thereof. Some (as Camerarita writeth) hang the root thereof about the necks of their cattle being fallen blind, by what occasion soever it happen, and persuade themselves that by this means they will recover their sight. Those that work in the mines in Germany affirm, That they find this root very powerful in defending them from the assaults of impure spirits or devils, which often in such places are troublesome unto them. Clusius.
CHAP. 100. Of Moly, or the Sorcerer's garlic.

The Description.

1. The first kind of Moly hath for his root a little whitish bulb somewhat long, not unlike to the root of the unset Leek, which sendeth forth leaves like the blades of corn or grass: among which doth rise up a slender weak stalk, fat and full of juice, at the top whereof cometh forth of a skinny film a bundle of milk-white flowers, not unlike to those of Ramsons. The whole plant hath the smell and taste of Garlic, whereof no doubt it is a kind.

2. Serpent's Moly hath likewise a small bulbous root with some fibres fastened to the bottom, from which rise up weak grassy leaves of a shining green colour, crookedly winding and turning themselves toward the point like the tail of a serpent, where of it took his name: the stalk is tough, thick, and full of juice at the top whereof standeth a cluster of small red bulbs, like unto the smallest clove of Garlic, before they be pilled from their skin. And among those bulbs there do thrust forth small and weak foot-stalks, every one bearing at the end one small white flower tending to a purple colour: which being past, the bulbs do fall down upon the ground, where they without help do take hold and root, and thereby greatly increase, as also by the infinite bulbs that the root doth cast off: all the whole plant doth smell and taste of Garlic, whereof it is also a kind.
3. Homer's Moly hath very thick leaves, broad toward the bottom, sharp at the point, and hollowed like a trough or gutter, in the bottom of which leaves near unto the bottom cometh forth a certain round bulb or ball of a goose-turd green colour which being ripe and set in the ground groweth and becometh a fair plant such as is the mother. Among those leaves riseth up a naked smooth thick stalk, of two cubits high, as strong as a small walking staff: at the top of the stalk standeth a bundle of fair whitish flowers, dashed over with a wash of purple colour, smelling like the flowers of Onion. When they be ripe there appeareth a black seed wrapped in a white skin or husk. The root is great and bulbous, covered with a blackish skin on the outside, and white within, and of the bigness of a great Onion.

4. Indian Moly hath very thick fat short leaves, and sharp pointed; in the bosom whereof cometh forth a thick knobby bulb like that of Homer's Moly. The stalk is also like the precedent, bearing at the top a cluster of scaly bulbs included in a large thin skin or film. The root is great, bulbous fashion, and full of juice.
5. *Caucafon*, or withering Moly, hath a very great bulbous root, greater than that of Homer's Moly, and fuller of a slimy juice; from which do arise three or four great thick and broad leaves withered always at the point; wherein consist all the difference between these leaves and those of Homer's Moly, which are not so. In the middle of the leaves riseth up a bunch of smooth greenish bulbs set upon a tender footstalk, in shape and bigness like to a great garden worm, which being ripe and planted in the earth, do also grow unto a fair plant like unto their mother.

These two last mentioned (according to Bauhin, and I think the truth) are but figures of one and the same plant; the later whereof is the better, and more agreeing to the growing of the plant.

6. To these may be fitly added two other Molies: the first of these, which is the yellow Moly, hath roots whitish and round, commonly two of them growing together; the leaves which it sends forth are long and broad, and somewhat resemble those of the Tulip, and usually are but two in number, between which rises up a stalk some foot high, bearing at the top an umbel of fair yellow star-like flowers tipped on their lower sides with a little green. The whole plant smelleth of Garlic.
7. This little Moly hath a root about the bigness of an hazel-nut, white, with some fibres hanging thereat; the stalk is of an handful or little more in height, the top thereof is adorned with an umbel of ten or twelve white flowers, each of which consists of six leaves, not sharp pointed, but turned round, and pretty large, considering the bigness of the plant. This plant hath also usually but two leaves, and those like those of Leeks, but far less.

The Place.

These plants grow in the garden of Mr. John Parkinson apothecary, and with Mr. John Tradescant and some others, studious in the knowledge of plants.

The Time.

They spring forth of the ground in February, and bring forth their flowers, fruit, and seed in the end of August.

The Names.

Some have derived the name Moly from the Greek words meaning to drive away diseases. It may probably be argued to belong to a certain bulbous plant, and that a kind of Garlic. by the words Moliza and Molix. The former, Galen in his Lexicon of some of the difficulter words used by Hippocrates, expounds that Moliza is a Garlic having a simple or single head, and not to be parted or distinguished into cloves: some term it Moly. Erotianus in his Lexicon expounds the latter thus: Molix (saith he) is a head of Garlic, round, and not to be parted into cloves.

The Names in particular.

1. This is called Moly by Matthiolus; Moly Angustifolium by Dodonæus; Moly Dioscorideum by Lobel and Clusius.

3. This same is thought to be the Moly of Theophrastus and Pliny, by Dodonæus, Clusius, &c. and some also would have it to be that of Homer, mentioned in his twentieth *Odyssey*. Lobel calleth it *Moly Liliflorum*.

4. 5. The fourth and fifth being one, are called *Caucafon*, and *Moly Indicum* by Lobel, Clusius, and others.

6. This is *Moly Montanum latifolium flavo flore* of Clusius, and *Moly luteum* of Lobel, *Adversar. par. 2.*

7. This same is *Moly minus* of Clusius.

**The Temperature and Virtues.**

These Molies are very hot, approaching to the nature of Garlic, and I doubt not but in time some excellent man or other will find out as many good virtues of them, as their stately and comely proportion thould seem to be possessed with. But for my part, I have neither proved, nor heard of others, nor found in the writings of the ancients, anything touching their faculties. Only Dioscorides reporteth, That they are of marvellous efficacy to bring down the terms, if one of them be stamped with oil of Fleur-de-lys according to art, and used in manner of a pessary or mother suppository.
CHAP. 101. Of divers other Molies.

Besides the Garlicks and Molies formerly mentioned by our author, and those I have in this edition added, there are divers others, which, mentioned by Clusius, and belonging unto this tribe, I have thought good in this place to set forth. Now for that they are more than conveniently could be added to the former chapters, (which are sufficiently large) I thought it not amiss to allot them a place by themselves.

![Fig. 317. The first Narcissus-leaved Moly (1)](image1)

![Fig. 318. The second Narcissus-leaved Moly (2)](image2)

The Description

1. This, which in face nighest represents the Molies described in the last Chapter, hath a root made of many scales, like as an Onion in the upper part, but the lower part is knotty, and runs in the ground like as Solomon's Seal; the Onion-like part hath many fibres hanging thereat; the leaves are like those of the white Narcissus, very green and shining, amongst which riseth up a stalk of a cubit high, naked, firm, green, and crested; at the top come forth many flowers consisting of six purplish leaves, with as many chives on their insides: after which follow three-square heads, opening when they are ripe, and containing a round black seed.

2. This other being of the same kind, and but a variety of the former, hath softer and more ash-coloured leaves, with the flowers of a lighter colour. Both these flower at the end of June, or in July.
3. This hath five or six leaves equally as broad as those of the last described, but not so long, being somewhat twined, green, and shining. The stalk is some foot in length, smaller than that of the former, but not less stiff, crested, and bearing in a round head many flowers, in manner of growing and shape like those of the former, but of a more elegant purple colour. In seed and root it resembles the precedent. There is also a variety of this kind, with leaves longer and narrower, neither so much twined, the stalks weaker, and flowers much lighter coloured.

This flowers later than the former, to wit, in July and August.

All these plants grow naturally in Leitenberg and other hills near to Vienna in Austria, where they were first found and observed by Carolus Clusius.

4. This hath a stalk some two cubits high, which even to the middle is encompassed with leaves much longer and broader than those of Garlic, and very like those of the Leek: on the top of the smooth and rush-like stalk growtheth a tuft consisting of many dark purple coloured bulbs growing close together, from amongst which come forth pretty long stalks bearing light purple star-fashioned flowers, which are succeeded by three-cornered seed-vessels. The root is bulbous, large, consisting of many cloves, and having many white fibres growing forth thereof. Moreover, there grow out certain round bulbs about the root, almost like those which grow in the head, and being planted apart, they produce plants of the same kind. This is Allium, sive Moly montanum latifolium 1, Clusius.
5. This hath a smooth round green stalk four cubits high, whereon do grow most commonly three leaves narrower than those of the former, and as it were grassy. The top of the stalk sustains a head wrapped in two lax films, each of them running out with a sharp point like two horns, which opening themselves, there appear many small bulbs heaped together, amongst which are flowers composed of six purplish little leaves, and fastened to long stalks. The root is round and white, with many long white fibres hanging thereat. Clusius calls this, *Allium, sive Moly montanum secundum*. And this is Lobel's *Ampeloapason proliferum*.

6. Like to the last described is this in height and shape of the stalk and leaves, as also in the forked or horned skin involving the head, which consisteth of many small bulbs of a reddish green colour, and ending in a long green point; amongst which, upon long and slender stalks hang down flowers like in form and magnitude to the former, but of a whitish colour, with a dark purple streak alongst the middle, and upon the edges of each leaf. The root is round and white, like that of the last described. This Clusius gives under the title of *Allium sive Moly montanum tertium*. 
7. This also hath three rushy leaves, with a round stalk of some cubit high, whose top is likewise adorned with a forked membrane, containing many pale coloured flowers hanging upon long stalks, each flower consisting of six little leaves, with the like number of chives, and a pistil in the midst. This tuft of flowers cut off with the top of the stalk, and carried into a chamber, will yield a pleasant smell (like that which is found in the flowers in the earlier Cyclamen) but it will quickly decay. After these flowers are past succeed three-cornered heads containing a black small seed, not much unlike Gillyflower seed. The root is round like the former, sometimes yielding off-sets. This is Alii montani 4. species 1. of Clusius.

8. There is another kind of this last described, which grows to almost the same height, and hath like leaves, and the head ingirt with the like skinny long pointed husks; but the flowers of this are of a very dark colour. The roots are like the former, with off-sets by their side. This is Clusius his Moly montani quarti species secunda. The roots of the three last described smell of garlic, but the leaves have rather an herby or grass-like smell.

The fifth and sixth of these grow naturally in the Styrian and Austrian Alps. The seventh grows about Pressburg in Hungary [Bratislava in Slovakia], about Niclasburg in Moravia [Mikulov in the Czech Republic], but most abundantly about the Baths in Baden.
9. This grows to the like height as the former, with a green stalk, having few leaves thereupon, and naked at the top, where it carrieth a round head consisting of many star-like small flowers, of a fair purple colour, fastened to short stalks, each flower being composed of six little leaves, withal many chives, and a pistil in the middle. The root is bulbous and white, having sometimes his off-sets by his sides. The smell of it is like Garlic. This groweth also about Pressburg in Hungary, and was there observed by Clusius to bear his flower in May and June. He calleth this *Allium, seu Moly montanum quintum*. 
CHAP. 102. Of White Lilies.

The Kinds.

There be sundry sorts of Lilies, whereof some be wild, or of the field; others tame, or of the garden; some white, others red; some of our own country's growing, others from beyond the seas; and because of the variable sorts we will divide them into chapters, beginning with the two white Lilies, which differ little but in the native place of growing.

The Description

1. The white Lily hath long, smooth, and full bodied leaves, of a grassy or light green colour. The stalks be two cubits high, and sometimes more, set or garnished with the like leaves, but growing smaller and smaller toward the top; and upon them do grow fair white flowers strong of smell, narrow toward the foot of the stalk whereon they do grow, wide or open in the mouth like a bell. In the middle part of them do grow small tender pointels tipped with a dusty yellow colour, ribbed or chamfered on the back side, consisting of six small leaves thick and fat. The root is a bulb made of scaly cloves, full of tough and clammy juice, wherewith the whole plant doth greatly abound.

2. The white Lily of Constantinople hath very large and fat leaves like the former, but narrower and lesser. The stalk riseth up to the height of three cubits, set and garnished with leaves also like the precedent, but much less. Which stalk oftentimes doth alter and degenerate from his natural roundness to a flat form, as it were a lath of wood furrowed or channelled amongst the same, as it were ribs or welts.
The flowers grow at the top like the former, saving that the leaves do turn themselves more backward like the Turk's Cap, and beareth many more flowers than our English white Lily doth.

**The Place.**

Our English white Lily growth in most gardens of England. The other groweth naturally in Constantinople and the parts adjacent, from whence we had plants for our English gardens, where they flourish as in their own country.

**The Time.**

The Lilies flower from May to the end of June.

**The Names.**

The Lily is called in Latin, *Lilium*, and also *Rosa Iunonis*, or Juno's Rose, because as it is reported it came up of her milk that fell upon the ground. For the poets feign, That Hercules, who Jupiter had by Alcumena, was put to Juno's breath whilst she was asleep; and after the sucking there fell away abundance of milk; and that one part was spilt in the heavens, and the other on the earth; and that of this sprang the Lily and of the other the circle in the heavens called *Lacteus Circulus*, or the Milky Way, or otherwise in English Watling Street. Saint Basil in the explication of the 44th Psalm saith, That no flower so lively sets forth the frailty of man's life as the Lily. It is called in high Dutch, *Wei Gilgen*: in low Dutch, *Witte Lilien*: in Italian, *Giglio*: in Spanish, *Lirio blanco*: in French, *Lys blanc*: in English, the white Lily.

The other is called *Lilium album Byzantinum*, and also *Martagon album Byzantinium*: in English, the white Lily of Constantinople: of the Turks themselves, *Sultan Zambach*, with this addition, (that they might be the better known which kind of Lily they meant when they sent roots of them into these countries) *Fa fioragrandi Bianchi*: so that *Sultan Zambach fa fioragrandi Bianchi*, is as much to say as, Sultan's great Lily with white flowers.

**The Nature.**

The white Lily is hot, and partly of a subtle substance. But if you regard the root, it is dry in the first degree, and hot in the second.

**The Virtues.**

A. The root of the garden Lily stamped with honey glueth together sinews that be cut in sunder. It consumeth or scoureth away the ulcers of the head called Achores, and likewise all scurviness of the beard and face.

B. The Root stamped with Vinegar, the leaves of Henbane, or the meal of Barley, cureth the tumours and apostumes of the privy members. It bringeth the hair again upon places which have been burned or scalded, if it be mingled with oil or grease, and the place anointed therewith.

C. The same root roasted in the embers, and stamped with some leaven of rye bread and hog's grease, breaketh pestilential botches. It ripeneth apostumes in the flanks, coming of venery and such like.

D. The flowers steeped in Oil of Olive, and shifted two or three times during summer, and set in the sun in a strong glass, is good to soften the hardness of sinews, and the hardness of the matrix.
E. Florentinus a writer of husbandry saith, That if the root be curiously opened, and therein be put some red, blue, or yellow colour that hath no caustic or burning quality, it will cause the flower to be of the same colour.

F. Julius Alexandrinus the Emperor's physician saith, That the water thereof distilled and drunk causeth easy and speedy deliverance, and expelleth the secondine or after-burthen in most speedy manner.

G. He also saith, the leaves boiled in red wine, and applied to old wounds or ulcers, do much good, and forward the cure, according to the doctrine of Galen in his seventh book *de simpl. Med. facultat*.

H. The root of a white Lily stamped and strained with wine, and given to drink for two or three days together, expelleth the poison of the pestilence, and causeth it to break forth in blisters in the outward part of the skin, according to the experience of a learned gentleman Mr. William Godorus, Sergeant Surgeon to the Queen's Majesty: who also hath cured many of the dropsy with the juice thereof, tempered with barley meal, and baked in cakes, and so eaten ordinarily for some month or six weeks together with meat, but no other bread during that time.
CHAP. 103. Of Red Lilies.

The Kinds.

Here be likewise sundry sorts of Lilies, which we do comprehend under one general name in English, Red Lilies, whereof some are of our own country's growing, and others of beyond the seas, the which shall be distinguished severally in this chapter that followeth.

The Description.

1. The gold-red Lily groweth to the height of two, and sometimes three cubits, and often higher than those of the common white Lily. The leaves be blacker and narrower, set very thick about the stalk. The flowers in the top be many, from ten to thirty flowers, according to the age of the plant, and fertility of the soil, like in form and greatness to those of the white Lily, but of a red colour tending to a saffron, sprinkled or powdered with many little black specks; like to rude unperfect drafts of certain letters. The roots be great bulbs, consisting of many cloves, as those of the white Lily.

2. The many-flowered red Lily hath a root like that of the last described, as also leaves and stalks; the flower also in shape is like that of the former, but of a more light red colour, and in number of flowers it exceedeth the precedent, for sometimes it bears sixty flowers upon one stalk.
3. This red Lily is like unto the former, but not so tall; the leaves be fewer in number, broader, and downy towards the top of the stalk, where it bears some bulbs. The flowers in shape be like the former, saving that the colour hereof is more red, and thick dashed with black specks. The root is scaly like the former.

4. There is another red Lily which hath many leaves somewhat ribbed, broader than the last mentioned, but shorter, and not so many in number. The stalk groweth to the height of two cubits, and sometimes higher, whereupon do grow flowers like the former; among the foot-stalks of which flowers come forth certain bulbs or cloved roots, brown of colour, tending unto redness; which do fall in the end of August upon the ground, taking root and growing in the same place, whereby it greatly increaseth, for seldom or never it bringeth forth seed for his propagation.
5. There is another sort of red Lily having a fair scaly or cloved root, yellow above, and brown toward the bottom; from which riseth up a fair stiff stalk crested or furrowed, of an overworn brown colour, set from the lower part to the branches, whereon the flowers do grow with many leaves, confusedly placed without order. Among the branches close by the stem grow forth certain cloves or roots of a reddish colour, like unto the cloves of Garlic before they are peeled which being fallen upon the ground at their time of ripeness, do shoot forth certain tender strings or roots that do take hold of the ground, whereby it greatly increaseth. The flowers are in shape like the other red Lilies, but of a dark orange colour, resembling a flame of fire spotted with black spots.

6. This hath a much shorter stalk, being but a cubit or less in height, with leaves blackish, and narrower than those aforegoing. The flowers, as in the rest, grow out of the top of the stalk, and are of a purplish saffron colour, with some blackish spots. The root in shape is like the precedent.

The Place.

These Lilies do grow wild in the ploughed fields of Italy and Languedoc, in the mountains and valleys of Etruria and those places adjacent. They are common in our English gardens, as also in Germany.

The Time.

These red Lilies do flower commonly a little before the white Lilies, and sometimes together with them.
The Names.

1. The first of these is thought by some to be the *Bulbus cruentus* of Hippocrates; as also the *Lilium purpureum* of Dioscorides: Yet Matthiolus and some others would have it his *Hemerocallis*. Dodonæus and Bapt. Porta think it the *Hyacinthus* and *Cosmosandalos* of the poets, of which you shall find more hereafter. It is the *Martagon Chymistarum* of Lobel, and the *Lilium aureum maius* of Tabernamontanus.

2. This is *Martagon Chymistarum alterum* of Lobel.

3. This is Clusius his *Martagon bulbiferum secundum*.


5. This Dodonæus calls *Lilium purpureum tertium*, and it is *Martagon bulbiferum tertium* of Clusius.

6. This last Lobel and Dodonæus call *Lilium purpureum minus*.

I have thought good here also to give you that discourse touching the poets’ Hyacinth, which being translated out of Dodonæus, was formerly unfitly put into the chapter of Hyacinths which therefore I there omitted, and have here restored to his due place, as you may see by Dodonæus, *Pempt. 2. lib. 2. Cap. 2.*

There is a Lily which Ovid, *Metamorph. lib 10.* calls *Hyacinthus*, of the boy Hyacinthus, of whose blood he feigneth that this flower sprang, when he perished as he was playing with Apollo, for whose sake, he saith, that Apollo did print certain letters and notes of his mourning. These are his words:

\[
\begin{align*}
Ecce cruor, qui fusus humo signaverat herbas, \\
Definit esse cruor, Tyrioque nitentior ostro \\
Flos oritur, formamque capit, quam Lilia, si non \\
Purpureus color his argenteus esset in illis. \\
Non satis hoc Phœbo est, (is enim fuit auctor honoris) \\
Ispe suos gemitus foliis inscribit, & ai ai, \\
Flos habet inscriptum, funestaque litera ducta est. \\
\end{align*}
\]

Which lately were elegantly thus rendered in English by Mr. Sands:

Behold! the blood which late the grass had dyed
Was now no blood: from thence a flower full blown,
Far brighter than the Tyrian scarlet shone:
Which seem'd the same, or did resemble right
A Lily, changing but the red to white.
Nor so contented, (for the youth received
That grace from Phoebus) in the leaves he weaved
The sad impression of his sighs, Ai, Ai,
They now in funeral characters display, &c.

Theocritus also hath made mention of this Hyacinth, in *Bion's Epitaph*; in the 19th *Idyll* which IDyll by some is attributed to Moschus, and made his third. The words are in English thus:

Now Hyacinth speak thy letters, and once more
Imprint thy leaves with Ai, Ai, as before.
Likewise Virgil hath written hereof in the third *Eclogue* of his *Bucolics*.

---
Gerard's Herbal

*Et me Phoebus amat, Phoebo sua semper apud me
Munera sunt, lauri & suave rubens Hyacinthus.*

Phoebus loves me, his gifts I always have,
The e'er green Laurel, and the Hyacinth brave.

In like manner also Nemesianus in his second *Eclogue* of his *Bucolics*:

*Te sine me, misero mihi Lilia nigra videntur,
Pallentesque Roseae, nec dulce rubens Hyacinthus:
At si tu venias, & candida Lilia fient
Purpureaeque Roseae, & dulce rubens Hyacinthus.*

Without thee, Love, the Lilies black do seem;
The Roses pale, and Hyacinths I deem
Not lovely red. But if thou com'st to me,
Lilies are White, red Rose and Hyacinths be.

The Hyacinths are said to be red which Ovid calleth purple; for the red colour is sometimes termed purple. Now it is thought this *Hyacinthus* is called *Ferrugineus,* for that it is red of a rusty iron colour: for as the putrefaction of brass is named *Ærugo;* so the corruption of iron is called *Ferrugo,* which from the reddish colour is staled also *Rubigo.* And certainly they are not a few that would have *Color ferrugineus* to be so called from the rust which they think *Ferrugo.* Yet this opinion is not allowed of by all men; for some judge, that *Color ferrugineus* is inclining to a blue, for that when the best iron is heated and wrought, when as it is cold again it is of a colour near unto blue, which from *Ferrum* (or iron) is called *ferrugineus.* These latter ground themselves upon Virgil's authority, who in the sixth of his *Æneidos* describeth Charon's ferrugineous barge or boat, and presently calleth the same blue. His words are these:

*Ipse ratem conto subigit velisque minstrat,
Et ferruginea subuectat corpora Cymba.*

He thrusting with a pole, and setting sails at large,
Bodies transports in ferrugineous barge.

And then a little after he adds:

*Cœruleam advertit puppim, ripæque propinquat,*

He then turns in his blue barge, and the shore
Approches nigh to.

And Claudius also, in his second book of the carrying away of Proserpina, doth not a little confirm their opinions; who writeth, That the Violets are painted, *ferrugine dulci,* with a sweet iron colour.

*Sanguineo splendore rosas, vaccinea nigro
Induit, & aulci violas ferrugine pingit.*

He trims the Rose with bloody bright,
And prime-tree berries black he makes,
And decks the Violet with a sweet
Dark iron colour which it takes.

But let us return to the proper names from which we have digressed. Most of the later herbarists do call this plant *Hyacinthus Poeticus,* or the Poets' Hyacinth: Pausanias in his second book of his *Corinthiacs* hath made mention of *Hyacinthus* called of the Hermonians, *Comosandalos,* setting down the ceremonies done by them
on their festival days, in honour of the goddess Chthonia. The priests (saith he) and
the magistrates for that year being, do lead the troupe of the pomp; the women and
men follow after; the boys solemnly lead forth the goddess with a stately show: they
go in white vestures, with garlands on their heads made of a flower which the
inhabitants call Comosandalos, which is the blue or sky-coloured Hyacinth, having
the marks and letters of mourning as aforesaid.

**The Nature**

The flower of the red Lily (as Galen saith) is of a mixed temperature, partly of
thin, and partly of an earthly essence. The root and leaves do dry and cleanse, and
moderately digest, or waste and consume away.

**The Virtues.**

A. The leaves of the herb applied are good against the stinging of serpents.

B. The same boiled and tempered with vinegar are good against burnings, and
heal green wounds and ulcers.

C. The root roasted in the embers, and pounded with oil of roses cureth
burnings, and softeneth hardness of the matrix.

D. The same stamped with honey cureth the wounded sinews and members out
of joint. It takes away the morphew, wrinkles, and deformity of the face.

E. Stamped with vinegar, the leaves of Henbane, and wheat meal, it removeth
hot swellings of the stones, the yard, and matrix.

F. The roots boiled in wine (saith Pliny) causeth the corns of the feet to fall
away within few days, with removing the medicine until it have wrought his effect.

G. Being drunk in honeyed water, they drive out by siege unprofitable blood.
CHAP. 104. Of Mountain Lilies.

Fig. 334. Great Mountain Lily (1)

Fig. 335. Small Mountain Lily (2)

The Description.

1. The great mountain Lily hath a cloved bulb or scaly root like to those of the Red Lily, yellow of colour, very small in respect of the greatness of the plant: From the which riseth up a stalk, sometimes two or three, according to the age of the plant; whereof the middle stalk commonly turneth from his roundness into a flat form, as those of the white Lily of Constantinople. Upon these stalks do grow fair leaves of a blackish green colour, in roundels and spaces as the leaves of Woodruff, not unlike to the leaves of white Lily, but smaller at the top of the stalks. The flowers be in number infinite, or at the least hard to be counted, very thick set or thrust together, of an overworn purple, spotted on the inside with many small specks of the colour of rusty iron. The whole flower doth turn itself backward at such time as the sun hath cast his beams upon it, like unto the Tulip or Turk's Cap, as the Lily or Martagon of Constantinople doth; from the middle whereof do come forth tender pointels with small dangling pendants hanging thereat, of the colour the flower is spotted with.

2. The small mountain Lily is very like unto the former in root, leaf, stalk, and flowers; differing in these points: The whole plant is lesser, the stalk never leaveth his round form, and beareth fewer flowers.

There are two or three more varieties of these plants mentioned by Clusius; the one of this lesser kind, with flowers on the outside of a flesh colour, and on the inside white, with blackish spots as also another wholly white without spots. The third variety is like the first, but differs in that the flowers blow later, and smell sweet.
The Place

These plants grow in the woody mountains of Styria and Hungary, and also in such like places on the North of Frankfurt, upon the Main.

The small sort I have had many years growing in my garden but the greater I have not had till of late, given me by my loving friend Mr. James Garret apothecary of London.

The Time.

These Lilies of the mountain flower at such time as the common white Lily doth, and sometimes sooner.

The Names.

The great mountain Lily is called of Tabernamontanus, *Lilium Saracenicum*, received by Master Garret aforesaid from Lille in Flanders, by the name of *Martagon Imperiale*: of some, *Lilium Saracenicum mas*: It is *Hemerocallis flore rubella*, of Lobel.


The Nature and Virtues.

There hath not been anything left in writing either of the nature or virtues of these plants: notwithstanding we may deem, that God which gave them such seemly and beautiful shape, hath not left them without their peculiar virtues; the finding out whereof we leave to the learned and industrious searcher of nature.
CHAP. 105. Of the Red Lily of Constantinople.

The Description.

1. The red Lily of Constantinople hath a yellow scaly or cloved root like unto the Mountain Lily, but greater: from the which ariseth up a fair fat stalk a finger thick, of a dark purplish colour toward the top, which sometimes doth turn from his natural roundness into a flat form, like as doth the great mountain Lily: upon which stalk grow sundry fair and most beautiful flowers, in shape like those of the mountain Lily, but of greater beauty, seeming as it were framed of red wax, tending to a red lead colour. From the middle of the flower cometh forth a tender pointel or pistil, and likewise many small chives tipped with loose pendants. The flower is of a reasonable pleasant savour. The leaves are confusedly set about the stalk like those of the white Lily, but broader and shorter.

2. This hath a large Lily-like root, from which ariseth a stalk some cubit or more in height, set confusedly with leaves like the precedent. The flowers also resemble those of the last described, but usually are more in number, and they are of a purplish sanguine colour.
3. This differs little from the last, but in the colour of the flowers, which are of a lighter red colour than those of the first described. The leaves and stalks also, as Clusius observeth are of a lighter green.

4. This may also more fitly be termed a variety from the former, than otherwise: for according to Clusius, the difference is only in this, that the flowers grow equally from the top of the stalk, and the middle flower rises higher than any of the rest, and sometimes consists of twelve leaves as it were a twin, as you may perceive by the figure.

The Time

They flower and flourish with the other Lilies.

The Names.


The Nature and Virtues.

Of the nature or virtues there is not anything as yet set down, but it is esteemed especially for the beauty and rareness of the flower; referring what may be gathered hereof to a further consideration.
CHAP. 106. Of the narrow-leaved reflex Lilies.

The Description.

1. The root of this is not much unlike that of other Lilies; the stalk is some cubit high, or better; the leaves are many and narrow, and of a darker green than those of the ordinary Lily the flowers are reflex, like those treated of in the last chapter, of a red or vermilion colour. This flowers in the end of May: wherefore Clusius calls it *Lilium rubrum præcox*, The early red Lily.

2. This plant is much more beautiful than the last described; the roots are like those of Lilies, the stalk some cubit and an half in height, being thick set with small grassy leaves. The flowers grow out one above another, in shape and colour like those of the last described, but oft-times are more in number, so that some one stalk hath borne some 48 flowers. The root is much like the former.

3. This in roots is like those afore described, the stalk is some 2 cubits high, set confusedly with long narrow leaves, with three conspicuous nerves running alongst them. The flowers are ar first pale coloured, afterwards yellow, consisting of six leaves bended back to their stalks, & marked with blackish purple spots.
4. There is also another differing from the last described only in that the flower is not spotted, as that of the former.

The Place.

These Lilies are thought natives of the Pyrenean mountains, and of late years are become denizens in some of our English gardens.

The Time.

The first (as I have said) flowers in the end of May: the rest in June.

The Names.

1. This is called by Clusius *Lilium rubrum præcox*.


3. This is *Lilium flavo flore maculis distinctum* of Clusius, and *Lilium montanum flore* flo of Lodel.

4. This being a variety of the last, is called by Clusius, *Lilium flavo flore maculis non distinctum*.

The Temperature and Virtues.

These in all likelihood cannot much differ from the temper and virtues of other Lilies, which in all their parts they so much resemble.
CHAP. 107. Of the Persian Lily.

The Description.

The Persian Lily hath for his root a great white bulb, differing in shape from the other Lilies, having one great bulb firm or solid, full of juice, which commonly each year setteth off or increaseth one other bulb, and sometimes more, which the next year after is taken from the mother root, and so bringeth forth such flowers as the old plant did. From this root riseth up a fat thick and straight stem of two cubits high, whereupon is placed long narrow leaves of a green colour, declining to blueness as doth those of the Woad. The flowers grow alongst the naked part of the stalk like little bells, of an overworn purple colour, hanging down their heads, every one having his own foot-stalk of two inches long, as also his pistil or clapper from the middle part of the flower; which being past and withered, there is not found any seed at all, as in other plants, but is increased only in his root.

The Place.

This Persian Lily groweth naturally in Persia and those places adjacent, whereof it took his name, and is now (by the industry of travellers into those countries, lovers of plants) made a denizen in some few of our London gardens.

The Time.

This plant flowereth from the beginning of May, to the end of June.

The Names.

This Persian Lily is called in Latin, Lilium Persicum, Lilium Susianum, Pennacio Persiano, and Pannaco Persiano, either by the Turks themselves, or by such as out of those parts brought them into England but which of both is uncertain.
Alphonsus Pancius, Physician to the Duke of Ferrara, when as he sent the figure of this plant unto Carolus Clusius, added this title, *Pennacio Persiano e pianta bellissima & e specie di Giglio o Martagon, diverso della corona Imperiale*: That is in English, This most elegant plant Pennacio of Persia is a kind of Lily or Martagon, differing from the flower called the Crown Imperial.

**The Nature and Virtues.**

There is not anything known of the nature or virtues of this Persian Lily, esteemed as yet for his rareness and comely proportion; although (if I might be so bold with a stranger that hath vouchsafed to travel so many hundreds of miles for our acquaintance) we have in our English fields many scores of flowers in beauty far excelling it.
CHAP. 108. Of the Crown Imperial.

Fig. 344. Crown Imperial

Fig. 345. Double Crown Imperial

Fig. 346. Crown Imperial with Seed

The Description.
The Crown Imperial hath for his root a thick firm and solid bulb, covered with a yellowish film or skin, from the which riseth up a great thick fat stalk two cubits high, in the bare and naked part of a dark overworn dusky purple colour. The leaves grow confusedly about the stalk like those of the white Lily, but narrower: the flowers grow at the top of the stalk, encompassing it round in form of an Imperial crown, (whereof it took his name) hanging their heads downward as it were bells: in colour it is yellowish or to give you the true colour, which bywords otherwise cannot be expressed, if you lay sap berries in steep in fair water for the space of two hours, and mix a little saffron with that infusion, and lay it upon paper, it showeth the perfect colour to limn or illumine the flower withal. The backside of the said flower is streaked with purplish lines, which doth greatly set forth the beauty thereof. In the bottom of each of these bells there is placed six drops of most clear shining sweet water, in taste like sugar, resembling in show fair Orient pearls, the which drops if you take away, there do immediately appear the like: notwithstanding if they may be suffered to stand still in the flower according to his own nature, they will never fall away, no not if you strike the plant until it be broken. Amongst these drops there standeth out a certain pistil, as also sundry small chives tipped with small pendants like those of the Lily; above the whole flowers there grows a tuft of green leaves like those upon the stalk, but smaller. After the flowers be faded, there follow cods or seed-vessels six-square, wherein is contained flat seeds, tough and limber, of the colour of Mace. The whole plant, as well roots as flowers, do savour or smell very like a fox. As the plant groweth old, so doth it wax rich, bringing forth a crown of flowers amongst the uppermost green leaves, which some make a second kind, although in truth they are but one and the self same, which in time is thought to grow to a triple crown, which happeneth by the age of the root, and fertility of the soil; whose figure or type I have thought good to adjoin with that picture also which in the time of his infancy it had.

The Place.

This plant likewise hath been brought from Constantinople amongst other bulbous roots, and made denizens in our London gardens, whereof I have great plenty.

The Time.

It flowereth in April, and sometimes in March, when as the weather is warm and pleasant. The seed is ripe in June.

The Names.

This rare & strange Plant is called in Latin, *Corona Imperialis*, and *Lilium Byzantium*: the Turks do call it *Cauale lale*, and *Tusai*. And as divers have sent into these parts of these roots at sundry times, so have they likewise sent them by sundry names; some by the name Tusai; others, Tousai, and *Tuyschiachi*, and likewise *Turfani* and *Turfanda*. Clusius, and that not without good reason, judgeth this to be the *Hemerocallis* of Dioscorides, mentioned *lib. 3. cap. 120.*

The Nature and Virtues.

The virtue of this admirable plant is not yet known, neither his faculties or temperature in working.

If this be the *Hemerocallis* of Dioscorides, you may find the virtues thereof specified Chapter 73 of this work; where in my judgement they are not so fitly placed as they might have been here: yet we at this day have no knowledge of the physical
operation of either of those plants mentioned in that place, or of this treated of in this chapter.

The Description.

1. There hath not long since been found out a goodly bulbous rooted plant, and termed *Satyrion*, which was supposed to be the true *Satyrion* of Dioscorides, after that it was cherished, and the virtues thereof found out by the studious searchers of nature. Little difference hath been found betwixt that plant of Dioscorides and this *Dens caninus*, except in the colour, which (as you know) doth commonly vary according to the diversity of places where they grow, as it falleth out in Squills, Onions, and the other kinds of bulbous plants. It hath most commonly two leaves, very seldom three; which leaf in shape is very like to *Allium ursinum*, or Ramsons, though far less. The leaves turn down to the groundward; the stalk is tender and flexible like to *Cyclamen*, or Sow-bread, about an handful high, bare and without leaves to the root. The proportion of the flower is like that of Saffron or the Lily flower, full of streams of a purplish white colour. The root is big, and like unto a date, with some fibres growing from it: unto the said root is a small flat half round bulb adjoining, like unto *Gladiolus*, or Corn-flag.

2. The second kind is far greater and larger than the first, in bulb, stalk, leaves, flower, and cod. It yieldeth two leaves for the most part, which do close one within another, and at the first they do hide the flower (for so long as it brings not out his flower) it seems to have but one leaf like the Tulip's, and like the Lily's, though shorter, and for the most part broader; wherefore I have placed it and his kinds next unto the Lilies before the kinds of *Orchis* or Stones. The leaves which it beareth are spotted with many great spots of a dark purple colour, and narrow below, but by little
and little toward the top wax broad, and after that grow to be sharp pointed, in form somewhat near Ramsons, but thicker and more oleous. When the leaves be wide opened the flower showeth itself upon his long weak naked stalk, bowing toward the earth-ward, which flower consisteth of six very long leaves of a fine delayed purple colour, which with the heat of the sun openeth itself, and bendeth his leaves back again after the manner of the Cyclamen flower, within which there are six purple chives, and a white three forked style or pistil. This flower is of no pleasant smell, but commendable for the beauty: when the flower is faded, there succeedeth a three-square husk or bead, wherein are the seeds, which are very like them of Leucoium bulbosum præcox; but longer, slenderer, and of a yellow colour. The root is long, thicker below than above, set with many white fibres, waxing very tender in the upper part, having one or more off-sets, or young shoots, from which the stalk ariseth out of the ground (as hath been said) bringing forth two leaves, and not three, or only one, save when it will not flower.

3. The third kind is in all things like the former, save in the leaves, which are narrower, and in the colour of the flower, which is altogether white, or consisting of a colour mixed of purple and white. Wherefore sith there is no other difference, it shall suffice to have said thus much for the description.

The Place.

These three plants grow plentifully at the foot of certain hills in the green and moist grounds of Germany and Italy, in Styria not far from Graz, as also in Modena and Bologna in Italy, and likewise in some of the choice gardens of this country.

The Time.

They flower in April, and sometimes sooner, as in the middle of March.

The Names.

This plant is called in Latin, Dens Caninus; and some have judged it Satyrium Erythronium. Matthiolus calls it Pseudohermodactylus. The men of the country where it groweth call it Šoftwurtz; and the Physicians about Styria call it Dentali. The second may for distinctions sake be termed Dens caninus flore albo, angustioribus foliis; that is, Dog's tooth with the white flower and narrow leaves.

The Nature.

These are of a very hot temperament, windy, and of an excrementitious nature, as may appear by the virtues.

The Virtues.

A. The women that dwell about the place where these grew, and do grow, have with great profit put the dried meal or powder of it in their childrens pottage, against the worms of the belly.

B. Being drunk with Wine it hath been proved marvellously to assuage the colic passion.

C. It strengtheneth and nourisheth the body in great measure, and being drunk with water it cureth children of the falling sickness.
CHAP. 110. Of Dog's Stones.

The Kinds

Stones or Testicles, as Dioscorides saith, are of two sorts, one named Cynosorchis, or Dog's Stones, the other Orchis Serapias, or Serapis his Stones. But because there be many and sundry other sorts differing one from another, I see not how they may be contained under these two kinds only: therefore I have thought good to divide them as followeth. The first kind we have named Cynosorchis, or Dog's Stones: the second, Testiculus Morionis, or Fool's Stones: the third, Tragorchis, or Goat's Stones: the fourth, Orchis Serapias, or Serapis' Stones: the Fifth, Testiculus odoratus, or sweet smelling Stones, or after Cordus, Testiculus Pamilio, or Dwarf Stones.

The Description.

1. Great Dog's Stones hath four, and sometimes five, great broad thick leaves, somewhat like those of the garden Lily, but smaller. The stalk riseth up a foot or more in height; at the top whereof doth grow a thick tuft of carnation or horse-flesh coloured flowers, thick and close thrust together, made of many small flowers spotted with purple spots, in shape like to an open hood or helmet. And from the hollow place there hangeth forth a certain chive or tassel, in shape like to the skin of a dog, or same such other four footed beast. The roots be round like unto the stones of a dog, or two olivs, one hanging somewhat shorter than the other, whereof the highest or uppermost is the smaller, but fuller and harder. The lowermost is the greatest, lightest, and most wrinkled or shriveled, not good for anything.
2. Whitish Dog's Stones hath likewise smooth, long broad leaves, but lesser and narrower than those of the first kind. The stalk is a span long, set with five or six leaves clasping or embracing the same round about. His spiky flame is short, thick, bushy, composed of many small whitish purple coloured flowers, spotted on the inside with many small purple spots and little lines or streaks. The small flowers are like an open hood or helmet, having hanging out of every one as it were the body of a little man without a head, with arms stretched out, and thighs straddling abroad, after the same manner almost that the little boys are wont to be pictured hanging out of Saturn's mouth. The roots be like the former.

3. Spotted Dog's Stones bring forth narrow leaves, ribbed in some sort like unto the leaves of narrow Plaintain or Ribwort, dashed with many black streaks and spots. The stalk is a cubit and more high: at the top whereof doth grow a tuft or ear of violet-coloured flowers, mixed with a dark purple, but in the hollowness thereof whitish, not of the same form or shape that the others are of, but lesser, and as it were resembling somewhat the flowers of Larkspur. The roots be like the former.

4. Marsh Dog's Stones have many thick blunt leaves next the root, thick streaked with lines or nerves like those of Plantain. The flower is of a whitish red or carnation: the stalk and roots be like the former.
5. This hath five or six little leaves; the stalk is some handful or better in height, set about with somewhat less leaves: the tuft of flowers at the top of the stalk are of a purple colour, small, with a white lip divided into four partitions hanging down, which also is lightly spotted with purple; it hath a little spur hanging down on the hinder part of each flower. The seed is small, and contained in such twined heads as in other plants of this kind. The roots are like the former, but much less.

The Place.

These kinds of Dog's Stones do grow in moist and fertile meadows. The Marsh Dog's Stones grow for the most part in moist and waterish woods, and also in marsh grounds. The 5 grows in many hilly places of Austria and Germany.

The Time.

They flower from the beginning of May to the midst of August.

The Names.

The first and second are of that kind which Dioscorides calleth *Cynosorchos*; that is in English, Dog's Stones, after the common or vulgar speech; the one the greater, the other the lesser.

1. This is *Cynosorchis prior* of Dodonæus, *Cynosorchis nostra major* of Lobel.

2. Dodonæus names this *Cynosorchis altera*. Lobel, *Cynosorchis majoris secunda species*.

3. This Lobel calls *Cynosorchis Delphinia*, &c.: Tabern., *Cynosorchis maculata*.

5. This is Clusius his *Orchis Pannonica quarta*.

**The Temperature.**

These kinds of Dog's Stones be of temperature hot and moist; but the greater or fuller stone seemeth to have much superfluous windiness, and therefore being drunk it stirreth up fleshly lust.

The second, which is lesser, is quite contrary in nature, tending to a hot and dry temperature; therefore his root is so far from moving venery, that contrariwise it stayeth and keepeth it back; as Galen teacheth.

He also affirmeth, that Serapis' Stones are of a more dry faculty, and do not so much prevail to stir up the lust of the flesh.

**The Virtues.**

A. Dioscorides writeth that it is reported, That if men do eat of the great full or fat roots of these kinds of Dog's Stones, they cause them to beget male children; and if women eat of the lesser dry or barren root which is withered or shrivelled, they shall bring forth females. These are some doctors' opinions only.

B. It is further reported, That in Thessalia the women give the tender full root to be drunk in goat's milk, to move bodily lust, and the dry to restrain the same.

**The Choice.**

Our age useth all the kinds of Stones to stir up venery, and the apothecaries mix any of them indifferently with compositions serving for that purpose. But the best and most effectual are the Dog's Stones, as most have deemed: yet both the bulbs or stones are not to be taken indifferently, but the harder and fuller, and that which contains most quantity of juice, for that whiche is wrinkled is less profitable, or not fit at all to be used in medicine. And the fuller root is not always the greater, but often the lesser, especially if the roots be gathered before the plant hath shed his flower or when the stalk first cometh up; for that which is fuller of juice is not the greatest before the seed be perfectly ripe. For seeing that every other year by course one stone or bulb waxeth full, the other empty and perisheth, it cannot be that the harder and fuller of juice should be always the greater; for at such time as the leaves come forth, the fuller then begins to increase, and whilst the same by little & little increaseth, the other doth decrease and wither till the seed be ripe: then the whole plant, together with the leaves and stalks doth forthwith fall away and perish, and that which in the mean time increased, remaineth fresh and full unto the next year.
CHAP. 111. Of Fool's Stones.

The Description.

1. The male Fool's Stones hath five, sometimes six long broad and smooth leaves, not unlike to those of the Lily, saving that they are dashed and spotted in sundry places with black spots and streaks. The flowers grow at the top, tuft or spike fashion, somewhat like the former, but thrust more thick together, in shape like to a fool's hood, or cock's comb, wide open, or gaping before, and as it were crested above, with certain ears standing up by every side, and a small tail or spur hanging down, the backside declining to a violet colour, of a pleasant savour or smell.

2. The female Fool's Stones have also smooth narrow leaves ribbed with nerves like those of Plantain. The flowers be likewise gaping, and like the former, as it were open hoods, with a little horn or heel hanging behind every one of them, and small green leaves sorted or mixed among them, resembling cock's combs, with little ears, not standing straight up, but lying flat upon the hooded flower, in such sort, that they cannot at the sudden view be perceived. The roots are a pair of small stones like the former. The flowers of this sort do vary infinitely in colour, according to the soil or country where they do grow: some bring forth their flowers of a deep violet colour, some as white as snow; some of a flesh colour, and some garnished with spots of divers colours, which are not possible to be distinguished.
3. This hath narrow spotted leaves, with a stalk some foot or more high, at the
top whereof groweth a tuft of purple flowers in shape much like those of the last
described, each flower consisting of a little hood, two small wings or side leaves, and
a broad lip or leaf hanging down.

The Place.

These kinds of Fool's Stones do grow naturally to their best liking in pastures
and fields that seldom or never are dunged or manured.

The Time.

They flower in May and June. Their stones are to be gathered for medicine in
September, as are those of the Dog's Stones.

The Names.

1. The first is called Cynosorchis Morio: of Fuchsius, Orchis mas angustifolia:
of Apuleius, Satyrion: and also it is the Orchis Delphinia of Cornelius Gemma.

2. The second is Cynosorchis morio foemina of Lobel: Orchis angustifolia
foemin. of Fuchsius: Testiculus Morionis foemina of Dodonæus.

3. This is Cynosorchis minimis & secundum caulem, &c. maculosis foliiis, of
Lobel.

The Temperature.

Fool's Stones both male and female are hot and moist of nature.
John Gerard and Thomas Johnson

The Virtues.

These Fool's Stones are thought to have the virtues of Dog's stones, whereunto they are referred.
CHAP. 112. Of Goat's Stones.

The Description.

1. The greatest of the Goat's Stones bringeth forth broad leaves, ribbed in some sort like unto the broad leaved Plantain, but larger: the stalk groweth to the height of a cubit, set with such great leaves even to the top of the stalk by equal
distances. The tuft or bush of flowers is small and flat open, with many tender strings or laces coming from the middle part of those small flowers, crookedly tangling one with another, like to the small tendrils of the Vine, or rather the laces or strings that grow upon the herb Savory. The whole flower consisteth of a purple colour. The roots are like the rest of the Orchides, but greater,

2. The male Goat's Stones have leaves like to those of the garden Lily, with a stalk a foot long, wrapped about even to the tuft of the flower with those his leaves: the flowers which grow in this bush or tuft be very small, in form like unto a lizard, because of the twisted or writhing tails, and spotted heads. Every of these small flowers is at the first like a round close husk, of the bigness of a pea, which when it openeth there cometh out of it a little long and tender spur or tail, white toward the setting of it to the flower; the rest spotted with red dashes, having upon each side a small thing adjoining unto it, like to a little leg or foot; the rest of the said tail is twisted crookedly about, and hangeth downward. The whole plant hath a rank or stinking smell or savour like the smell of a goat, whereof it took his name.

3. The female Goat's Stones have leaves like the male kind, saving that they be much smaller, having many flowers on the tuft resembling the flies that seed upon flesh, or rather ticks. The stones or roots, as also the smell are like the former.

4. This also because of the unpleasant smell may fitly be referred to this classis. The roots hereof are small, and from them arise a stalk some half a foot high, beset with three or four narrow leaves: the tuft of flowers which groweth on the top of this stalk is small, and the colour of them is red without, but somewhat paler within; each flower hanging down a lippe parted in three.

The Place.

1, 2, 3. These kinds of Goat's Stones delight to grow in fat clay grounds, and seldom in any other soil to be found.

4. This grows upon the sea banks in Holland, and also in some places near unto the Hague.

The Time.

They flower in May and June with the other kinds of Orchis.

The Names.

1. Some have named this kind of Goat's Stones in Latin, Testiculus Hircinus, and also Orchis Saurodes, or Scincophora, by reason that the flowers resemble Lizards.

2. The second may be called Tragorchis mas, male Goat's Stones and Orchis Saurodes, or Scincophora, as well as the former.

3. The third, Tragorchis fœmina, as also Coriosmites, and Coriophora, for that the flowers in shape and their ungrateful smell resemble ticks.

The Nature and Virtues.

The temperature and virtues of these are referred to the Fool's Stones, notwithstanding they are seldom or never used in physic, in regard of the stinking and loathsome smell and savor they are possessed with.
CHAP. 113. Of Fox Stones.

The Kinds.

There be divers kinds of Fox-Stones, differing very much in shape of their leaves, as also in flowers: some have flowers wherein is to be seen the shape of sundry sorts of living creatures; some the shape and proportion of flies, in other gnats, some humble bees, others like unto honey bees; some like butterflies, and others like wasps that be dead; some yellow of colour, others white; some purple mixed with red, others of a brown overworn colour: the which severally to distinguish, as well those here set down, as also those that offer themselves daily to our view and consideration, would require a particular volume; for there is not any plant which doth offer such variety unto us as these kinds of Stones, except the Tulips, which go beyond all account: for that the most singular simplest that ever was in these later ages, Carolus Clusius (who for his singular industry and knowledge herein is worthy triple honour) hath spent at the least five and thirty years, sowing the seeds of Tulips from year to year, and to this day he could never attain to the end or certainty of their several kinds of colours. The greatest reason whereof that I can yield is this; that if you take the seeds of a Tulip that bear white flowers, and sow them in some pan or tub with earth, you shall receive from that seed plants of infinite colours: contrariwise, if you sow the seeds of a plant that bear but flowers of variable colours, the most of those plants will be nothing like the plant from whence the seed was taken. It shall be sufficient therefore to set down most of the varieties, and comprehend them in this chapter.
The Description.

1. Butterfly Orchis, or Satyrion, beareth next the root two very broad leaves like those of the Lily, seldom three: the flowers be white of colour, resembling the shape of a butterfly: the stalk is a foot high; the root is two stones like the other kinds of Stones or Cullions, but somewhat sharper pointed.

2. Gnat Satyrion cometh forth of the ground, bearing two, sometimes three leaves like the former, but much smaller. The stalk groweth to the height of an hand, whereon are placed very orderly small flowers like in shape to Gnats, and of the same colour. The root is like the former.

3. The Humble Bee Orchis hath a few small weak and short leaves, which grow scatteringly about the stalk: the flowers grow at the top among the small leaves, resembling in shape the humble bee. The root consisteth of two stones or bulbs, with some few threads annexed thereunto.

4. The Wasp Satyrion growth out of the ground, having stalks small and tender. The leaves are like the former, but somewhat greater, declining to a brown or dark colour. The flowers be small, of the colour of a dry oaken leaf, in shape resembling the great bee, called in English an hornet or drone bee. The root is like the other.
5. The leaves of Bee Satyrion are longer than the last before mentioned, narrower, turning themselves against the sun as it were round. The stalk is round, tender, and very fragile. Atop grow the flowers, resembling the shape of the dead carcass of a Bee. The stones or bulbs of the roots be smaller and rounder than the last described.

6. The Fly Satyrion is in his leaves like the other, saving that they be not of so dark a colour: the flowers be smaller and more plentifully growing about the stalk, in shape like unto flies, of a greenish colour.
7. Yellow Orchis riseth out of the ground with brown leaves, smaller than the last before mentioned: the stalk is tender and crooked. The flowers grow at the top yellow of colour, in shape resembling the yellow flies bred in the dung of kine after rain.

8. The Small Yellow Satyrion hath leaves spread upon the ground, at the first coming the slender stalk riseth up in the midst, of half a hand high. The flowers grow scatteringly toward the top, resembling the flies last before mentioned, dark or rusty of colour. The stones or bulbs are very round.
Fig. 366. Orchids or Satyrions (9-12)

9. Bird's Orchis hath many large ribbed leaves, spread upon the ground like unto those of Plaintain; among the which rise up tender stalks covered even to the tuft of the flowers with the like leaves, but lesser, in such sort that the stalks cannot be seen for the leaves. The flowers grow at the top, not so thick set or thrust together as the others, purple of colour, like in shape unto little birds, with their wings spread abroad ready to fly. The roots be like the former.
10. Spotted Bird's Satyrion hath leaves like unto the former, saving that they be dashed or spotted here and there with dark spots or streaks, having a stalk covered with the like leaves, so that the plants differ not in any point, except the black spots which this kind is dashed with.

11. White Bird's Satyrion hath leaves rising immediately forth of the ground like unto the blades or leaves of Leeks, but shorter; among the which riseth up a slender naked stalk two handfuls high; on the top whereof be white flowers resembling the shape or form of a small bird ready to fly, or a white butterfly with her wings spread abroad. The roots are round, and smaller than any of the former.

12. Soldier's Satyrion bringeth forth many broad large and ribbed leaves, spread upon the ground like unto those of the great plantain: among the which riseth up a fat stalk full of sap or juice, clothed or wrapped in the like leaves even to the tuft of flowers, whereupon doth grow little flowers resembling a little man having a helmet upon his head, his hands and legs cut off, white upon the inside, spotted with many purple spots, and the back part of the flower of a deeper colour tending to redness. The roots be greater than any of the other kinds of Satyrions.

13. Soldier's Cullions hath many leaves spread upon the ground, but lesser than the Soldier's Satyrion, as is the whole plant. The backside of the flowers are somewhat mixed with whiteness, and sometimes are ash coloured: the inside of the flower is spotted with white likewise.

14. Spider Satyrion hath many thin leaves like unto those of the Lily, scatteringly set upon a weak and feeble stalk, whereupon doth grow small flowers, resembling as well in shape as colour the body of a dead humble bee, or rather of a spider; and therefore I think Lobel, who was the author of this name, would have said Arachnitis, a Spider.
15. This by right should have been put next the Gnat Satyrion, described in the second place. It hath short, yet pretty broad leaves, and those commonly three in number, besides those small ones set upon the stem. The flowers are small, and much like those of the second formerly described.

16. Our author gave you this figure in the fourteenth place, under the title of *Orchis Andrachnitis*; but it is of the *Orchis 16. minor* of Tabernam. or *Orchis Angustifolia* of Bauhin. This Orchis is of the kind of the *Myodes*, or Fly Satyrions, but his leaves are far longer and narrower than any of the rest of that kind, and therein consists the only and chiefest difference.

**The Place.**

These kinds of Orchis grow for the most part in moist meadows and fertile pastures, as also in moist woods.

The Bee, the Fly, and the Butterfly Satyrions do grow upon barren chalky hills and heathy grounds, upon the hills adjoining to a village in Kent named Greenhithe, upon long field downs by Southfleet, two miles from the same place, and in many other places of Kent: likewise in a field adjoining to a small grove of trees, half a mile from Saint Alban's, at the South end thereof. They grow likewise at Hatfield near S. Alban's, by the relation of a learned preacher there dwelling, Mr. Robert Abbot, an excellent and diligent herbarist.

That kind which resembleth the white butterfly growth upon the declining of the hill at the north end of Hampstead Heath, near unto a small cottage there in the wayside, as ye go from London to Hendon a village thereby. It growth in the fields adjoining to the pound or pinfold without the gate, at the village called Highgate, near London: and likewise in the wood belonging to a worshipful gentleman of Kent.
named Master Sidley, of Southfleet; where do grow likewise many other rare and dainty simples, that are not to be found elsewhere in a great circuit.

The Time.

They flower for the most part from May to the end of August, and some of them sooner.

The Names.

These kinds of Orchis have not been much written of by the ancients, neither by the late writers to any purpose, so that it may content you for this time to receive the names set down in their several titles, reserving what else might be said as touching the Greek, French, or Dutch names or any general definition until a further consideration.

The Nature and Virtues.

The nature and virtues of these kinds of Orchis are referred unto the others, namely to those of the Fox Stones; notwithstanding there is no great use of these in physic, but they are chiefly regarded for the pleasant and beautiful flowers, wherewith Nature hath seemed to play and disport herself.
There be sundry sorts of sweet smelling Testicles or Stones, whereof the first is most sweet and pleasant in smell, the others of less smell or savour, differing in flower and roots. Some have white flowers, others yellow; some flesh coloured; some dashed upon white with a little reddish wash; some have two stones, others three, and some four, wherein their difference consisteth.

The Description.

1. The first kind of Sweet Stones is a small base and low plant in respect of all the rest: The leaves be small, narrow, and short, growing flat upon the ground; amongst the which riseth up a small weak and tender stalk of a finger long, whereupon do grow small white flowers spike fashion, of a pleasant sweet smell. The roots are two small stones in shape like the other.

2. Triple Orchis hath commonly three, yet sometimes four bulbs or tuberous roots, somewhat long, set with many small fibres or short threads; from the which roots rise immediately many flat and plain leaves, ribbed with nerves amongst them like those of Plantain: among the which come forth naked stalks, small and tender, whereupon are placed certain small white flowers, trace fashion, not so sweet as the former in smell and savour. The top of the stalk whereon the flowers do grow, is commonly as if it were twisted or writhed about.
3. Friesland Lady Traces hath two small round stones or bulbs, of the bigness of the peas that we call rouncifalls; from the which rise up a few hairy leaves, lesser than those of the Triple Stones, ribbed as the small-leaved Plantain: among the which cometh forth a small naked stalk, set round about with little yellow flowers, not trace fashion as the former.

4. Liège Lady Traces hath for his roots two greater stones, and two smaller; from the which come up two and sometimes more leaves, furrowed or made hollow in the midst like to a trough, from the which riseth up a slender naked stalk, set with such flowers as the last described saming thar they be of an overworn yellow colour.

**The Place**

These kinds of Stones or Cullions do grow in dry pastures and heaths, and likewise upon chalky hills, the which I have found growing plentifully in sundry places, as in the field by Islington, near London, where there is a bowling place under a few old shrubby Oaks. They grow likewise upon the heath at Barn Elms, near unto the head of a conduit that sendeth water to the house belonging to the late Sir Francis Walsingham. They grow in the field next unto a village called Thistleworth, as you go from Branford to her Majesty's house at Richmond; also upon a common heath by a village near London called Stepney, by the relation of a learned merchant of London, named Mr. James Cole, exceedingly well experienced in the knowledge of simples.

The yellow kinds grow in barren pastures and borders of fields about Ovenden and Clare in Essex. Likewise near unto Much Dunmow in Essex, where they were showed me by a learned gentleman Master James Twaights, excellently well seen in the knowledge of plants.
Gerard's Herbal

I received some roots of the second from my kind friend Mr. Thomas Wallis of Westminster, the which he gathered at Dartford in Kent, upon a piece of ground commonly called the Brimth: but I could not long get them to grow in a garden, neither do any of the other Satyrions love to be pent up in such strait bounds.

The Time.

These kinds of Stones do flower from August to the end of September.

The Names.

1. The first is called in Latin Testiculus Odoratus: in English, Sweet selling Testicles or Stones, not of the sweetness of the roots, but of the flowers. It is called also Orchis spiralis, or Autumnalis, for that this (as also that which is set forth in the next place) hath the top of the stalk as it were twisted or twined spire fashion, and for that it cometh to flowering in autumn: of our English women they be called Lady-traces; but every country hath a several name; for same calls them Sweet Ballocks, Sweet Cods, Sweet Cullions, and Stander-Grass. In Dutch, Knabenkraut, and Stondelkraut; in French, Satyrion.

2. The second sort is called Triorchis, and also Tetrorchis: in English, Triple Lady-traces, or white Orchis.

3. The third is called Orchis Frisia: in English Friesland Orchis.

4. The last of these kinds of Testicles or Stones is called of some in Latin, Orchis Leodiensis, and Orchis Lutea, as also Basilica minor Serapias, and Triorchis Áeginetæ: In English, Yellow Lady-traces.

The Temperature.

These kinds of Sweet Cullions are of nature and temperature like the Dog's Stones, although not used in physic in times past; notwithstanding later writers have attributed some virtues unto them as followeth.

The Virtues.

A. The full and sappy roots of Lady-traces eaten or boiled in milk, and drunk, provoke venery, nourish and strengthen the body, and be good for such as be fallen into a consumption or hectic fever.
CHAP. 115. Of Satyrion Royal.

The Description.

1. The male Satyrion Royal hath large roots, knobbed, not bulbed as the others, but branched or cut into sundry sections like an hand, from the which come up thick and fat stalks set with large leaves like those of Lilies, but less; at the top whereof groweth a tuft of flowers, spotted with a deep purple colour.

2. The Female Satyrion hath cloven or forked roots, with some fibres joined thereto. The leaves be like the former, but smaller and narrower, and confusedly dashed or spotted with black spots: from the which springeth up a tender stalk, at the top whereof doth grow a tuft of purple flowers, in fashion like unto a Friar's hood, changing or varying according to the soil and climate, sometimes red, sometimes white, and sometimes light carnation or flesh colour.
3. This in roots and leaves is like the former, but that the leaves want the black spots, the stalk is but low, and the top thereof hath flowers of a whitish colour, not spotted: they on the foreside resemble gaping hoods, with ears on each side, and a broad lip hanging down; the back part ends in a broad obtuse spur. These flowers smell like Elder blossoms.

The Place.

The Royal Satyrions grow for the most part in moist and fenny grounds, meadows, and woods that are very moist and shadowy. I have found them in many places, especially in the midst of a wood in Kent called Swanscombe Wood near to Gravesend, by the village Swanscombe, and likewise in Hampstead wood four miles from London.

The Time.

They flower in May and June, but seldom later.

The Names

Royal Satyrion, or finger Orchis is called in Latin, *Palma Christi*; notwithstanding there is another herb or plant called by the same name, which otherwise is called *Ricinus*. This plant is called likewise of some, *Satyrium Basilicum*, or *Satyrium regium*. Some would have it to be *Buzeiden*, or *Buzidan Arabum*, but Avicenna saith *Buzeiden* is a woody Indian medicine: and Serapio saith, *Buzeiden* be hard white roots like those of *Behen album*, and that it is an Indian drug: but contrariwise the roots of *Palma Christi* are nothing less than woody, so that it cannot be the same. Matthiolus would have Satyrion Royal to be the *Digita Citrini* of Avicenna; finding fault with the monks which set forth commentaries upon Mesue's *Compositions*, for doubting and leaving it to the judgement of the discreet reader. Yet
do we better allow of the monks doubt, than of Matthiolus his assertion. For Avicenna's words be these; What is Asabasafra, or Digiti Citrini? and answering the doubt himself, he saith, It is in figure or shape like the palm of a man's hand, of a mixed colour between yellow and white, and it is hard, in which there is a little sweetness, and there is a citrine sort dusty and without sweetness. Rhasis also in the last book of his Continent calls these, Digiti Crocei, or Saffron Fingers; and he saith it is a gum or vein for dyers. Now these roots are nothing less than of a saffron colour, and wholly unfit for dyeing. Wherefore without doubt these words of Avicenna and Rhasis, in the ears of men of judgment do confirme, That Satyrion Royal, or Palma Christi, are not those Digiti Citrini. The Germans call it Creutsblum; the low Dutch, Handekens cruyp; the French, Satyrion royal.

The Temperature and Virtues

The roots of Satyrion Royal are like to Cynosorchis or Dog's Stones, both in savour and taste, and therefore are thought by some to be of like faculties. Yet Nicolaus Nicolus, in the chapter of the cure of a quartan ague, saith, That the roots of Palma Christi are of force to purge upward and downward; and that a piece of the root as long as one's thumb stamped and given with wine before the fit cometh, is a good remedy against old quartans after purgation: and reporteth, That one Baliolus, after he had endured 44 fits, was cured therewith.

This faculty of purging and vomiting, which our author out of Dodonæus, and he out of Nicolus, give to the root of Palma Christi, I doubt it mistaken and put to the wrong place; for I judge it to belong to the Ricinus, which also is called Palma Christi; for that Nicolus saith, a piece of root must be taken as long as one's thumb; now the whole root of this plant is not so long. And besides, Ricinus is known to have a vomitory or purging faculty.

The Kinds

There be sundry sorts of Serapis' Stones, whereof some be male others female; some great, and some of a smaller kind; varying likewise in colour of the flowers, whereof some be white, others purple; altering according to the soil or climate, as the
greatst part of bulbous roots do. Moreover, some grow in marshy and fenny grounds, and some in fertile pastures, lying open to the sun, varying likewise in the shape of their flowers; retaining the form of flies, butterflies, and gnats, like those of the Fox stones.

**The Description.**

1. The white handed Orchis or Satyrion hath long and large leaves, spotted and dashed with black spots, from the which doth rise up a small fragile or brittle stalk of two hands high, having at the top a bush or spoky tuft of white flowers, like in shape to those of *Palma Christi*, whereof this is a kind. The root is thick, fat, and full of juice, fashioned like the hand and fingers of a man, with some tough and fat strings fastened to the upper part thereof.

2. Red Handed Satyrion is a small low and base herb, having a small tender stalk set with two or three small leaves, like unto those of the Leek, but shorter. The flower groweth at the top tuft fashion, of a glistering red colour, with a root fashioned like an hand, but lesser than the former.

3. Serapis' Stones, or Marsh Satyrion hath a thick knobby root, divided into fingers like those of *Palma Christi*, whereof it is a kind: from which rise thick fat and spongeous stalks, let with broad leaves like those of Plantain, but much longer, even to the top of the tuft of flowers; but the higher they rise toward the top the smaller they are. The flower consisteth of many small hooded flowers somewhat whitish, spotted within with deep purple spots; the backside of these little flowers are Violet mixed with purple.

4. Fenny Satyrion (or Serapis' Stones) differeth little from the former, saving that the leaves are smaller, and somewhat spotted, and the tuft of flowers hath not so many green leaves, nor so long, mixed with the flowers, neither are they altogether of so dark or purplish a colour as the former. The roots are like those of the last described.
5. Mountain Orchis or Satyrion hath thick fat and knobby roots, the one of them for the most part being handed, and the other long. It grows like the former in stalks, leaves, and flowers, but is somewhat bigger, with the leaves smoother, and more shining.

6. Clove Satyrion, or sweet smelling Orchis, hath flat and thick roots divided into fingers like those of *Palma Christi*, saving that the fingers are longer, smaller,
and more in number; from the which rise up long and narrow leaves like those of Narcissus or Daffodil: among which cometh forth a small tender stalk, at the top whereof growth a purple tuft compact of many small flowers resembling flies, but in savour and smell like the Clove, or Clove Gillyflower; but far sweeter and pleasanter, as myself with many others can witness now living, that have both seen and smelt them in my garden. After the flower is past, come many seed vessels filled with a small seed, and growing after the manner as you see them here at large expressed in a figure, together with the root also set forth at full.

7. Gelded Satyrion hath leaves with nerves and sinews like to those of Daffodil, set upon a weak and tender stalk, with flowers at the top white of colour; spotted within the flower, and in shape they are like gnats and little flies. The stalk is gelded as it were, or the stones and hands cut off, leaving for the root two long legs or fingers, with many strings fastened unto the top.

8. Frog Satyrion hath small flat leaves set upon a slender weak stem; at the top whereof, grows a tuft of flowers compact of sundry small flowers, which in shape do resemble little frogs, whereof it took his name. The root is likewise gelded, only reserved two small mis-shapen lumps with certain fibres annexed thereto.

9. This also may fitly be added to the last described, the root showing it to be of a kind between the Serapis' and Orchis. It groweth to the height of the former, with short leaves engirting the stalk at their setting on. The flowers on the top resemble a Frog, with their long leaves: and if you look upon them in another posture, they will somewhat resemble little Flies; wherefore Lobel calls it as well Myoides, as Batrachites.
The Time.

These plants flourish in the month of May and June, but seldom after, except some degenerate kind, or that it hath had same impediment in the time when it should have flowered, as often happeneth.

The Names.

We have called these kinds, Serapis' Stones, or Serapiades, especially for that sundry of them do bring forth flowers resembling flies and such like fruitful and lascivious insects, as taking their name from Serapis the god of the citizens of Alexandria in Egypt, who had a most famous temple at Canopus, where he was worshipped with all kind of lascivious wantonness, songs, and dances, as we may read in Strabo, in his seventeenth Book. Apuleius confounds the Orchides and Serapiades, under the name of both the Satyrions: and withal saith it is called Entaticos, Panion, and of the Latins, Testiculae Leporinus. In English we may call them Satyrions, and finger Orchis, and Hare's Stones.

The Nature and Virtues.

Serapis' Stones are thought to be in nature, temperature, and virtues, like unto the Satyrion Royal; and although not so much used in physic, yet doubtless they work the effect of the other Stones.
CHAP. 117. Of Fenny Stones.

The Description.

1. This hath cleft or divided roots like fingers, much like unto the roots of other *Palma Christi*; whereof this is a kind: from the which riseth up a stalk of a foot high, set here and there with very fair lily-like leaves, of colour red, the which do clip or embrace the stalks almost round about, like the leaves of Thoroughwax. At the top of the stalk groweth a fair bush of very red flowers, among the which flowers do grow many small sharp pointed leaves. The seed I could never observe, being a thing like dust that flieth in the wind.

2. The other Marsh handed Satyrion differeth little from the precedent, but in the leaves and flowers, for that the leaves are smaller and narrower, and the flowers are fair white, gaping wide open; in the hollowness whereof appear certain things obscurely hidden, resembling little helmets, which setteth forth the difference.
3. This third Handed Satyrion hath roots fashioned like an hand, with some strings fastened to the upper part of them; from which riseth up a fair stiff stalk armed with large leaves, very notably dashed with blackish spots, clipping or embracing the stalk round about; at the top of the stalk standeth a fair tuft of purple flowers, with many green leaves mingled amongst the same, which maketh the bush or tuft much greater. The seed is nothing else but as it were dust like the other of his kind; and it is contained in such twined vessels as you see espressed apart by the side of the figure; which vessels are not peculiar to this, but common to most part of the other Satyrions.

4. The creeping rooted Orchis or Satyrion without testicles, hath many long roots dispersing themselves, or creeping far abroad in the ground, contrary to all the rest of the Orchids: which roots are of the bigness of straws, in substance like those of Soapwort; from the which immediately doth rise four or five broad smooth leaves like unto the small Plantain, from the which shooteth up a small and tender stalk, at the top whereof groweth a pleasant spiky ear of a whitish colour, spotted on the inside with little specks of a bloody colour. The seed also is very small.
5. This from handed roots like others of this kind sends up a large stalk, sometimes attaining to the height of two cubits; the leaves are much like to those of the Marsh Satyrions; the flowers are of an elegant purple, with little hoods like the top of an helmet (whence Gemma termed the plant, *Cynosorhisch conopsea*; and from the height he called it *Macrocaulos*.) These flowers smell sweet, and are succeeded by seeds like those of the rest of this kindred.

It delights to grow in grounds of an indifferent temper, not too moist nor too dry. It flowers from mid-May to mid-June.

**The Place.**

They grow in rich and fenny grounds, and in shadowy woods that are very moist.

The fourth was found by a learned preacher called Master Robert Abbot, of Bishop's Hatfield, in a boggy grove where a conduit head doth stand, that sendeth water to the Queen's house in the same town.

It grows also plentifully in Hampshire within a mile of a market town called Petersfield, in a moist meadow named Woodmead, near the path leading from Petersfield, towards Buriton.

**The Time.**

They flower and flourish about May and June.

**The Names.**

1. This is *Cynosorhisch Dracuntias* of Lobel and Gemma.
2. This is *Cynosorchis palustris altera Leptaphylla*, of Lobel; *Testiculus Galericulatus*, of Tabernamontanus.

3. Lobel and Gemma term this, *Cynosorchis palustris altera Lophodes, vel nephelodes*.

4. This is *Orchis minor radice repente*, of Camerarius.

5. This by Lobel and Gemma is called *Cynosorchis macrocaulos, sive conopsæa*.

**The Temperature and Virtues.**

There is little use of these in physic; only they are referred unto the handed Satyrions, whereof they are kinds: notwithstanding Dalechampius hath written in his great volume, that the Marsh Orchis is of greater force than any of the Dog's Stones in procuring of lust.

Camerarius of Nuremberg, who was the first that described this kind of creeping Orchis, hath set it forth with a bare description only and I am likewise constrained to do the like, because as yet I have had no trial thereof.
CHAP. 118. Of Bird's Nest.

Bird's Nest hath many tangling roots plaited or crossed one over another very intricately, which ressemblèth a crow's nest made of sticks; from which riseth up a thick soft gross stalk of a brown colour, set with small short leaves of the colour of a dry oaken leaf that hath lain under the tree all the winter long. On the top of the stalk groweth a spiky ear or tuft of flowers, in shape like unto Maimed Satyrion, whereof doubtless it is a kind. The whole plant, as well sticks, leaves, and flowers, are of a parched brown colour.

I received out of Hampshire from my often remembered friend Master Goodyer this following description of a *Nidus avis* found by him the twenty-ninth of June, 1622.

*Nidus avis flore & caule violaceo purpureo colore; an Pseudoleimodoron Clus. Hist. Rar. plant. pag. 270.*

This riseth up with a stalk about nine inches high, with a few small narrow sharp pointed short skinny leaves, set without order, very little or nothing at all wrapping or inclosing the stalk; having a spike of flowers like those of *Orobanche*, without tails or leaves growing amongst them: which fallen, there succeed small seed-vessels. The lower part of the stalk within the ground is not round like *Orobanche*, but slender or long, and of a yellowish white colour, with many small brittle roots growing underneath confusedly, wrapped or folded together like those of the common *Nidus avis*. The whole plant as it appeareth above ground, both stalks, leaves, and flowers, is of a violet or deep purple colour. This I found wild in the border of a field called Marborne, near Habridge in Holybourne, a mile from a town called Alton in
Hampshire, being the land of William Baden. In this place also groweth wild the thistle called \textit{Corona fratrum}. Joh. Goodyer.

\textbf{The Place.}

This bastard or unkindly Satyrion is very seldom seen in these Southerly parts of England. It is reported, that it groweth in the North parts of England, near unto a village called Knaresborough. I found it growing in the middle of a wood in Kent two miles from Gravesend, near unto a worshipful gentleman's house called Master William Swan, of Houk Green. The wood belongeth to one Master John Sidley: which plant I did never see elsewhere; and because it is very rare, I am the more willing to give you all the marks in the wood for the better finding it, because it doth grow but in one piece of the wood: that is to say, the ground is covered all over in the same place near about it with the herb Sanicle, and also with the kind of Orchis called \textit{Hermaphroditica}, or Butterfly Satyrion.

\textbf{The Time}

It flowereth and flourisheth in June and August. The dusty or mealy seed (if it may be called seed) falleth in the end of August but in my judgement it is an unprofitable or barren dust, and not any seed at all.

\textbf{The Names.}

It is called \textit{Satyrium abortirum}: of some, \textit{Nidus avis}: in French \textit{Nid d'oiseau}: in English, Bird's-nest, or Goose-nest: in Low Dutch, \textit{Vogels nest}: in High-Dutch, \textit{Margen dhehen}.

\textbf{The Temperature and Virtues.}

It is not used in physic that I can find in any authority either of the ancient or later writers, but is esteemed as a degenerate kind of Orchis, and therefore not used.