

# “OF THIS GARDEN THOU MAYEST FREELY EAT”:

Genesis 2:16

## BOOKS FOR THE GARDENER In the Kenneth Spencer Research Library

This exhibition was created in 2000 by Sally Haines from the holdings of the Department of Special Collections, Kenneth Spencer Research Library, University of Kansas. An earlier variant was mounted in 1983 under title “All that in This Delightfull Garden Growes”

Quotations, translated from the Czech by Marie and Robert Weatherall, are from *The Gardener’s Year* and *The Insect Play* by the brothers Čapek: Karel and Josef; and *Intimate Things*, and *R.U.R. (Rossum’s Universal Robots)*, by Karel Čapek.



KU Friends  
of the  
Library

Annual Spring Meeting  
TEA in a GARDEN  
Sunday, May 7, 2000  
3:00-5:00 p.m.  
Spencer Research Library

Annual Meeting  
Edwynna Condon Gilbert, President

Introduction to the current exhibition  
*'Of This Garden Thou Mayest Freely Eat'* (Genesis 2:16)

Books for the Gardener

Richard W. Clement, Special Collections Librarian  
Sally Haines, Associate Special Collections Librarian

This exhibition, created by Sally Haines, is drawn entirely from the holdings of the Department of Special Collections and features books from the 15<sup>th</sup> to the 20<sup>th</sup> centuries to delight the bibliophile and gardener alike.

Tea served in the North Gallery, overlooking the campanile.  
Friends of the Linda Hall Library also are invited to attend this event.



detach & return by May 1<sup>st</sup>

We (I) will attend the Annual Spring Meeting of the KU Friends of the Library, May 7<sup>th</sup>.

Name(s) \_\_\_\_\_

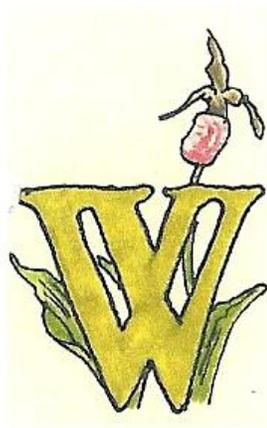
Please remit \$7.50 per person to:  
KU Friends of the Library  
c/o Mary M. Rosenbloom  
502 Watson Library



328 Spencer • University of Kansas Libraries • Lawrence, Kansas 66045

**It is early spring as our Gardens exhibit opens but the True Gardener is nowhere in sight: since January he has been reading the Burpee catalogs, glorying in the appearance of the first snowdrops, and staring at his new packages of seeds like a rabbit at a carrot patch. Today he will be found down on his haunches in shirtsleeves, turning the soil and tending his seedlings. Only the inevitable Kansas rains will bring him inside, perhaps to the Spencer Library, and he may turn up yet again in July when it's 110° in the shade with no relief in sight. The True Gardener knows that within these walls there are enough garden manuals to occupy**

him for months, and that he need not give up his passion altogether because of thunder and lightning or another Dust Bowl. But he will soon discover also that in our library there are as many species and varieties of gardens as of roses or cabbages, and many hybrid forms of Reader-Gardeners, too, from hardy cultivar to shy violet; each will find here conditions for optimum growth. Gardeners of the pharmacologist or herbalist variety will find the Garden of Health; the theologian will discover new Edens and Gethsemanes; the cynic will delight in Edward Gorey's *Evil Garden*; the hedonist can romp through Chaucer's *Romaunt of the Rose*, kindergarteners will find a wonderful child's garden of verses and stories; the patriot will glory in the wealth of books on our native flora, and the Irish musician will find a song in praise of the potato. There's something here for the Gardener in Everyman, so don't just stand and stare at the carrot patch: come on in and nibble.





## **THE GARDEN OF HEALTH: *Gart der Gesundheit*, *Hortus Sanitatis***

**The herbal is a medical garden in book form - whence the titles *Hortus Sanitatis* and *Gart der Gesundheit* - and as such contains data on the appearance, gathering, preparation, and use of medicinal plants. Remedies from the animal and mineral kingdoms are often included as well. Although the works shown here - with one 19<sup>th</sup> century American exception - are from the early part of the Golden Age of the Herbal (roughly 1470-1670), these practical manuals have been popular with scientist and non-scientist alike since antiquity, and a stroll through any bookstore or health-food market today will attest to a resurgence of that popularity. The Department of Special Collections has a rich and growing garden of herbals spanning six centuries.**

VIII



ALKAKENGE

Alkakenge est una species solatri & est frigida & sicca circa secundum gradum . & habet folia similia foliis solatri & habet fructum in cista rotundum similem uesice & fructus granum rubicundum simile uite & uirtus eius proxima est uirtuti uite lupine . Alkakenge delet fistulas . succus eius mixtus cum succo celidonie & cum uiriolo Romano puluerizato intromittendo fistulis pluribus uicibus interpellatis temporibus abluatur fistula cum melle Rosato donec mortificetur fistula hoc senties cum uirulencia amplius emanere non habet sed sanies



**You wake up one morning feeling rather strange; your head aches a little and your back; there is a scratching at the back of your throat and an itching in your nose ... but towards evening ... crumpled in a heap of misery ... this pitiful human ruin gets up, turns around, and staggers to his bookshelves. -- Čapek, "A cold", in *Intimate Things***

**[HERBARIUS LATINUS]:** *Incipit tractatus de virtutibus herbarum.*  
Impressum Vice[n]ciae: per magistrum Leonardum de Basilea &  
Guilielma de Papia, 27 Oct. 1491.

*Pryce C6*

**The Wheezer of Oz:** When it comes to getting rid of a cold, we 21<sup>st</sup> century folk may be no better off than 15<sup>th</sup> century folk. But like them we do have recourse to tried-and-true remedies for the symptoms and can shuffle off to the bookshelf to find solace in herbals old and new. Failing that, we can do what grandpas ancient and modern have done, and reach for the already bottled remedies tucked behind the herbals on the same shelf.

This is the 10<sup>th</sup> edition of an herbal first printed in 1484 by Peter Schoeffer, an associate of Gutenberg, at Mainz. It is a compendium from medieval authors and was probably intended for those who wanted to be able to obtain remedies cheaply and easily in the absence of a doctor, for although the woodcuts are crude, all the plants depicted were either natives of Germany or were at least cultivated locally, and the reader, if not a physician himself, needed only to be reminded of their general appearance. Although *Physalis alkekengi* had reputed medicinal value as a diuretic and the berries were and still are sometimes eaten, it is at present used primarily as an ornamental, not for its flower but for the bladder or husk covering the berry, typical of the whole genus *Physalis*. The plant is commonly known as winter cherry, ground cherry, husk tomato, or Chinese lantern plant.

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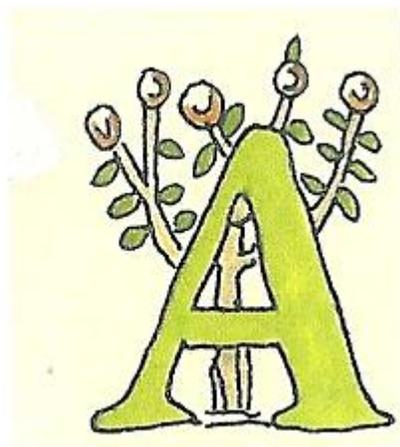
**Y**ou go to the doctor with your ailment; he taps you all over, writes you out a prescription, and tells you to come back in a week. I will bet that you are definitely dissatisfied; you would have liked to hear from the doctor that you have got, let us say, *hyperacidity of the dorsal rheostat*, and that the drops which you are to take are: *glyceroamidomethylethyltoluol*. -- Čapek, "Names", in *Intimate Things*

[HORTUS SANITATIS: Maior]: *Ortus sanitatis de herbis et plantis*.  
De animalibus et reptilibus ... avibus ... piscibus ... lapidibus ...  
Strasbourg: Renonius Beck, 1517. Summerfield D302

**Eye of newt and toe of frog:** The *Hortus sanitatis* shown here in the 8<sup>th</sup> edition, was first published in 1491. It is the last of the three great fundamental herbal compilations, and the most extensive: the first is the *Herbarius* of 1484 (our copy, above, is the 10<sup>th</sup> edition, 1491); the second is the *Gart der Gesundheit*, 1485. The woodcuts are the last for a while to have a medieval look about them. Although many of the cuts are derived from the *Gart*, there is, as herbal historian Agnes Arber has pointed out, a back-sliding to a more artificial look than most of the *Gart* cuts have.

For comparative purposes, the “alkekengi” is shown in all three compilations: in the *Hortus* there is a forced symmetry that disregards the axillary branching of the *Gart* sample; a leaf is added on the left to even things out; a thorn-like part has been substituted for an awkwardly delineated group of leaves at the top right, and another thorn is added to fill up a gap, the whole finished up at the bottom of the branch with a flourish expected more of a calligrapher than of a botanical artist. The text of the *Hortus* is almost entirely rewritten and elaborated upon. The “Operationes” discuss the plants (or the mammals, herps, birds, fish or stones) and their respective medicinal properties.

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he humiliated and streaming creature in slippers by the stove snorts, blows his nose, barks, drinks some infusion or other, sneezes and coughs, skulks about the

room, avoids everybody. He has a slight temperature ... -- Čapek, "A cold", in *Intimate Things*

[**HORTUS SANITATIS: Minor = Gart der Gesundheit**]: Mencz:

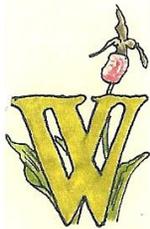
Peter Schöffer, 28 March 1485.

H29, plate 36

**Gesundheit!** A year after Peter Schöffer first published the *Herbarius latinus*, and riding on its success, he produced the *Gart der Gesundheit*, or Garden of Health. Written in the Bavarian vernacular and containing indexes by ailment, etc., it appealed to a wider audience than the *Herbarius*. Many of the plants were obviously drawn from nature and so for the first time made a break with the practice of over a millennium of merely copying earlier book and manuscript sources and thereby perpetuating inaccuracies while creating new ones in the process. Note the vast improvement of the illustration of *Physalis alkekengi* over its delineation in the *Herbarius* to the right.

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**W**e each carry in us, willy nilly, the primordial pagan, the primitive cave-man; we are fascinated by fire. The man ... who has never in his life made a bonfire in the fields and danced round it, is perhaps not descended from old Adam ... perhaps his ancestors were hatched from frog-spawn or fell down with the rain, like the ancestors of vegetarians, total abstainers, and other superhuman beings. -- Čapek, "Fires", in *Intimate Things*

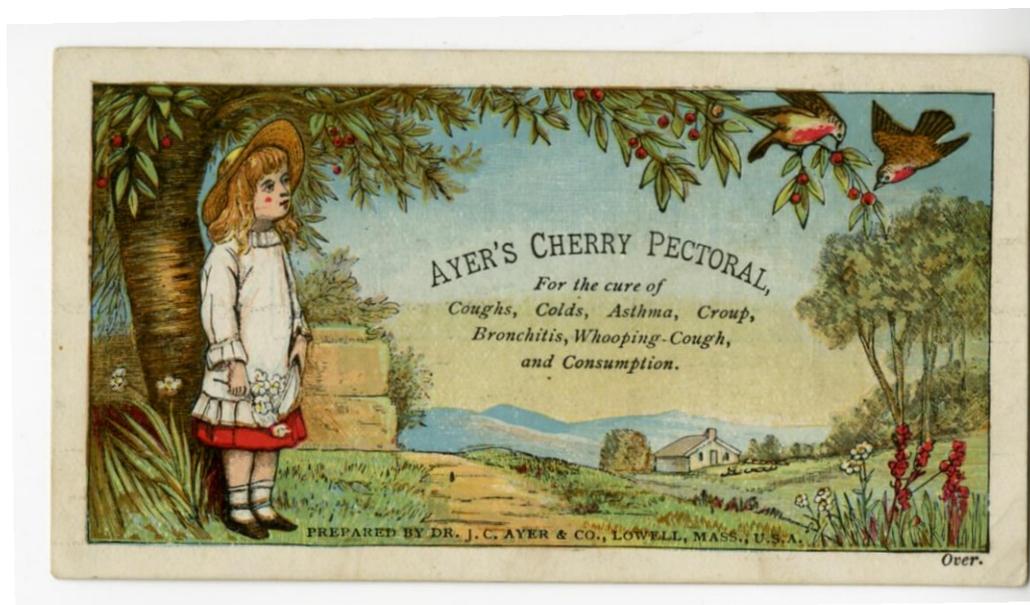
**Pliny the Elder (23-79 A.D.):** *Bücher und Schrifften, von der Natur.* Getruckt zů Franckfurt am Mayn: durch Peter Schmidt, in Verlegung Sigmund Feyrabends und Simon Hüters, 1565. *Summerfield E1059*

**Survival of the bored:** Just as curiosity killed the cat, it killed Pliny too: he was asphyxiated by volcanic dust and gasses when he went

to investigate the same eruption of Vesuvius that destroyed Pompeii in A.D. 79. But Roman naturalist Pliny was curious about a lot of things besides volcanoes: in this chapter he is concerned with determining the suitability of certain plants for human medicinal use, by observation of their use and effects on wild animals. But Charles Darwin, if he read Pliny, would find a bone to pick with him some 1,800 years later when he wrote in *The descent of man*, that “physiological experiment on animals is justifiable for real investigation, but not for mere damnable and detestable curiosity”.  
Lighten up, Chuck.

Roughly contemporary with Dioscorides and like Dioscorides, Pliny is cited frequently in medieval botanical literature. His only surviving work is the encyclopaedic *Naturalis historia*, the earliest extant manuscript of which dates from the 10<sup>th</sup> century. Although his work was a compilation and contained nothing original, we have him to thank for the survival of some of the writings of those ancient herbalists Diocles of Carystus, and Crataeus.

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**D**ieser Tractat helt yn von be-  
reytung der wein zu gesunt-  
heyt vnnnd nutzbarkeyt der menschen.



at that time Jesus said to his disciples” - but just  
what the time was like, what hour of the day it was,

**and what season of the year, of that the Bible says nothing.**

**‘At that time’ was, perhaps just such a grey November day as this. It was cold ... One can imagine Simon called Zelotes with an awful cold ...**

**“It’s for you when you have a chill,” explained Andrew. “You make a garlic soup, sweat it out of you, and there it is.”**

**“Or wine with cinnamon,” said Mark. “Very hot wine with a little honey. Get them to make it for you, Simon.”** -- Čapek, “Autumn picture”, in *Intimate Things*

**Arnaldus de Villanova (1235?-1311):** *Dyser tractat helt yn von Bereytung der Wein zů Gesuntheyt uund Nutzbarkeyt der Menschen.* Getruckt zů Strassburg: durch Matthiam Hupffuff, 1512.

*Summerfield C1173*

**Wine for thy stomach’s sake:** Arnaldus de Villanova was one of the most interesting men of the Middle Ages: physician, surgeon, botanist, alchemist, philosopher, lay theologian who was often in trouble for heretical writings, adviser to and ambassador of kings and popes.

His *Liber de Vinis* was written sometime between 1309 and 1311. The first printed edition, 1478, in German, was the earliest printed book on wine. Although it is not an herbal in the strictest sense we include it in the Garden of Health because it is a medical book. Arnaldus was not interested in wine as a beverage but for the treatment and prevention of disease, or as one translator put it, he told his readers “how to improve their cocktails to the benefit of their livers, spleens, brains and other organs.”

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**H**onest, self-evident truths are to a man like his glands or his kidneys; he does not even know about them, but they function silently and without stopping. A man does not defend his kidneys; if he were attacked he would defend his life, not his kidneys. But if he admits into his being some thought which does not blend with it as reliably as the glands or kidneys, the organism defends itself by a feeling of misgiving and repudiation. There is no way of expressing it: it is a sheer physical reaction to wrongly functioning ideas. -- Čapek, "The inner voice", in *Intimate Things*

**Pietro Andrea Mattioli (1501-1577): *Commentarii in sex libros ... de medica materia*. Venetiis: ex officina Valgrisiana, 1565.**

*Summerfield E696*

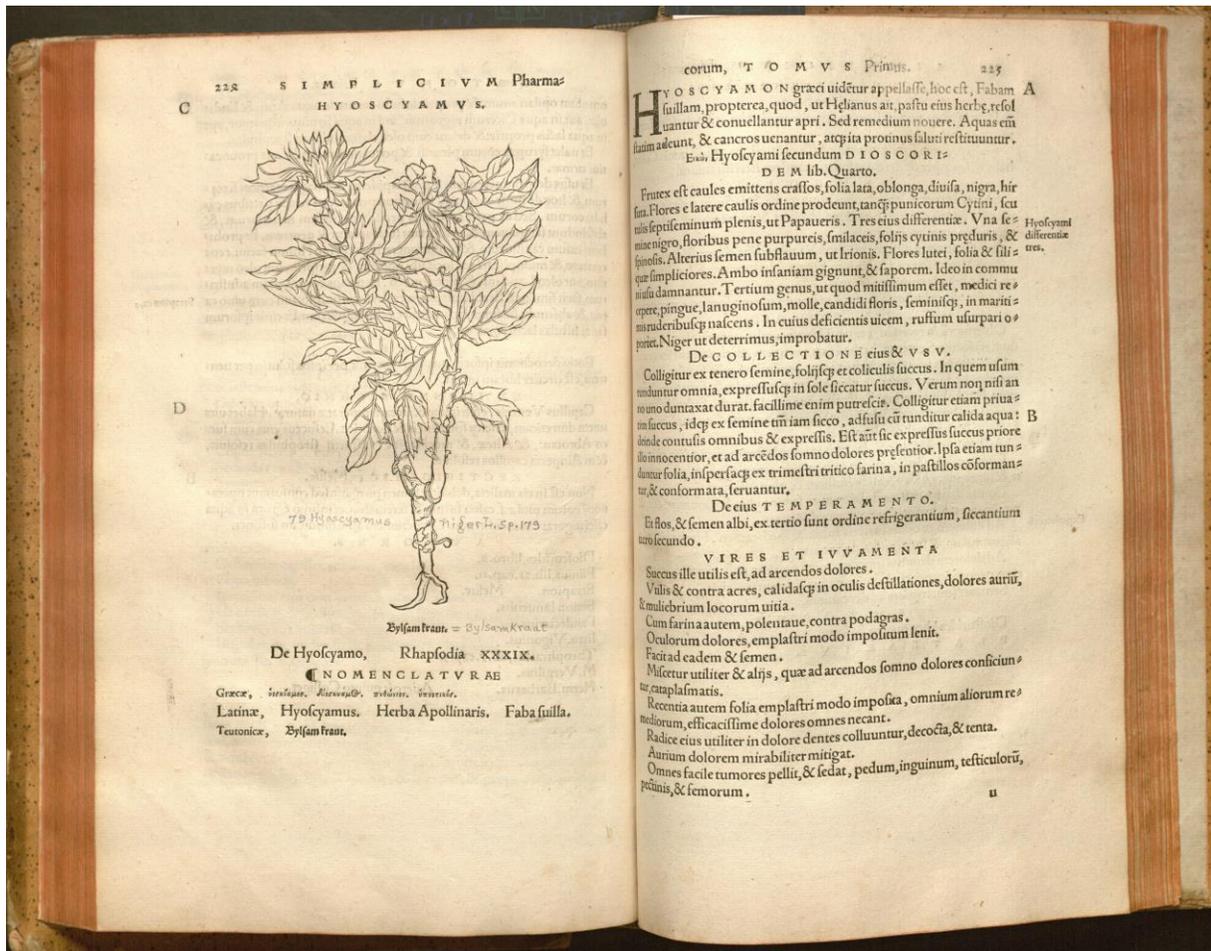
**Give me to drink mandragora:** According to The Bard, thus did Cleopatra choose to anaesthetize herself and avoid the boredom of a few days without Anthony.

According to the medieval “Doctrine of Signatures”, every plant held some outward and visible clue to its medicinal value. A walnut resembled the human brain and so was eaten in order to cure a headache. Lima beans would alleviate a kidney infection. The resemblance of the solanaceous mandrake root to the human body qualified it as a cure-all, and in time the human imagination saw so many separate organs represented in the root that it came to have more superstition connected with it and more cures ascribed to it than any other plant.

Like many of its relatives in the nightshade family, *Mandragora officinarum* does in fact contain alkaloids and its narcotic properties were recognized long before the Doctrine of Signatures. Along with its sister henbane it may have been one of the first anaesthetics. Rituals connected with digging up the plant were complicated, and woe to the man who heard its cry as it was torn from the ground. Stories connected with collecting the mandrake got a good debunking from the English botanist William Turner. It is no longer a recognized pharmaceutical, although it is still used as a pain killer and aphrodisiac in parts of southern Europe, and figures prominently in the folklore in areas of the world where it is found. It is not to be confused with the American mandrake, or May-apple, *Podophyllum peltatum*.

The *Commentarii* on Dioscorides of Italian botanist and physician Mattioli are considered his most important work. The 1<sup>st</sup> edition, published in Italian in 1544, was followed by about 44 more editions in Italian, Latin, French, German, and Czech; 14 of them, including the volume shown, were published by Valgrisi. Special Collections keeps a close watch on the booksellers’ catalogs for works to add to our 20-some editions of the *Commentarii* and other botanical works of Mattioli.

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**I**t's appalling the number of leaves a caterpillar uses up." -- The butterfly, Victor, in Čapek's *The Insect Play*

**Otto Brunfels (1488-1534):** *Herbarum vivae eicones*. Argentorati: apud Ioannem Schottu[m], 1532. 2 volumes. Volume [?]

Summerfield E60

**Precious bane:** An Old World native, *Hyoscyamus niger*, or black henbane, is the source of important antispasmodic drugs, and this species along with other members of the nightshade family is used in heart and circulation therapy whenever atropine is indicated. Like *Datura* and other sister genera, it is deadly in overdose.

The modern age of botany begins with Brunfels' *Herbarum vivae eicones*. The break with the Middle Ages is reflected in the title: the illustrations are indeed from living plants, not copied from earlier works. But, whereas the botanical artist today attempts to depict a typical plant specimen, Brunfels' artist, Hans von Weiditz, went almost too far in the direction of realism and drew exactly what he saw: worm-eaten leaf, broken stem and all.

Before Weiditz, most woodcut plant illustration in books had not been realistic, with few exceptions; and because the text is not on a par with the illustrations, Weiditz should perhaps be given a more prominent place in botanical history.

Like most botanists of his day Brunfels was apparently unaware that species differ in different locales, so his descriptions often do not fit the plants depicted, for although his illustrations are taken from local plants, most of his knowledge of botany was from the works of earlier authorities, such as Dioscorides, working in different climes. Brunfels' contributions to botany were to provide the medium for Weiditz's art and to encourage Hieronymus Bock in the production of what might be called the first scientific herbal, the *Kreuter Buch* of 1539.

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ome people say that charcoal should be added, and others deny it; some recommend a dash of yellow sand, because it is supposed to contain iron, while others warn you against it for the very fact that it does contain iron. Others, again, recommend ... a handful from a fresh molehill ... and a handful from the grave of a hanged virgin – all that should be well mixed (gardening books do not say whether at the new moon or full, or on a midsummer night) ... -- Čapek, *The gardener's Year*

**Matthias de L'Obel (1538-1616):** *Plantarum seu Stirpium historia*.  
Antverpiae: ex officina Christophori Plantini, 1576 Summerfield E704

**You want fries with that?:** Many of the plants in our Garden of Health and throughout the exhibition are members of the Solanaceae, also known as the nightshade or potato family, simply

because the exhibition maker has a particular fondness for this group of plants. The solanums comprise more than 75 genera with more than 2,000 species, and strange bedfellows they are, for although many of the individual species are very familiar to us and some of them we eat in some form almost every day, others are deadly poison.

It may come as a shock to learn that the potato, petunia, green and red peppers, deadly nightshade (source of belladonna), eggplant, buffalo-burr, Chinese lantern plant, henbane, horse-nettle, tomato, jimsonweed, tobacco, and mandrake are all in the same family. Small wonder then, that like Europeans familiar for centuries with the poisonous mandrake, even some early 20<sup>th</sup> century New World folk had to be convinced – sometimes with dramatic, sloppy, slurpy, public tomato-eatings – that their shiny red vegetable compatriot was safe to eat. In fact, all of the aforementioned solanaceous plants with the exception of the strictly ornamental petunia, fall into one of the three plant categories relating directly to human health: those that feed us, those that can cause injury, and those that alter consciousness. The petunia's lovely colors and aroma contribute to spiritual well-being.

The idea that natural affinities existed in the plant kingdom was beginning to be sensed during the 16<sup>th</sup> and 17<sup>th</sup> centuries and L'Obel's fame rests on his attempt, more conscientious than that of his predecessors, to arrive at a natural classification. In general he recognized the progression from simple to more highly developed plant forms. This work is an enlargement of his chief botanical work, *Stirpium adversaria nova*, first published in 1570.

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**here are maniacs ... who dedicate their lives to one species, which, moreover, they want and must have in every cultivated and named variety. -- Čapek, *The Gardener's Year***

**Leonhard Fuchs (1501-1566): *Plantarum et stirpium icones.***

Lugduni: 1595.

*Summerfield B2002*

**If you can stand the heat:** The *Capsicum* peppers are yet another genus of the family Solanaceae native to the New World, including sweet peppers, *C. annuum*, and the red, or chili peppers, *C. frutescens*, source of tabasco sauce, paprika, cayenne and chili powder.

Although paprika is a Hungarian invention, it is prepared from the dried ground fruits of various capsicums, so goulash as we know it today could not have been eaten much before the end of the 15<sup>th</sup> century. Medicinally, peppers are used in various ways for their heat-creating properties in everything from throat lozenges to anti-thumb-sucking preparations, to treatment for seasickness and *delirium tremens*. All the capsicums are rich sources of vitamin C.

This 1595 edition of Fuchs's herbal, without text, is a 16<sup>th</sup> century field guide, and much more convenient for this purpose than the folio first edition *De historia stirpium*, 1542. The woodcuts for the folio edition were used for the last time in Schinz's *Anleitung zu der Pflanzenkenntniss* (see the cabbage in **The Garden of the Gardener**).

Although Fuchs's herbal is considered a fine piece of scholarship for its day, his descriptions were based on those of the classical authors and did not always fit the northern plants of his illustrations; and although one school-of-thought judges the large illustrations to be the most beautiful plant pictures of the 16<sup>th</sup> century, surpassing even those of Hans Weiditz in Brunfels's herbal, others prefer the practicality of the smaller cuts of the octavo editions.

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When we flee from the world sometimes, it does us good to be little; that is why we turn to small things for comfort. We feel rested among them; their smallness amuses us ... life is easier and more playful in those moments ... it is free of tragedy and silence. The liberating beauty of small things lies in the fact that they are really invincibly comic. -- Capek, "Big and Little", in *Intimate Things*

**Cristóvão da Costa (1525?-1594?):** *Trattatto ... della historia, natura, et virtu delle droghe medicinali.* In Venetia: Presso à Francesco Ziletti, 1585. Summerfield C1125

**Beautiful soup!** Of the fifteen-some species of *Datura*, the best known and most widely used in medicine is *D. stramonium*, or jimsonweed, also known as Devil's apple. It has been smoked for centuries to relieve respiratory complaints and is used today to treat

the symptoms of bronchitis and asthma. All parts of the plant contain alkaloids. Ingesting a small amount can cause hallucinations, a little more than a small amount results in death.

Virtually all the tropane alkaloids with the exception of cocaine are found in the nightshade family and their role in the history of witchcraft is a fascinating area of study. One explanation for the origin of the name jimsonweed is recounted in Beverly's *History of Virginia*: the story has it that when in 1676 soldiers were sent to Jamestown to put down a rebellion they happened to make a soup of the young sprouts of *D. Stramonium*, "... the effect of which was a very pleasant comedy, for they turned natural fools upon it for several days. One would blow up a feather in the air, another would dart straws at it with fury; another, stark naked, was sitting up in a corner like a monkey, grinning and making maws at them; a fourth would fondly kiss and paw his companions, and smile in their faces with a countenance more antic than any Dutch droll ... and after eleven days returned to themselves again, not remembering anything that had passed ..." – hence, Jamestown weed or jimsonweed.

Portuguese physician and botanist Christovam da Costa travelled extensively in Persia, China, Africa, and the Americas, especially Peru. This work on tropical botany and medicine was the result of his natural history studies in these parts of the world. The drawings for the woodcuts were made by the author himself, from nature.

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Amethyst



**ou must have a garden, though it be no bigger than a pocket-handkerchief ... -- Čapek, *The Gardener's Year***

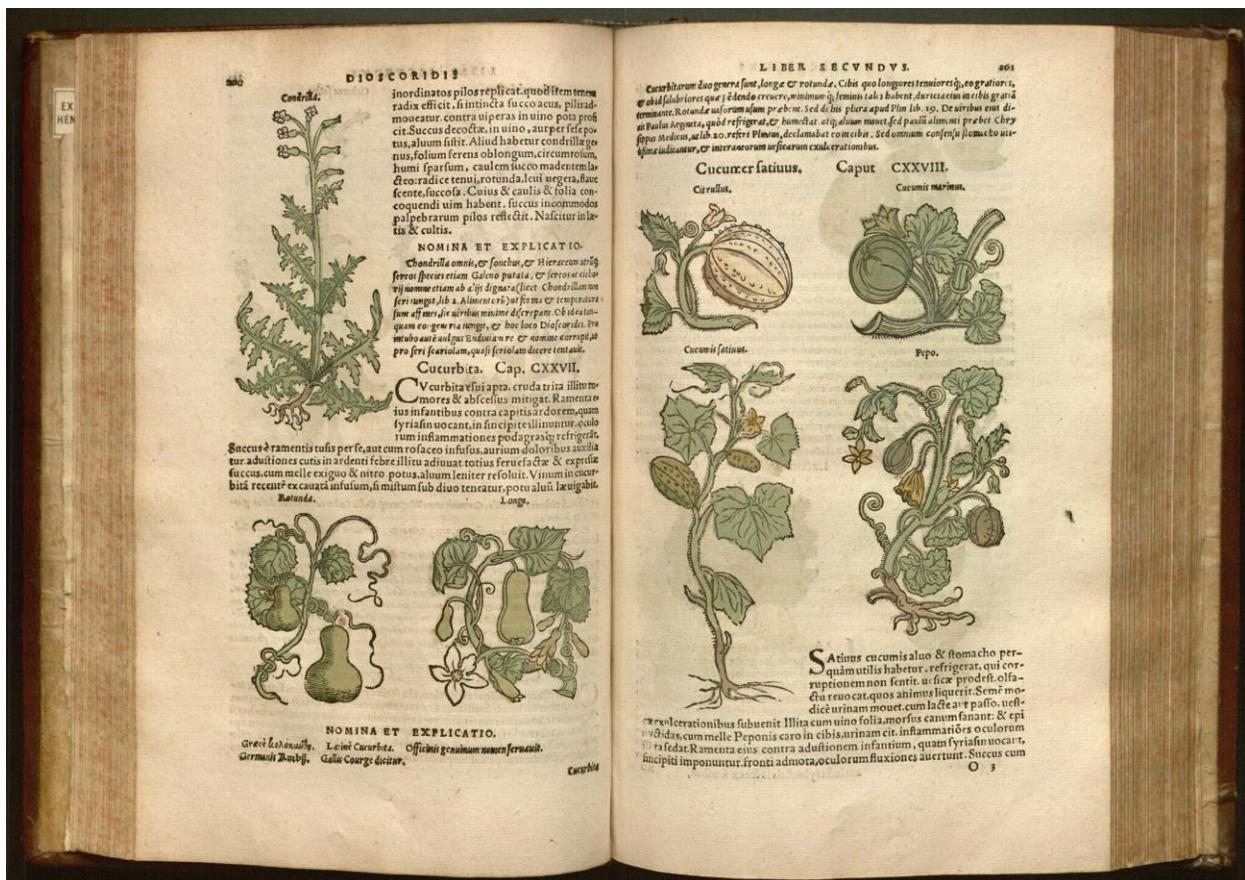
***Herba palma Christi.*** [Manuscript: Italy, 17<sup>th</sup> century  
MS A44:3

**Youth's sweet-scented manuscript:** We have chosen to call this Italian manuscript herbal the *Herba palma Christi* after the first of the 33 crude sketches of plants herein. It is part of a volume

containing medical, kitchen, and household recipes. On the verso of most leaves are the plant's identification and medical uses, with directions for preparation and administration. Herba palma Christi is a common name today for the castor oil plant but this illustration bears little resemblance to *Ricinus communis*.

Manuscripts such as this one await the curiosity and critical eye of a youthful student in the history of botany looking for an unusual term-paper topic.

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ut the hand held out to the heroic book trembles weakly; I could not believe in great and magnificent deeds to-day; man is a small, weak creature, severely tried ... No, leave me in peace today, heroism and

**honour ...away with you, amorous passions and intoxicating kisses of royal beauties. How can a man think of such things with a wet handkerchief to his nose? -- Čapek, "A cold", in *Intimate Things***

**Dioscorides Pedanius of Anazarbos (40?-90? A.D.):** *De medicinali materia*. Franc[ofurti ad Moenum]: apud Chr. Egenolphum, 1543.  
*Summerfield D291*

**Better to purge with hyssop:** These illustrations of cucurbits, or gourds, were printed and adapted by the publisher Egenolph from Fuchs's *De historia stirpium*. Several species of gourds are powerful purgatives but are little used today because of the danger of poisoning.

Some of the earliest examples of herbal material in existence are in records from Egypt, Sumer, and China, e.g. the *Papyrus Ebers*, ca. 1550 B.C., containing material which may have been written 2000 years earlier; a Sumerian tablet from circa 3000 B.C.; and the *Pen T'sao Ching* from China, 2700 B.C.

Western herbal records are not so ancient. An herbal of Diocles of Carystus, 3<sup>rd</sup> century B.C., no longer exists and there are only a few fragments of the first century B.C. herbal of Crateuas. Because we are concerned here with practical applications of botany and how plants served man as medicines, Theophrastus, Greek philosopher and grandfather of scientific botany, does not come into the discussion, which properly begins with Dioscorides.

The modern science of pharmacology goes back to the work of this man whose herbal was the single most important and influential of all time, the authority in matters of *materia medica* for 1500 years. No manuscript of *De materia medica* from Dioscorides's time is still extant; the oldest manuscript dates from 512 A.D. and is housed in the National Library of Vienna. The Spencer's Department of Special Collections has a facsimile edition.

Manuscript versions of Dioscorides in Latin had circulated in Europe during the Middle Ages; Greek, Arabic, and Hebrew texts came west after the fall of Byzantium, were compared with western ones, and soon revised versions appeared. The standardization of texts that followed the coincidental invention of printing from moveable type, facilitated communication and discussion among botanists and eventually led to the study of botany for its own sake, quite separate from medicine. The first printed edition of Dioscorides appeared in 1478 in Italy. The volume shown here is the first illustrated edition.

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**ookshelves, many-coloured rows ... I want to find in you a little book which will comfort me, who am accursed ... Away with you, humorous tales, out of**

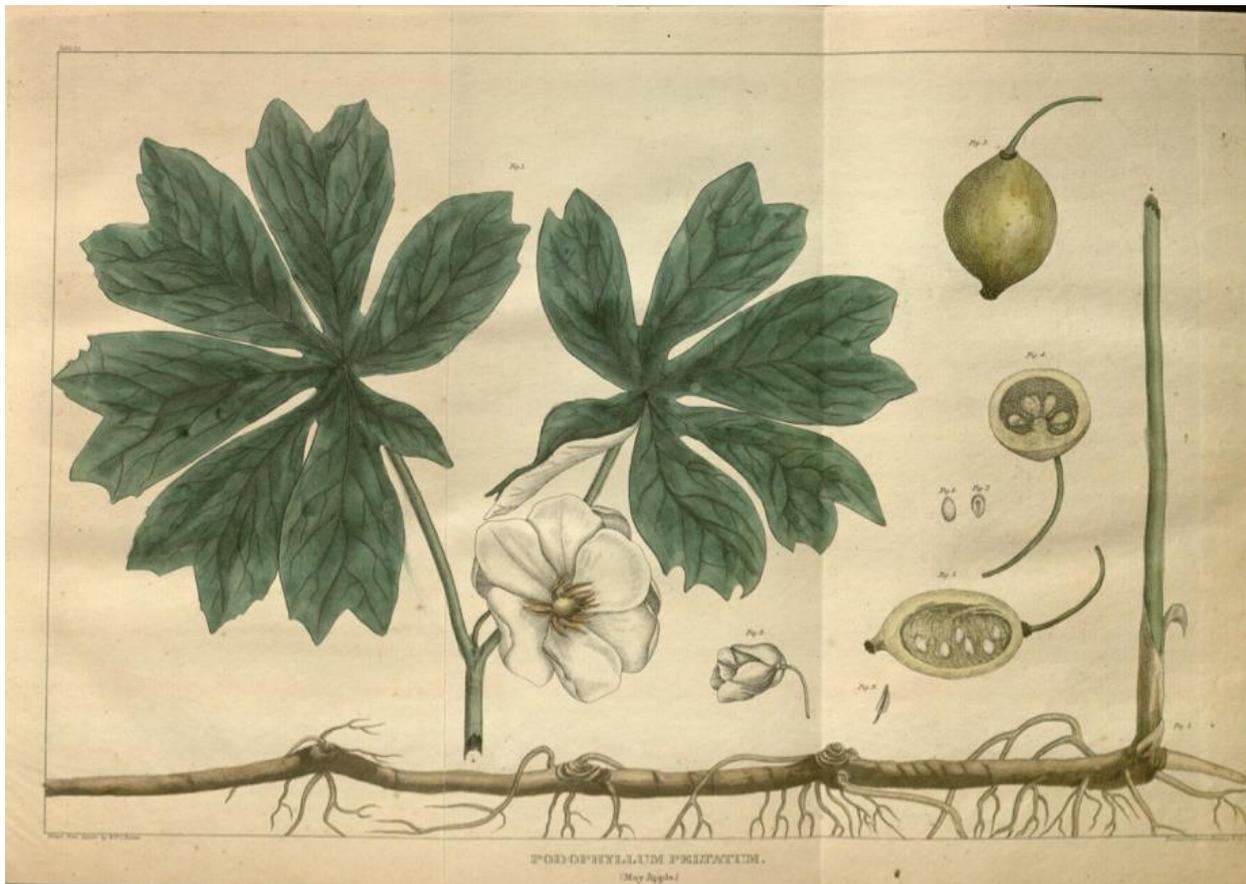
**my sight! To-day I could not bear the vulgar malice with which you hold up a stricken man to ridicule ... And you, heroic romances, would you not carry me off to distant ages and epic times when there were no colds ... in less time than I blow my nose? ... Why are books almost all written by wicked and unhappy people? -- Čapek, "A cold", in *Intimate things***

**Charles de L'Ecluse (1526-1609):** *Rariorum aliquot stirpium per Hispania observatarum historia*. Antverpiae: ex officina Christophori Plantini, 1576. *Summerfield B454*

Although Charles de l'Ecluse (or Carolus Clusius) was a licensed physician he did not practice medicine and was not as concerned as his botanically minded contemporaries were with the medical aspects of botany. He is included in our *Garden of Health* as an exception to the rule of the day. He studied plants for their own sakes and is considered by historians of botany to be one of the most important and best botanical writers of the 16<sup>th</sup> century, for he paid close attention to the details of flower structure and had an eye for natural affinities among species.

This work was the result of a botanical expedition to Spain and Portugal where L'Ecluse discovered several hundred new species. He was also responsible for numerous introductions from the Near East. Sixteenth century gardeners had l'Ecluse to thank for the early introduction of *Ranunculus*, *Anemone*, *Iris*, and *Narcissus*, and for bringing to Germany and the Low Countries that New World wonder, the potato.

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**Y**ou should know that nurserymen do not consider cultivation to be a craft, but a science and art ... I think that there is some magic in it, as in hunting and medicine. -- Čapek, *The Gardener's Year*

**William Paul Crillon Barton (1786-1856):** *Vegetable materia medica of the United States*. Philadelphia: H.C. Carey & I. Lea, 1818-1825. 2 volumes. Vol. 2.: Carey & Son; Joseph A. Skerrett, printer.

D2033

**Not poppy, nor mandragora:** Because our interest in medicinal botany extends to New World medicinals as well as to those in early European herbals, we show here the herbal of the 19<sup>th</sup> century American W.P.C. Barton as an exception to the rule of 15<sup>th</sup> and 16<sup>th</sup> century texts by auslanders. All the plants herein are indigenous

Americans. Barton, the Philly surgeon and nephew of famous botanist Benjamin Smith Barton, drew his plants from nature and colored the plates with the help of his wife.

*Podophyllum peltatum*, the May apple or American mandrake, is in the family Berberidaceae and should not be confused with the solanaceous Old World mandrake, *Mandragora officinalis*. The “apple” or berry of *P. peltatum* is edible, but the rhizome contains the poisonous irritant resin podophyllin which used to treat chronic constipation; as little as five grains can cause death, indeed the ultimate balm for all sufferings and illnesses known to man.



## **THE GARDEN OF THE MERRY WANDERERS OF THE NIGHT**

**With the first rays of the morning sun the Gardener discovers that his worst Midsummer Night's nightmares have come true: in the spirit of Puck, Shakespeare's 'merry wanderer of the night', mischievous natural elements have been at work and play in the garden overnight. Night after night they creep through the fence on paw and tendril, drop out of the sky or burrow up through the soil to lay waste the lettuce patch, crowd out the petunias, drown the strawberries, and make a mockery of the Gardener's dream of Paradise on Earth.**

**Special Collections is strong in ornithology, herpetology, medical botany, Linnaeana, and 18<sup>th</sup> century agriculture and economic botany.**

**\*\*\***





ne would think that watering a little garden is quite a simple thing, especially if one has a hose. It will soon be clear that until it has been tamed a hose is an extraordinarily evasive and dangerous beast, for it contorts itself, it jumps, it wriggles, it makes puddles of water, and dives with delight into the mess it has made; then it goes for the man who is going to use it and coils itself around his legs. -- Čapek, *The Gardener's Year*

**Johann Zahn (1641-1707):** *Specula physico-mathematico-historica*. Norimbergae: sumptibus Joannis Christophori Lochner, 1696. 3 volumes. Vol. 1. *Summerfield G211*

**Fire and ice:** Too much water in any garden is indeed annoying, but consider the even worse plight of the Mexican farmer who found his peppers to be especially hot one morning as the result of a volcano sprouting amongst his vines. He was witnessing the birth of *Paracutin*, and as intrusive (as well as extrusive) as it was at the time, volcanic ash makes for very rich garden soil.

Detailing possible origins of phenomena such as that most unusual of garden pests, the volcano, was one of the things scholar-priest Johann Zahn set out to do in this detailed and comprehensive 17<sup>th</sup> century encyclopedia. Zahn was one of the most learned men of his age, with a vast knowledge of the natural and physical sciences. This up-to-date survey in three books treats of the Cosmos, Earth, and Man; the many plates include a double-page map of the moon showing lunar phases, cross section diagrams of the earth, maps of America, Australia, and the sun.

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**ramp**: No offence, mister, but why'jer catch them when they're all so happy playing?

**Lepidopterist**: Playing, you call it. I'm afraid you haven't the scientific mind, my friend.

**Tramp**: What do you do with them when you catch them?

**Lepidopterist**: ... Well, each ... must be identified, recorded and assigned a place in my collection ... carefully killed ... pinned and properly dried ... a little cyanide of potassium.

**Tramp**: And what's it all for?

**Lepidopterist**: Love of nature. -- Čapek, *The Insect Play*

**Carl Linnaeus (1707-1778)**: *Beskrifning på et Amerikanskt diur*. In: K. Svenska Vetenskapsakademien. Handlingar. Series 1. I Stockholm: tryckte hos Lorenz Ludvig Grefing, 1747. 40 volumes Vol. 8. B3068

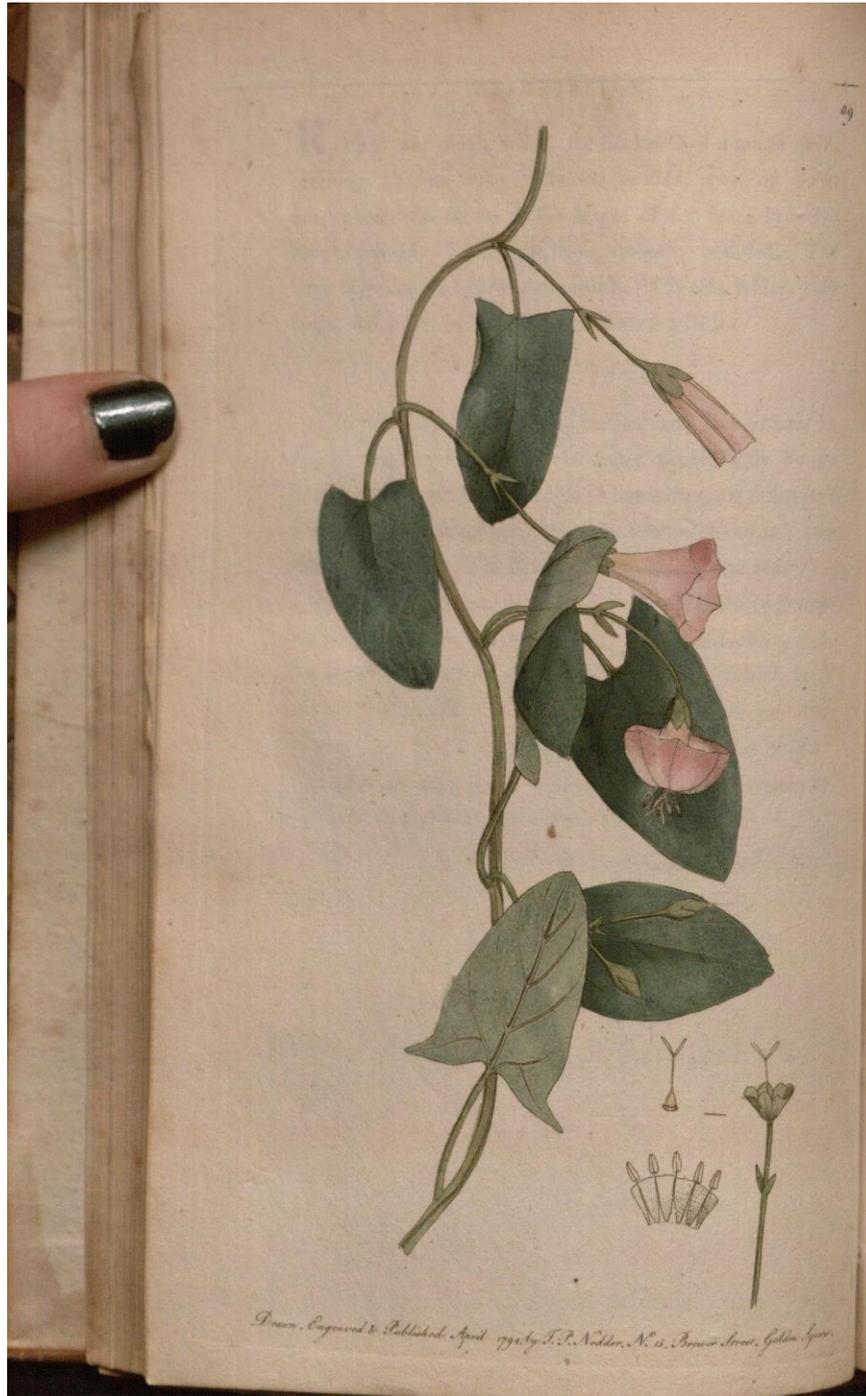
**A boon to hatters**: Čapek's lepidopterist in the above quotation was catching insects, of course, not mammals, and although the raccoon pictured did indeed end up stuffed and assigned a place in a collection, the manner of the 'coon's demise tells an especially sad tale. To wit: the crown prince of Sweden had given this American mammal to Linnaeus and asked him to describe it scientifically, which he does herein. Linnaeus's great fondness for the animal is evident in the description (come in and read it for yourself!)

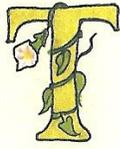
One night the raccoon climbed over the fence and into another yard where a large dog attacked and killed it. Linnaeus knew he would never see the likes of such an animal again and did a dissection before adding him to his museum.

Čapek's sarcasm aside, Charles Darwin owes an immense debt to men like Linnaeus who collected and classified: such collections in natural history museums provide the evidence to support the

conclusions of a theory of evolution. As for the raccoon as pest, it must be said that he more than makes up for his raids on our corn and melon patches by consuming vast quantities of insects. Like the sun and the rain, he is a mixed blessing for American gardeners, and a boon to hatters.

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**he more of a nuisance, the more they stick to life. --**  
Čapek, *The Gardener's Year*

**Thomas Martyn (1735-1825):** *Flora rustica*. London:  
published by P.F. Nodder, 1792-1794. 4 volumes. Vol. 3.

*Linnaeana C378*

**From Russia with wheat:** Martyn was a professor of botany at Cambridge and one of the earliest to embrace the Linnaean system of classification. His *Flora rustica* was intended to be a periodical, but failed for lack of support after publication of volume 4. Frederick Nodder drew, engraved, and hand-printed the 144 plates of the plants “as either useful or injurious in husbandry”. The *Convolvulus arvensis*, or bindweed, pictured here, is a pest well known in Kansas since it migrated to the Sunflower State with the Turkey Red wheat from Russia in the 1870s.

Martyn compares this with other species of bindweed and finds it “infinitely more destructive”, because rather than sticking to hedges where it can climb, it “wanders over whole fields, from which it cannot be eradicated without repeated ploughing ... and burning the roots ...”

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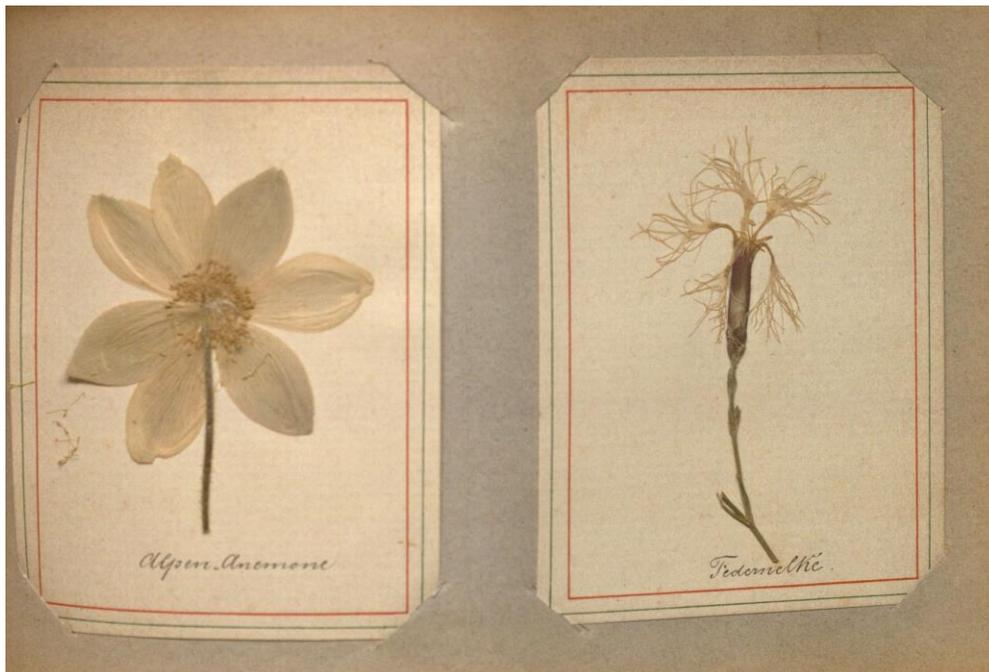


**I**f it were of any use, every day the gardener would fall on his knees and pray somehow like this: “O Lord, grant ... that there may be ... no plant lice and snails ... and that once a week thin liquid manure and guano may fall from heaven. Amen.” -- Čapek, *The Gardener's Year*

**Giovanni Battista Ferrari (1584-1655):** *Flora ouero Cultura di fiori*. In Roma: per Pier. Ant. Facciotti, 1638. *Summerfield C37*

**Snails got legs?** Ferrari's fame rests not so much on his botanical knowledge as on the quality of his engraved plates for this book on floriculture as well as for those of his other botanical works. The snail or slug depicted here can be a serious garden pest, even without legs; it damages plants with the scouring action of a raspy tongue as it looks for food, and some species live on young garden seedlings.

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## LEONTODON Taraxacum.

Dandelion.

SYNGENESIA *Polygamia aequalis.*

GEN. CHAR. Receptacle naked. Calyx imbricated, with flaccid scales. Down simple, on a footstalk.

SPEC. CHAR. Outer scales of the calyx reflexed. Leaves runcinate, toothed, smooth.

SYN. Leontodon Taraxacum. *Lin. Sp. Pl.* 1122.*Huff.* 339. *Reib.* 294. *Curt. Lond. Jase.* 1. t. 58.*Woodv. Med. Bot.* t. 3.*L. officinalis.* *With.* 679.*Taraxacum officinale.* *Sibth.* 239.*Dens leonis.* *Raii Syn.* 170. n. 1. also 171. n. 2.

THE Dandelion is too common to be overlooked by the most incurious botanist; it clothes our meadows with yellow early in the spring, and may be found in bloom throughout summer in waste or ill-cultivated places. The root is perennial, deep and branching, rendering it a troublesome weed. Leaves radical, numerous, runcinate (that is, cut into lateral lobes which are hooked backwards), toothed, pointed, of a full grass-green, smooth. Stalks simple, round, hollow, smooth, single-flowered, brittle. Flower large, opening in the morning and in fine weather only, composed of numerous bright-yellow ligulate florets with 5 teeth. Calyx of several linear entire leaves, of which the outermost are more or less recurved. Styles observed by Mr. Sowerby to be hairy. Seeds obovate, furrowed, rough, bearing on a long footstalk a radiated tuft of simple down. Receptacle convex, dotted. The whole herb is milky and bitter, but, like Lettuce, becomes sweet by culture, or blanching.

The above English name, a corruption of the French *dent de lion*, lion's tooth, has taken place of a very coarse one expressive of the diuretic quality of this plant.

With respect to the *L. pauciflorum* of Lyons, to which Dr. Withering has applied the name of *Taraxacum*, we scarcely think it more than a variety. It grows on wet commons, is less vigorous, has leaves less deeply lobed, and the outer scales of the calyx are shorter, ovate, and hardly at all reflexed. We suspect the  $\gamma$  of Hudson to be a distinct species, but must wait for more light before it can be determined.



**N**obody knows how it happens, but ... when you step on a bed to ... pull out a dandelion, you usually tread on a shoot of the lily or trollius; it crunches under your foot, and you sicken with horror and shame; and you take yourself for a monster under whose hooves grass will not grow. -- Čapek, *The Gardener's Year*

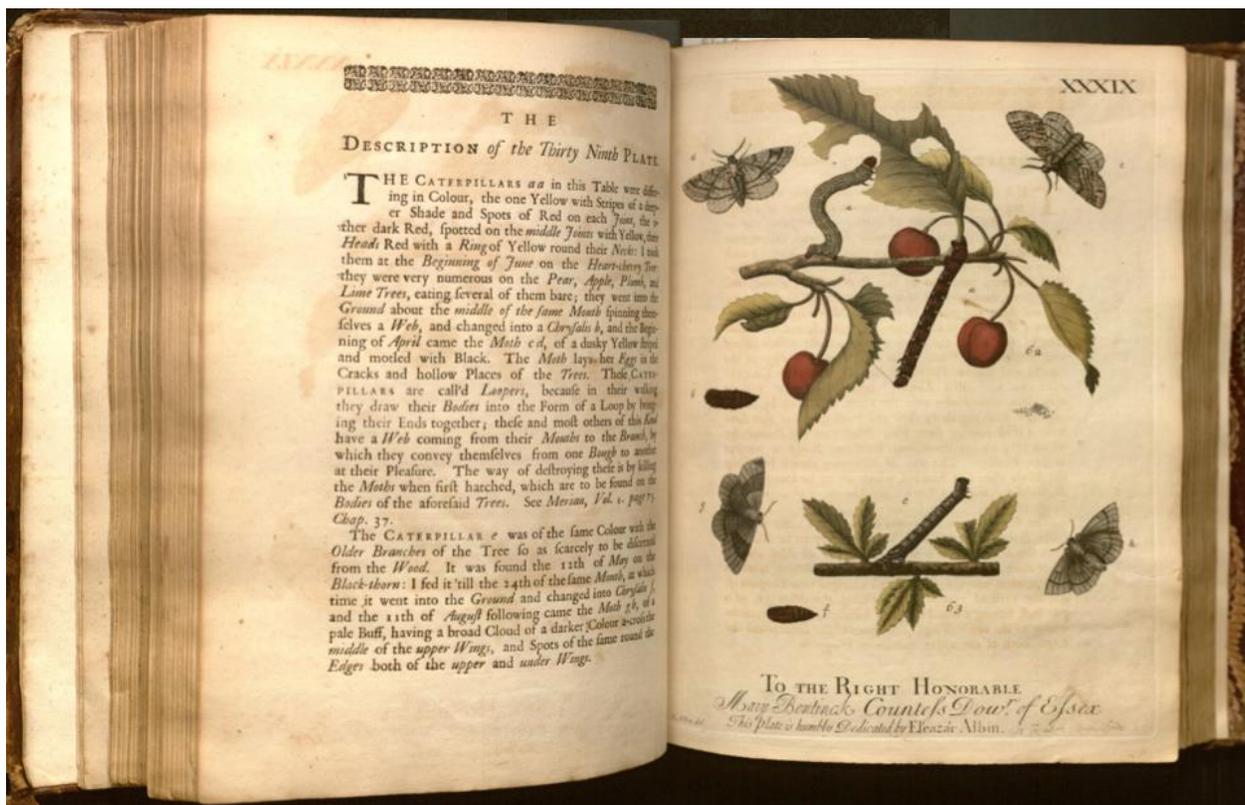
**James Sowerby (1857-1822):** *English botany.* London: printed for the author, by J. Davis, 1790-1814. 36 volumes. Vol. 8, 1799.

*Linnaeana C516*

**Something Wicked This Way Comes:** It won't do to try to convince the gardener to love his dandelions; better to have him read Ray Bradbury's *Dandelion wine*. In England the plant is commonly called piss-a-beds, maybe having to do with its medicinal properties as noted by Nicholas Culpeper: "It openeth the passages of urine both in young and old; powerfully cleanseth imposthumes and inward ulcers in the urinary passages, and by its drying and temperate quality doth afterwards heal them."

The dandelion depicted here is one of 2,592 engraved, hand-colored illustrations of British plants in 36 volumes, executed by James Sowerby. All known British plants except the fungi are included and the illustrations are so accurate that the set is to this day more useful than most subsequent floras. It is certainly one of the most beautiful.

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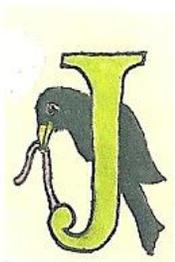
**he gardener does not place any confidence in the first ... butterfly which usually announces the spring in the papers ... this first butterfly is usually the last one of the previous year which has forgotten to die. -- Čapek, *The Gardener's Year***

**Eleazar Albin (active 1713-1759):** *A natural history of English insects.* London: printed for the author: and sold by William and John Innys, 1720.

D28

**Boy meets bug:** Eleazar Albin was by profession a teacher of water-color painting, who was first attracted to natural history by the bright colors of birds, plants, and insects. A fellow naturalist commenting on Albin's printed works noted that although he excelled in "the fidelity and correctness with which his subjects are delineated, both as to their size and distinctive marks", the textual information was "loose, miscellaneous, and unmethodical, though sometimes it is amusing and often instructive".

\*\*\*



**ust take the case of the blackbirds. They are tame to the point of impudence and simply whistle at man; they would snap their fingers at him if they had any, or make a long nose at him. They have their definite department in which they make the law; they have ... a sense of individual property. A blackbird in my garden ... has the exclusive right to extract the worms, dig up the flowers, and nip off the crocus bulbs. -- Čapek, "Birds", in *Intimate things***

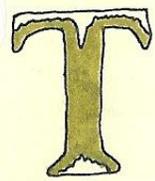
**Georges Buffon (1707-1788):** *Histoire naturelle*. A Paris: de l'Imprimerie royale, 1749-1804. 44 volumes and atlas. Vol. 18, 1775.  
*Ellis Aves D344*

**Let Georges bake 'em in a pie:** Buffon's encyclopedic *Histoire naturelle* is a landmark in the history of science. It is one of the last great works of the Renaissance and right on the cusp of the Enlightenment. Buffon was in opposition to the Linnaean approach: Linnaeus had felt that it was not his duty to discover an order in nature, but to create one; he believed that all species existed in the form in which they had been created at the beginning of the world, and there was no thought of heredity or genetic connection between organisms.

Buffon, on the other hand, looked for an order in nature, some unifying law, a biological equivalent of Newtonian physics. Both men laid groundwork for Darwin's theory of evolution: Linnaeus by classifying, describing, and naming organisms and providing a stimulus to biological exploration; Buffon by describing and emphasizing elements Linnaeus ignored, such as behavior, geography, the connections between disparate parts of nature.

This volume is from the birds section of the first edition of Buffon's great work and is part of a sizable group of the works of Buffon in the Department of Special Collections.

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**T**he gardener thinks of roots which freeze in the soil ... of twigs chilled to the pith by the dry and icy wind ... If I knew that it would help, I would wrap my holly in my own coat, and draw my pants over the juniper ... I would cover you with my hat, Alum root, and for you, Coreopsis, nothing is left but my socks: be thankful for them. -- Čapek, *The Gardener's Year*

**Ralph Bohun (died 1716):** *A discourse concerning the origine and properties of wind*. Oxford: printed by W. Hall for Tho. Bowman, 1671.

B698

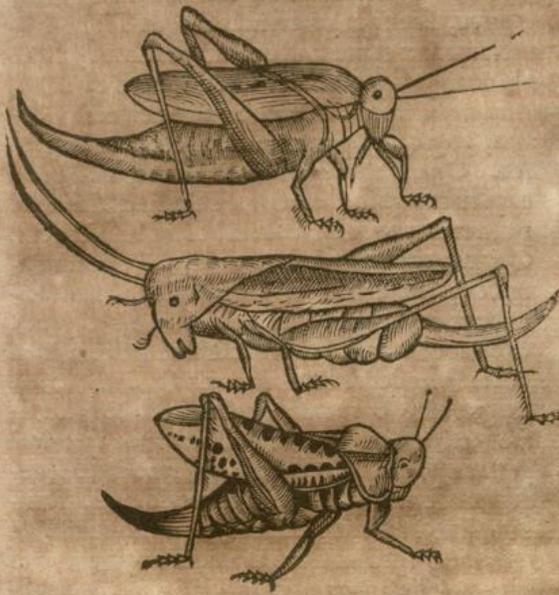
**Person of the North Wind:** The Native American Kansa were “The People of the South Wind”. Indeed students of weather and other folk who love wind and rain head for Kansas, not only because one can study meteorology – with real mock-up tornados – and train to join Lawrence Weather Watchers – but they come just to be where the action is, storm-wise. In fact many of us Kansans much prefer the initial scenes of the Wizard of Oz, in black and white, with tornado, to the happy-sappy-over-the-rainbow stuff that occurs later on.

Bohun’s book represents the first *scientific* attempt to explain weather phenomena. Most of the information for this scarce and interesting (but scientifically unimportant) treatise was gleaned from sea captains and voyagers, with some credit due to previous meteorological writers: “I have no intention to disparage the authority of the ancients; but ... we have more intimate converse with nature than heretofore, which displays her beautiful bosome, and every day affords new discoveries ... to the benefit of human life”.

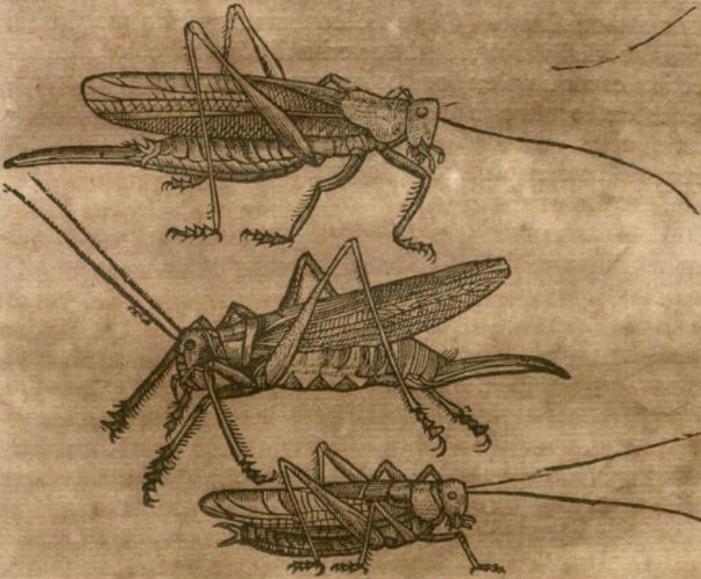
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Iron pyrite



earum nomina fuerunt, quæ jam per i hylicorum ignaviam usu excidunt. Sunt autem omnes Locustæ vel alata, vel non alata. Alatarum aliæ vulgares sunt, aliæ rariores: vulgarium sex majores vidimus, (omnes virides) atque minores multicolores. Prima majorum cucullo veluti herbaceo caput, collum, mediumque fere corpus contegit: alæ à collo subitus oriuntur, virentes, parvis paucisque nigris maculis insignitæ, dorso item virenti venter fuscus subjicitur, caulis extremo nigricante; magnum illi os, & dentes validi



rique, ad fruges absumendæ segrege nati. Secunda huic similis videtur, sed epomis collo annectitur; nasus item & os ipsû magis rubescunt, punctaq; in alis habet majora.

Tertiæ viridis omninò vultus; crura albicant,

cauda nigricat, alas maculosiores obtinet, & circa extremitates ex albo rubescentes.

Hæ autem femine sunt, à quibus tres itidem mares hoc discrepant, quòd vel extrema caudâ, vel supra caudam, duos tresve gestant aculeos, medioq; item caputio magis rubent. Prima minorum species, *Holtsspecht*



Tigu-



**utterflies, beetles, moths, and men – why can't we all live 'appy together? The world's big enough, and life could be 'appy for everythink – if we 'ad a bit o sense.**  
-- Čapek, *The Insect Play*

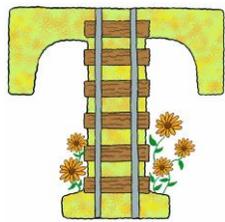
**Thomas Moffett (1553-1604):** *Insectorum*. Londini: ex Officinâ typographicâ Thom. Cotes. Et venales ... apud Benjam. Allen, 1634.

*E450*

**Getting the Bugs Out:** Thomas Moffett was physician, author, poet, all-round natural scientist and health food enthusiast, the latter no doubt as a result of his poisoning by “dorm” food during his student days. At least he didn't have to worry about *dichlorodiphenyltrichloroethane*, a.k.a. DDT. An astute observer of all forms of insect life, Moffett earned the praise of the great 18<sup>th</sup> century physician and naturalist Albrecht von Haller who called him the preeminent entomologist before the time of Jan Swammerdam, mostly on the basis of the work displayed here, the great number of species described therein, and the high quality of the illustrations.

Present-day folk interested in good food and good entomology have great hope for PEF (Pulsed Electric Fields). Bruce Chladny, horticultural agent for K-State Research and Extension Douglas County, reports that the high-voltage zapping of the Mexican fruit fly by PEF has proven highly successful, and is a promising alternative to the widely used fumigant methyl bromide now being eliminated by the U.S. Environmental Protection Agency under the Clean Air Act. It is thought the fumigant may contribute to the depletion of Earth's ozone layer.

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here were weeks when I was forced to chew lettuce three times a day, to avoid throwing it away. ... If I were obliged to eat my roses or nibble the flowers of lilies-of-the-valley, I think I should lose the respect I have towards them. Besides, we gardeners have already enemies enough. -- Čapek, *The Gardener's Year*

**Joannes Jonstonus (1603-1675):** *Theatrum universale omnium animalium quadrupedum*. Bibliopola Helibrunnensis: Franciscus Iosephus Eckebrecht; typis Christiani de Lannoy, 1755. [with added title: *Historiae naturalis de quadrupedibus*. Francofurti ad Moenum; impensis haeredum Math. Meriani], [no date]. *Ellis Omnia E312*

**Bugs, bunnies:** Jonston, or John Johnstone, was a naturalist of Scottish descent born in Poland. He studied botany and medicine at Cambridge and Leyden and eventually settled in Leyden to practice medicine and indulge his interest in natural history. His critics deemed his writings laborious compilations but they were very popular in England during the 17<sup>th</sup> century and were frequently translated, into a number of languages. Perhaps he did exhibit more learning than judgment; for our part the less said about rabbits, hares, mice, squirrels, shrews, and moles, the better: talking and writing about them just encourages them.

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*Plantago major*

Published by Pallas, & Porden, July 1788.



ne of nature's mysteries – how from the best grass seed the most luxuriant and hairy weeds come up. -- Čapek, *The Gardener's Year*

**William Woodville (1752-1805):** *Medical botany*. 2d edition. London: printed and sold by William Phillips, 1810. 4 volumes. Vol. 1. *Linnaeana D92*

**White man's foot:** Native New Worlders called *Plantago*, or plantain, white man's foot, because it seemed to be planted all over the place. The gardener usually considers it to be an ugly, pesky weed that takes up room needed for useful plants, or at least what might be pretty grasses; the Swiss, on the other hand, have attributed the richness of Alpine milk to *Plantago*. It appears in this work on medical botany as a vulnerary, useful for healing wounds, hence another common name: soldier's weed. Indeed recent research indicates some species do have antibiotic properties.

Woodville was attempting with this work to describe and illustrate, with 300 plates, all the vegetable *material medica* in the catalogs of the Royal College of Physicians of London and Edinburgh. It was THE standard source-book for plants of the British pharmacopoeia until the late 1870s.

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Crinoid stems – South Central Kansas



Apparently stones grow from some kind of seeds or eggs ... Cultivated soil ... consists mainly of ... stones, pieces of glass ... broken dishes, nails, wire, bones, Hussite arrows, silver paper from slabs of chocolate ... old pipes, old labels, bits of string, buttons ... dog droppings ... pot handles ... buckles, horseshoes ... and innumerable other components which the astonished gardener digs up at every stirring of his beds. One day, perhaps, from underneath the tulips he will unearth an American stove, Attila's tomb, or the Sybilline Books. -- Čapek, *The Gardener's Year*

**Johann Samuel Schröter (1735-1808):** *Vollständige Einleitung in die Kenntniss und Geschichte der Steine und Versteinerungen.*

Altenburg: in der Richterischen Buchhandlung, 1774-1784. 4 volumes. Vol. 3, 1778.

C902

**Kansas rocks:** Schröter wrote about conchology, mineralogy and the then new science of ancient life called paleontology. He would have had fun in Kansas, as geologist if not Dust Bowl farmer and xeriscapist.

Your garden potatoes may be “Yukon Gold”, but don’t expect to break your teeth biting down on the diamonds in unwashed Kansas lettuce unless you live in Riley County. And even then be skeptical. For in these parts the *Doctrine of Signatures* (the ancient notion that the appearance of a plant could be a sign of its medical use) has a different meaning.

Kimberlites, deep pipes of volcanic material, have long been known to exist in Riley Co. (and more recently have been found in Marshall Co., Kansas). They are important to geologists because they are composed of the type of rock that in a small percentage of kimberlites the world over, contain diamonds. Because these pipes are composed of igneous rock, surrounded by sedimentary layers, they produce magnetic anomalies, unusual readings called “signatures”.

During the summer of the last year of the millennium, Kansas University student researchers conducted studies at ground level leading to the confirmation of the presence of several heretofore unknown Kansas kimberlites.

So, you see, there’s more to gardening in Kansas than meets the eye.



## **THE GARDEN OF THE GARDENER**

**The gardener can spend a lifetime learning the practical side of gardening. He can learn to outwit the elements and garden pests by the proper placement of scarecrows, regular fertilizing and weeding of a well-turned soil, and intelligent consultation of garden books, wherein lies the wisdom of hundreds of years of horticultural experience. If he follows faithfully all the tenets in these volumes for another two hundred years or so, he will have a garden to rival that of any Kansas country gentleman or purveyor at the Lawrence Farmers' Market.**

**The Department of Special Collections in the Kenneth Spencer Research Library is dedicated to the preservation of these tomes and the other books and manuscripts housed here for the use of gardeners today and for many hundreds of years into the future.**

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Fig. 2.

Fig. 1.

Fig. 1. CANNABIS . Mas. C.B.P  
 Fig. 2. CANNABIS . Semina C.B.P.

R. Lincake del.

J. S. Miller sculp.

Published according to Act of Parliament by P. Miller March 30<sup>th</sup> 1756.



**T**he great gardener, or nurseryman, is usually a teetotaler and a non-smoker; in a word, he is a very virtuous man; he is not known in history by prominent crimes or by warlike or political acts; his name is immortalized by some new rose or dahlia, or apple ... --  
Čapek, *The Gardener's Year*

**Philip Miller (1691-1771):** *Figures of the most beautiful, useful, and common plants described in the Gardeners dictionary.* London: printed for the author; and sold by John Rivington, A. Millar, H. Woodfall, [etc.] 1760. 2 volumes. Vol. 1. *Linnaeana G15*

**Honk for hemp:** Even the pot-head gardener is usually *highly* aware of the uses of the versatile *Cannabis sativa*, or marijuana, other than for its powerful psychic and physical effects. Long reputed to have medicinal qualities, a number of its chemical constituents are now proving to be pharmacologically valuable.

The long fibers of hemp are used the world over to make rope. The fruit, too, has served both man and animal as food in times of famine and is used sometimes in bird seed.

Philip Miller was the greatest British garden writer of the 18<sup>th</sup> century and the many editions of his encyclopedic *Gardeners dictionary* attest to the phenomenal growth of gardening during the period. Although he was said to be quarrelsome and dogmatic, Miller the scientist was open-minded enough to finally adopt the Linnaean system of binomial nomenclature in the 1768 edition of his *Dictionary*.

In 1760 when these *Figures* were published, he was still stubbornly attached to polynomials and called our plant *Cannabis foliis digitatis*, short as polynomials go, probably because *Cannabis* is a monotypic genus and as the only one of its kind did not need to be

differentiated from other (non-existent) species by a long string of descriptive phrases.

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**I** am talking of the real gardener and not of apple-growers and market gardeners. Let the apple-grower beam over his apples and pears, let the market gardener rejoice at the super-human height of his kohlrabi ... a real gardener feels ... all the year round is spring ... knows nothing of the autumn. -- Čapek, *The Gardener's Year*

**William Hooker (1779-1832):** "*Account of a new pear ... called Williams' Bon Chretien.*" In: Royal Horticultural Society, London. Transactions. 1<sup>st</sup> series. 2<sup>nd</sup> edition. London: printed by W. Bulmer; sold by J. Hatchard, 1818. Vol. 2. D1075

**A silver nutmeg and a golden pear:** William Hooker was a botanical artist employed by the Horticultural Society of London to illustrate fruits specifically (his specialty) although he engraved and hand-colored botanical plates of all kinds for a number of botanical works in both England and America. The plates in this journal, especially of fruits and flowers, are stunning in their beauty and realism; this 2<sup>nd</sup> edition appears to be quite rare and we could not locate any other copies.

Like our plants and animals, books with plates often have survival problems, and we can only hope that this edition hasn't become extinct at the hands of unscrupulous "plates pirates". The fact that it isn't listed in bibliographies would, we hope, indicate rather that a very small edition was published, perhaps because the publisher, Joseph Sabine (1770-1837) was already running out of money. It is evident from this letter to Sabine that Hooker considered no fruits forbidden and had no intention of being a starving artist, for he is quite knowledgeable about the relative merits with regard to flavor of that which he was hired to depict.

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76. BRASSICA oleracea, capitata. Kopfsohl. Rabis.



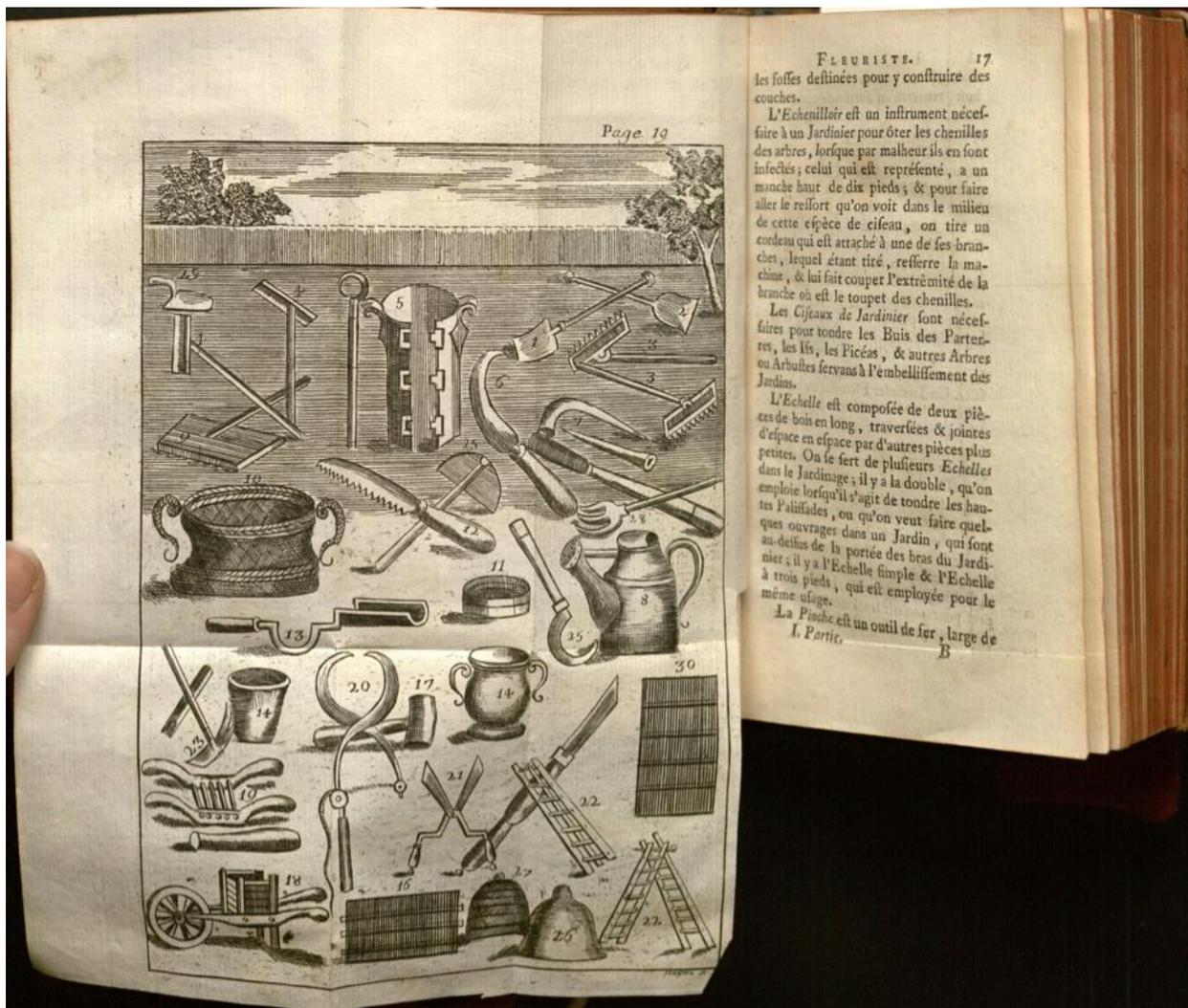
**W** hat! This man here talks of every uneatable root, but he never mentions ... cabbages, cauliflowers and onions ... What a gardener is this, when partly out of pride, partly out of ignorance, he omits the most beautiful things that a garden can produce. -- Čapek, *The Gardener's Year*

**Salomon Schinz (1734-1784):** *Anleitung zu der Pflanzenkenntniss.*  
Zürich: in Verlag des Waysenhauses, 1774. *Linnaeana G16*

**If God made chocolate, who made kohlrabi?** The common cabbage is just one of the many distinctive cultivated varieties of *Brassica oleracea*, the wild form of which grows in rocky coastal areas of Europe from England to the Adriatic, and gives rise to kale, savoy, Brussels sprouts, cauliflower, broccoli, calabrese, and kohlrabi, for starters. The name cabbage comes from the Latin *caput* meaning head, referring, of course, to the part we eat, botanically speaking nothing more than a swollen terminal bud.

In 1542 Leonhart Fuchs produced a beautiful folio herbal *De historia stirpium*, but because the hefty volume was expensive, with some 500 full-page plant woodcuts, and too heavy use as a field guide, subsequent editions were smaller. One hundred of the woodcuts made a re-appearance in 1774, their final one in fact, in this work by Swiss botanist and physician Salomon Schinz. The only apparent difference in the plates is the removal of the original printed plant names and the printing of new ones.

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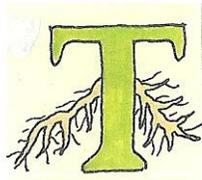
ne may loosen the soil with dynamite, but this the gardener usually does not possess. -- Čapek, *The Gardener's Year*

**Louis Liger (1658-1717):** *Le jardinière fleuriste*. Nouvelle édition. A Paris: chez Savoye, du Fonds de Claude Prudhomme, 1764. B7230

**A swarm of bees in July, is not worth a fly.** French agriculturist Louis Liger's work on flower gardening, first published in 1704, went through many editions. English translations appeared in 1706 and 1717. This new edition, considerably revised and augmented, is subtitled (in translation) "Universal culture of flowers, trees, bushes, shrubbery, serving to embellish gardens", and described new

techniques for bringing water into gardens mechanically for installing fountains. Liger was the author of many publications on gardening and husbandry.

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**There** are some people, especially critics and public speakers, who love to talk about roots; they proclaim ... that we ought to return to the roots; or that some evil should be exterminated root and branch, or that we ought to penetrate to the root of some matter. Well, I should like to see how they would set about digging up ... a three-year-old quince. ... I think that after some toil they would straighten their backs and utter one word. --  
Čapek, *The Gardener's Year*

**René Rapin (1621-1687):** *Of gardens*. London: printed by W. Bowyer for Bernard Lintot, 1706?

B1948

**Hors-d'oeuvre:** A practical and pictorial monthly magazine of flowers, fruits and general horticulture. The condition of this little volume leads one to believe that it could tell quite another story Of Gardens and Of Gardeners. James Gardiner (!) made this translation of the French Jesuit priest René Rapin's Latin poem *Hortorum Libri IV*. It first appeared in Paris in 1665, and was translated into English in 1673 by John Evelyn, but Evelyn's admission that it might have "lost much of its lustre" by his translation was generally conceded to be true. The four books were: Of flowers, Of trees, Of waters, and Of orchards.

*The Oxford English dictionary* gives this etymology for orchard: originally *ort-geard* in Old English, the first element is from the Latin *hortus*, late and medieval Latin *ortus*. In the 9<sup>th</sup> century *ortgeard* became *orcgeard* or *orceard* to become finally *orchard* in Middle English, with variants *ort-yard*, *hort-yard* and the like. Noting the similarity of the elements yard, gard, and old Irish *gort*, meaning field, it is easy to assume that *hortus* and *garden* have a common ancestor and, assuming that this is not a false etymology, orchard would mean: garden-garden.

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Scoria - Kansas Mesa, near Collbran, Colorado



Always something ... is fading; always you must cut withered stalks, murmuring (to the flower, not to yourself): "And with you also it is over." ... flowers in very truth they are like women ... as soon as they begin to fade ...they cease to look after themselves (I am talking of flowers), and if one wished to be brutal, he would say that they look like rags. What a pity my sweet beauty (I am talking of flowers) ... time is so fleeting; beauty comes to an end and only the gardener remains. -- Čapek, *The Gardener's Year*

**L. Frank Baum (1856-1919):** *The patchwork girl of Oz.* Illustrated by John R. Neill. Chicago: The Reilly & Lee Co., 1913. *Children 6109*

**He did windows:** Lyman Frank Baum was an editor, actor, reporter, theater manager, producer and founding director of Oz Manufacturing Company, poultry farmer, salesman of Baum's Castorine Axle Grease, owner of Baum's Bazaar General Store,





**I** tell you that this flowering of mature age is more vigorous and passionate than those restless and passing tossings of the young spring. In it there is the sense and consistency of a grown-up man; if you flower, do it thoroughly; and have plenty of honey so that the bees will come. -- Čapek, *The Gardener's Year*

**Samuel Linnaeus (1718-1797):** *Kort, men tillförlitelig bij-skjötsel.* Wexjö: tryckt hos Kongl. Privelegerade och Gymnasii Boktryckaren Anders Wrigseen, 1768. *Linnaeana B85*

**Bi-kung:** There was a tug of war between Mother Nature and Mother Linnaeus when the interests of her son Carl, who would become Sweden's "Prince of Naturalists" turned towards medicine; she'd hoped he would become a clergyman like his father, and botany was a dirty word around the Linnaean household. Carl's brother Samuel had no trouble deciding whether to bee or not to bee (as intransitive verb), and although he did become a clergyman, he couldn't be kept from the garden altogether and became an authority on bee-keeping. He was known locally as "Bi-kung", the Bee-King.

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Quartz

# A DE HISTORIA, NATV

RA AC VIRIBVS ARBORVM ET FRVTICVM,

Et primo,

## DE HORTO ET IIS QVAE IN EO

nascuntur, plantis, & arboribus.



B

## DE SOLI, FVNDI, AC TERRAE

adparatione, pastinatione, stercoratione,  
atque cultu.



**P**RINCIPIO igitur, quando de arboribus & cultu hortorum tradere propositum nobis est, etiam de soli conditione & qualitate aliquid praemittendum uidetur. Terra igitur ea, quae in locis squalidis & siccis uasta incultaq; iacet, solis ardore plerunq; ita torretur & induratur, ut humorem transmittere facile non possit, neque imbris aut rore reficiatur. Deinde ut plurimum ita quoque consolidatur, ut neq; frumenta, neq; quicquid aliud in ea seritur aut plantatur, protuberare facile, aut ad frugem peruenire possit. Quare si qua eiusmodi fuerit, ea principio fodiendo, pastinando, aut etiam arando diligenter ac multum subigi praeparariq; debet, ut hoc pacto duritiem ac feritatem illam pristinam exuat, cultuq; uelut mansuefacta mitescat.

Quod si qua autem in tantum solida ac spissa erit, ut subinde in glebas maiores ac duriores conerescat, ea omnino surculis aut fustibus



will tell you how to recognize a real gardener. ... You will find him with his rump sticking up somewhere among the perennials. -- Čapek, *The Gardener's Year*

**Adam Lonitzer (1528-1586):** *Naturalis historiae*. Francofurti: apud Chr. Egenolphum, 1551. *Summerfield E1080*

**Bed and board:** This illustration of the gardener at work is from an herbal by Frankfurt town physician Adam Lonitzer. Typical of medieval gardens are the raised beds and the looped and woven willow branches providing support to the potted plants. Details of the woodcut are almost obliterated by the opaque pigments so often used for hand-coloring early printed books; far preferable were the transparent watercolor washes such as that apparently used for *Physalis alkengi* in the *Gart der Gesundheit*.

\*\*\*



**CRESSLER'S  
FRAGRANT BALM**  
A MOST EXQUISITE TOILET LUXURY.

The **FINEST** preparation in use for **CHAPPED HANDS, FACE AND LIPS**, and any eruptions or roughness of skin. A most delightful and far superior substitute for Cold Cream, Camphor Ice and Glycerine, without being sticky or greasy.

It will positively remove sunburn and tan, and make the skin smooth, beautiful, soft and white. Kid gloves can be worn immediately after using. It renders face powder invisible and makes it adhere. It is the only thing gentlemen should use after shaving, as it allays all irritation, and soothes and cools the face. It is an excellent preparation for mothers to apply to infants to cure chafing, also to apply to recent burns that are not blistered.

**CRESSLER'S  
Wild Rose Tooth Powder,**  
A delicious dentifrice for cleansing and preserving the teeth and purifying and perfuming the breath.

**D. W. CRESSLER & CO.,**  
Philadelphia and Chicago.

Compliments of your Druggist.

**EDWIN ARTZ,**  
Augusta, Ill.  
P29:78

# A NEW Orchard and Garden,

Or

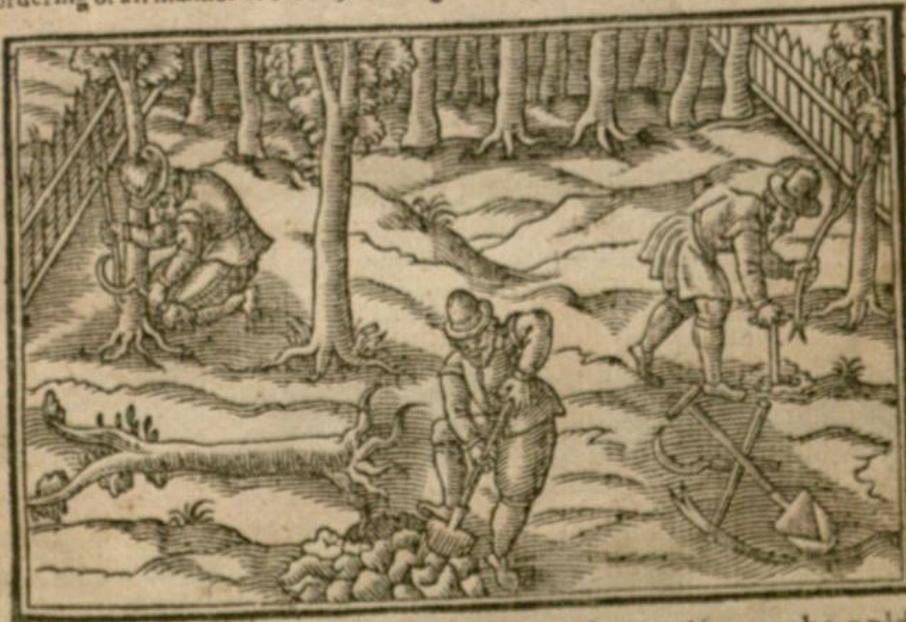
The best way for planting, grafting, and to make  
*any ground good, for a rich Orchard: Particularly in the North,*  
and generally for the whole kingdome of England, as in nature,  
*reason, situation, and all probability, may and doth appeare.*

With the Country Houfewifes Garden for hearthes of common use;  
their vertues, seasons, profits, ornaments, variety of knots, models  
for trees, and plots for the best ordering of Grounds and Walkes.

As also the Husbandry of Bees, with their severall uses and annoy-  
ances, all being the experience of 48. yeares labour, and now the third  
time corrected and much enlarg'd, by *William Lawson.*

Whereunto is newly added the Art of propagating Plants, with the true  
ordering of all manner of Fruits, in their gathering, carrying home, and preservation.

Skill and paines bring fruitfull gaines.



Nemo sibi natus.

London, Printed by *Edward Griffin* for *Iohn Harrison*, at the golden  
Vnicorne in Pater noster-row, 1638.



**Now in spring gardeners are irresistibly drawn to their gardens; as soon as they lay the spoon down, they are on the beds presenting their rumps to the splendid azure sky. -- Čapek, *The Gardener's Year***

**William Lawson (active 1618):** A new orchard and garden.

London: printed by Edward Griffin for John Harison, 1638. B7980

**Eels in the birdbath:** Lawson claimed that his books were written for North Country folk and his advice was sometimes very practical: “Your gardener had not need to be an idle or lazy lubber ... if you are not able, nor willing to hire a gardener then you must take all pains”; and sometimes very impractical: “There should run a pleasant river with silver streames ... a speckled trout, or fleighty eele, or some other dainty fish ... Or moats, whereon you might row with a boate, and fish with nettes”.

Lawson’s list of garden pests is a little different from our stable of Merry Wanderers: topping his list are deer, followed by goats, sheep, hares, rabbits, cattle, horses, then various birds, winds, cold, weeds, worms, moles, poison smoke, and finally “other works noisome done in or neere your orchard” and “evill neighbors, a careless master, an undiscreet, negligent or no keeper”.

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Ornate box turtle belly shell - Argonia, Kansas





**I**t once happened to me that ... a melon grew so huge ... so record breaking, that it caused astonishment to a whole host of publicists, poets, and even university professors ... After some time the melon began to look rather indecent; then we cut it, and ate it for punishment. --  
Čapek, *The Gardener's Year*

**Kan'en Iwazaki (1786-1842):** *Honzô zufu* [Illustrated manual of plants]. Tokyo: Iwamoto Yonetarô, 1916-1922. 95 vols. Vol. 68, 1921. D1484

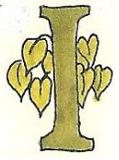
**Chicken am good, 'possum am fine, but nothin' like that watermelon hangin' on the vine.** This line from an old American folk-song is more Kentucky than Kabuki, but methinks the sentiment is international. There is only one person of *my* acquaintance who does not like watermelon.

This is the first complete printed edition of the greatest illustrated botanical work of 19<sup>th</sup> century Japan, and is considered one of the most important works on systematic botany in the Tokugawa period (1603-1867). The author was disturbed by the lack of accurate plant illustration in Japanese botanical works and his intention was to print a collection of drawings in black and white from paintings he had made of some 2,000 plants, and to have the colors added by hand.

After the first four volumes were printed in 1830, the project was abandoned and the compilation continued in manuscript. It was completed in 1844, two years after Iwasaki's death. Manuscript copies are very beautiful and very rare, so at the beginning of the 20<sup>th</sup> century a Society for the Publication of the *Honzô Zufu* was organized. This monumental woodblock color edition was completed some 20 years and 95 volumes later. It is said to be almost impossible to locate a complete copy of this work. The University of Kansas is fortunate to have one and KU's East Asian Library has a facsimile of one of the original manuscript copies.

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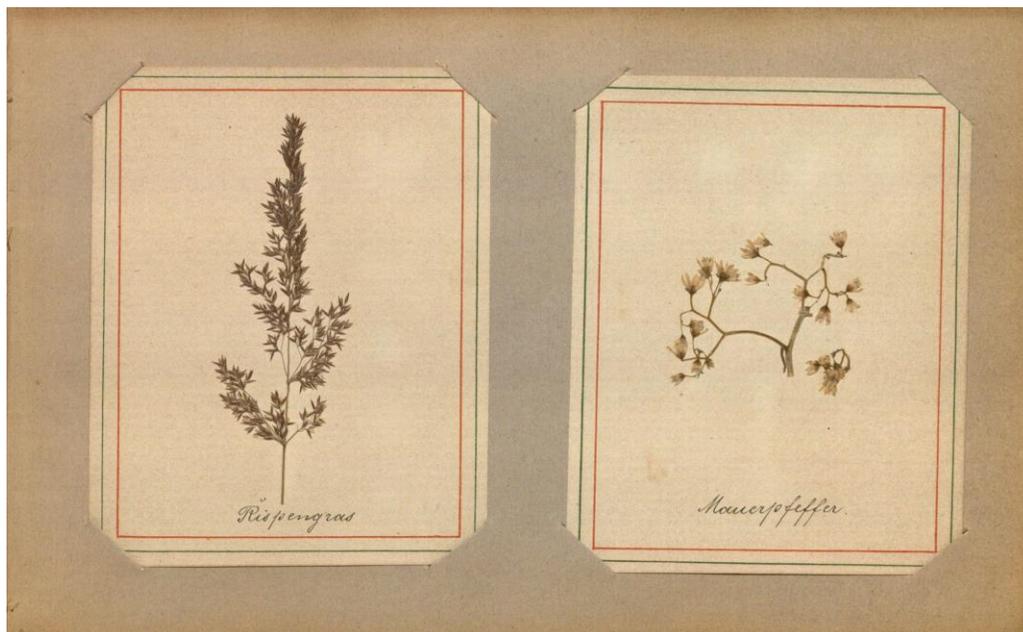


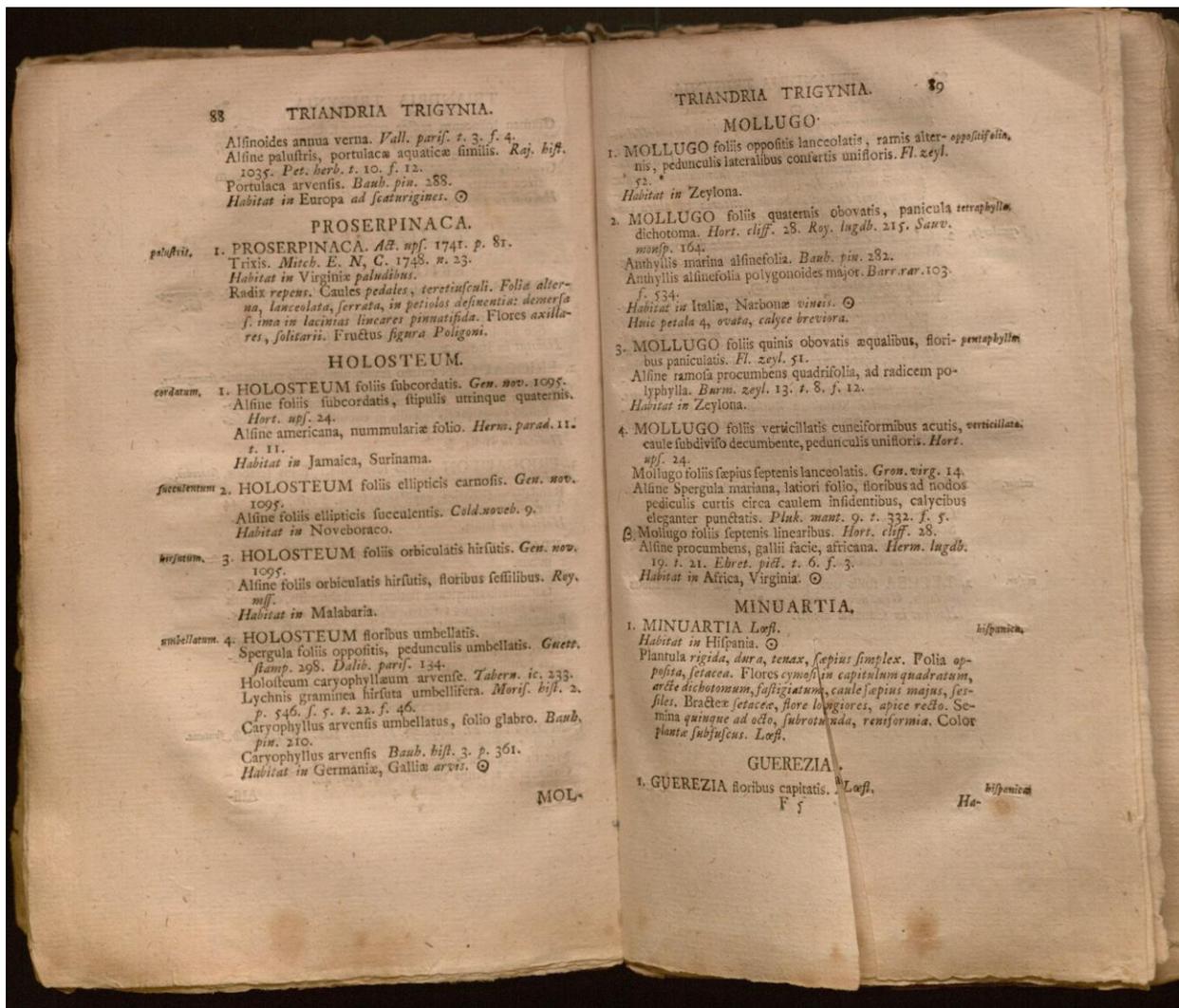
**I**n July, according to the immutable law of gardeners, roses are grafted. ... When all is ready the gardener tries the blade of the knife on the tip of his thumb; if the grafting knife is sufficiently sharp it gashes his thumb and leaves an open and bleeding wound. This is wrapped in several yards of lint, from which a bud rather full and big, develops on the finger. This is called grafting a rose. -- Čapek, *The Gardener's Year*

*The florist*, vol. 1. January to December. London: Chapman and Hall; Edinburgh: J. Menzies, 1848. C8308

**One perfect rose:** Dorothy Parker would have preferred one perfect limousine, of course. She might not have such contempt for her sister-in-prickliness, the rose, if she'd had a subscription to *The florist*, a practical and pictorial monthly magazine of flowers, fruits and general horticulture.

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**flower without a name is a weed, a flower with a Latin name is somehow raised to a state of dignity ... and we gardeners are particular about good names. For that reason we have children and blackbirds, because they pull out and mix the labels. -- Čapek, *The Gardener's Year***

**Carl Linnaeus (1707-1778): *Species plantarum* [1st state].**  
 Holmiae: impensis Laurentii Salvii, 1753. 2 volumes. Vol. 1.

Linnaeana C340

**Landmark in the history of botany:** The *Species plantarum*, Stockholm, 1753, is the world's single most important botanical work, for in it the great Swedish naturalist Carl Linnaeus (or Linné)

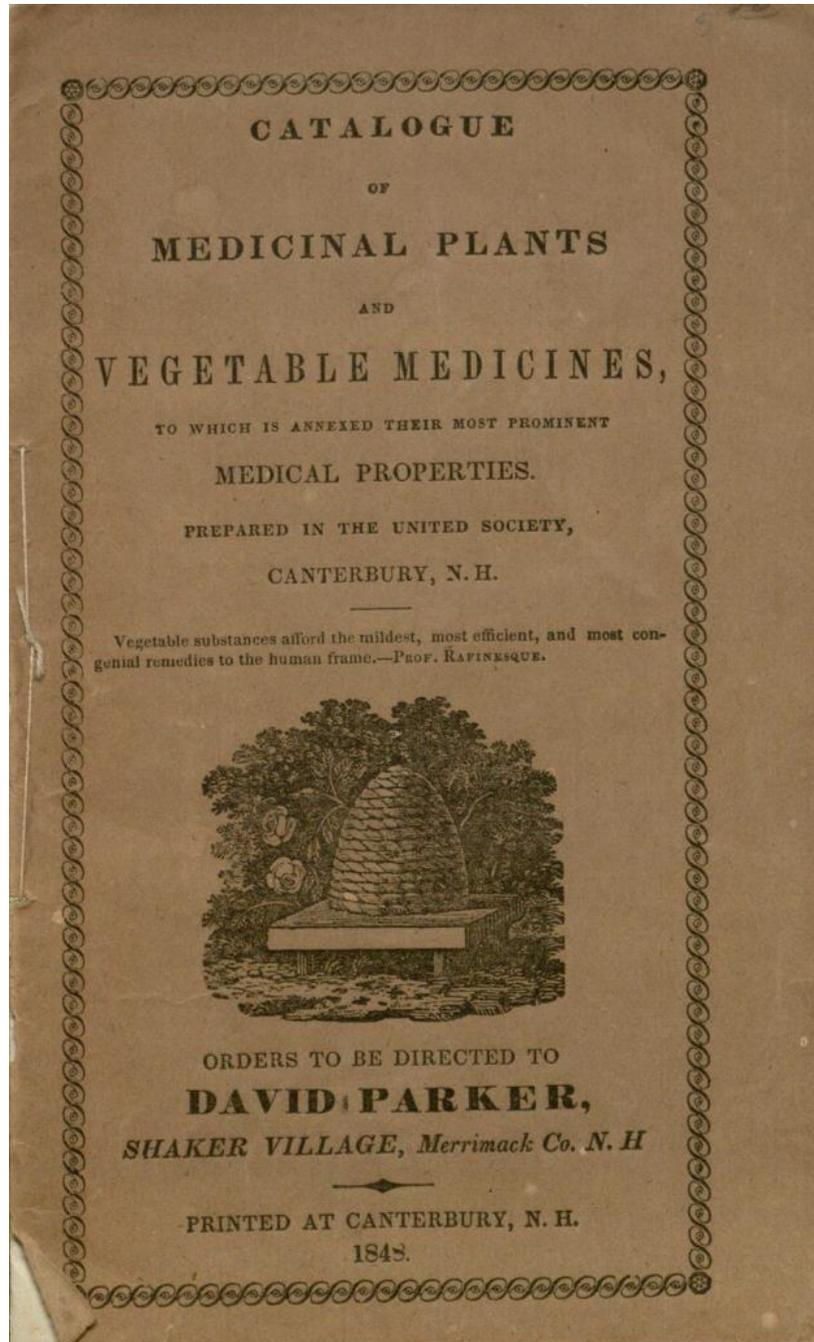
first gave two names, a genus name and a specific epithet, to all known plant species. Accordingly it has been internationally accepted as the starting point for modern botanical nomenclature, and as new species are discovered and described, the only valid name is the one first published. Linnaeus's predecessors and Linnaeus himself (for even his own works published before 1753 are considered 'pre-Linnaean') had used names of varying lengths to identify the general group to which an organism belonged and to give enough information about it to separate it from similar species.

As more species became known the names lengthened and were impossible to remember: the scarlet strawberry had been known as *Fragaria foliis ovatis crenatis nervosis calycibus maximus*. Its binomial *Fragaria virginiana* was much more convenient and one could refer to other sources for a description that would differentiate it from other species of strawberry.

Earlier scientists had used convenient systems on a small scale, including binomials, but Linnaeus was the first to apply his rules consistently to the whole plant kingdom – and five years later to the whole animal kingdom in the 10<sup>th</sup> edition of his *Systema naturae*, 1758, thus marking the beginnings of modern zoological nomenclature and systematics.

Volume 1 of the *Species* exists in two states: the first is shown here and is a great rarity. After the book was printed Linnaeus wanted to make changes on leaves E6, F5 (shown), and R2. These cancelled leaves were replaced in a second printing by new leaves with changes made. Although the first state is bibliographically interesting and was published three months prior to the second, both are treated as though published simultaneously and for purposes of priority the cancelled text must be considered non-existent, for the International Code of Botanical Nomenclature, 1956, states that 'a name is not validly published when it is not accepted by the author who published it'.

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ardeners recognize one another ... at first sight ... in the first phrases which they utter they exchange views on the weather ... strawberries, American catalogs ... in December the garden is mostly found in a great number of garden catalogs. The gardener himself hibernates under glass in a heated room, buried up to the neck, not in

**manure or brushwood, but in garden catalogs ... Then the hibernating gardener ceases entirely to be interested in what he has got in his garden, being fully occupied with what he has not, which of course is far more ... -- Čapek, *The Gardener's Year***

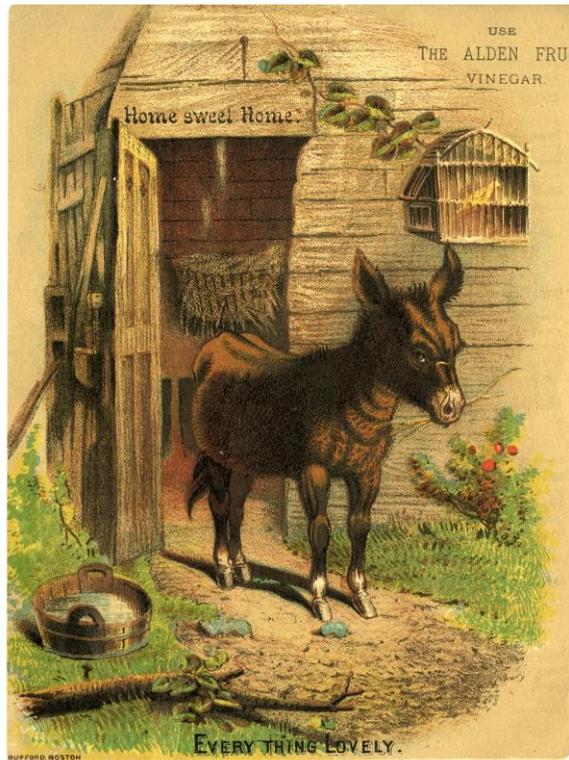
**United Society of Shakers.** *Catalogue of medicinal plants and vegetable medicines.* Printed at Canterbury, N.H., 1848. B14840

**Can one order limas from L.L.Bean?** In pre-supermarket America people grew their own vegetables; when for some reason seeds could not be harvested or saved from the year's crop, they were imported from England, Holland, and Germany. The Shakers were the first to produce and distribute seed commercially in this country, near the end of the 1700s, but following the tenets of their faith they grew only "useful" plants, i.e. vegetables, and edible and medicinal herbs.

After 1784, when David Landreth established a seed house in Philadelphia, ornamentals were introduced, seed companies sprouted up all over and thus began a competition, which along with the science of genetics has resulted in the most wonderful improvements in both plants and catalogs.

Color catalogs first appeared in 1853 from B.K. Bliss, Springfield, Massachusetts. The libraries of Cornell University and the U.S. Department of Agriculture have large collections of these catalogs, the study of which provides an interesting picture of plant introduction and use in this country.

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**Everything that exists is either suitable for the soil or it is not. Only cowardly shame prevents the gardener from going into the street to collect what horses have left behind ... When they bring you a whole wagonload ... a warm smoking pile, you walk around it, weigh it with your eyes and nose, and say approvingly: "God bless it" ... A cartload of manure is most beautiful when it is brought on a frosty day, so that it steams like a sacrificial alter. ... the gardener ... carefully spreads this gift of God over the whole garden as if he were spreading marmalade on his child's bread.**  
-- Čapek, *The Gardener's Year*

**Advertising card** for Alden fruit vinegar "for sale by C.C. Grigson, dealer in staples and fancy groceries, Augusta, Ill." Late 19<sup>th</sup> century.  
*Box P29*

**The Excrement of the Gods:** The Colombians call their gold nuggets the excrement of Supreme Beings, and so is the excrement of earthly beasts Gold to the gardener.

FRIDERICI SCHRAGII,  
ANTECESSORIS ARGENTORATENSIS.  
*DISSERTATIO JURIDICA*  
DE  
JURE  
HORTENSI

Vom

*Garten-Recht.*

Annexum est

JOH. TOBIÆ GEISLERI,  
MILETENSIS,  
*SCRIPTUM JURIDICUM,*  
De eodem Argumento.



ARGENTORATI,

Sumptibus JOHANNIS FRIDERICI SPOOR, Bibliop.

ANNO M DC XCIIX.



very citizen dreams sometimes of what he would do if one day he became a dictator. For my part ... I should issue a Raspberry Edict. It would enact that no gardener, under the penalty of having his right hand cut off, must plant raspberries near the hedge. Tell me, what has a gardener done to have everlasting raspberry suckers from his neighbor's garden sprouting in the middle of the Rhododendrons? -- Čapek, *The Gardener's Year*

**Friedrich Schrag (died 1718)**, *praeses* : *De jure hortensi. Vom Garten Recht*. [Defendet Albertus Mappus]. Argentorati: sumptibus Johannis Friderici Spoor, 1698. *Summerfield B1950*

**There goes the neighborhood.** The Gardener of Avon advises (*Measure for measure*: Act II. Scene I.), "We must not make a scarecrow of the law, setting it up to fear the birds of prey."

Whatever that means, at least it's probably time to stand the birdbath right-side up again, get out the weed-whacker, take the tire-swing off the apple tree so it won't breed mosquitos, yank out the dead stuff (stalks of unharvested corn and *Cannabis*), and cart away the rusty carcass of our old Chevy, lest we bring down on ourselves the wrath of both neighbor *AND* the local constabulary.

Subtitled *Vom Garten-Recht*, this is a dissertation on legal regulation of gardens: kinds of gardens, cultivation, the care and feeding of plantings, what is allowed to be grown where, and whether on the inside or the outside of city walls and limits; opinions of both classical and contemporary authors are cited.



## **THE GARDEN OF EDEN**

**It is often said that the emotion shared by poets, musicians, monks, philosophers, artists, and lovers alike is nothing more than a longing to return to the Garden of Eden, a nostalgia for Paradise. But for most Mortals, who can resist anything but Temptation and wouldn't care to take chances in Eden, Special Collections offers a less terrifying experience: here one can read about Birds of Paradise in books from one of the finest collections of ornithologia in the world, the Ellis**



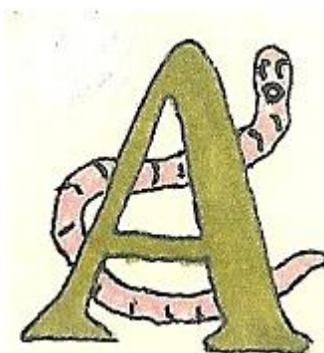
by me today.” Imagine him ... sitting over a test-tube and thinking how the whole tree of life would grow from it, how all animals would proceed from it, beginning with some sort of beetle and ending with man himself. A man of different substance from ours. Miss Glory, that is a tremendous moment.  
-- Čapek, R. U. R. (*Rossum's universal robots*)

**Isidore of Seville (died 636 A.D.):** *Etymologiae*. Augustae Vindelicorum: G. Zainer, 1472. Pryce E8

**Renaissance Man: the prototype:** The *Etymologiae* is the crowning work of Spanish ecclesiastic, encyclopaedist, and historian, Isidore of Seville. A compilation and condensation of all his learning, it touches on everything from grammar to architecture to medicine, and although unoriginal and uncritical it was nonetheless a valued authority for centuries and served to keep ancient culture and learning alive through the Middle Ages.

In addition to the genealogical trees shown here, the volume includes some FIRSTS in the history of printing: it is the first dated printed book printed in Germany with Roman type, and includes the earliest printed map. It is the earliest work in this exhibition and one of four incunabula shown (from Latin *incunabulum* meaning cradle, beginning, or swaddling clothes; in bibliography it refers to those books printed in the infancy of printing from movable type, i.e. from about 1450 through 1500).

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**fter his death the gardener does not become a butterfly, intoxicated by the perfumes of flowers, but a garden worm tasting all the dark, nitrogenous, and spicy delights of the soil. -- Čapek, *The Gardener's Year***

**Saint John Chrysostom (died 407):** [*Extracts from the works, in Russian Church Slavonic*] Manuscript from Russia, 18<sup>th</sup> century.

MS C38

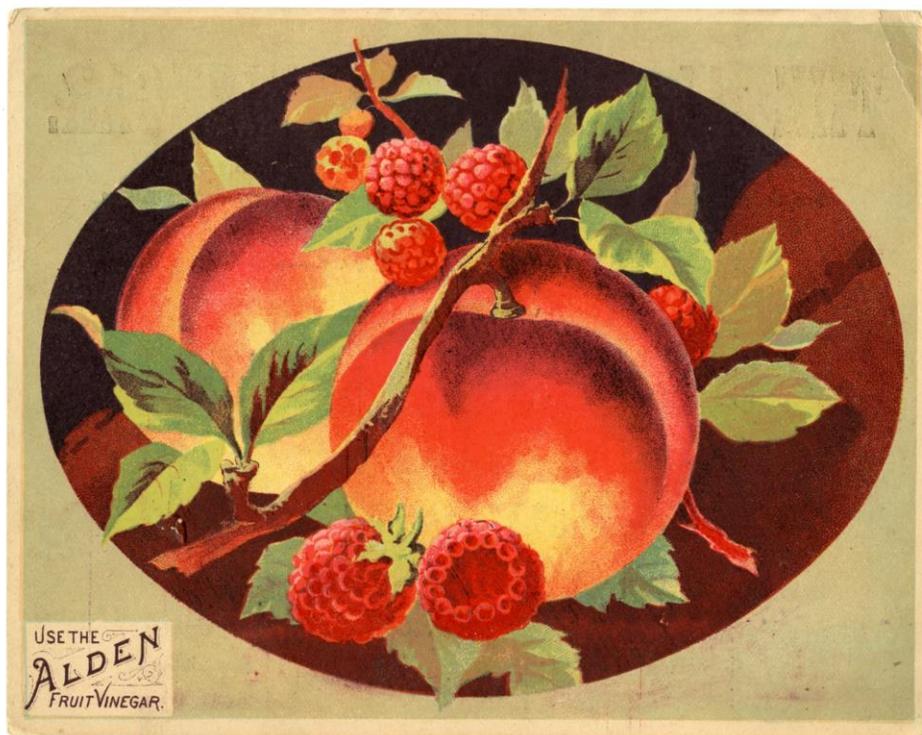
[This manuscript will need to be completely recataloged in the light of KU History Professor Eve Levin's research on what she calls a "Kansas Apocalypse": Eve notes that only six of the texts herein are attributed to St. John Chrysostomus and it is most certainly no older than the last decade of the 18<sup>th</sup> century (the old catalog record shows it to be 16<sup>th</sup>-17<sup>th</sup> c.). She suggests that "A more accurate title of MS C38 might be: 'Instructional Miscellany with Illuminations on Apocalyptic Themes.'"]

**Xerxes did die, And so must I:** St. John Chrysostom, "The Golden Mouthed", was the most famous of the Greek Fathers of the Church.

His works consist of discourses illustrating passages of Scripture, commentaries on the Biblical books, etc.

But the passage shown here is from the monk Dorotheus's sermon on death and doomsday, or, roughly, "On the remembrance of death" and it reads as follows: "... thou wilt be where thou knowest not what will befall thee. For no one can pass by this most bitter cup. Remember that thou art dust and that thou art nourished by the earth and that thou shalt return to the earth: thy flesh will crumble and rot, and worms will devour it and thy bones will disintegrate. Remember ... how many emperors and princes there have been on earth in all their sumptuousness and splendor ... and they left this world with its sumptuousness and splendor. For lo the earth is even as ashes: how many powerful heroes have there been in in the world." –*Translated from the Russian Church Slavonic by Michael Biggins.*

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ON  
THE ORIGIN OF SPECIES

BY MEANS OF NATURAL SELECTION,

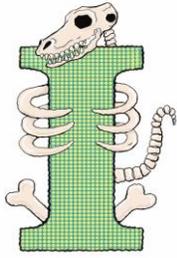
OR THE  
PRESERVATION OF FAVOURED RACES IN THE STRUGGLE  
FOR LIFE.

By CHARLES DARWIN, M.A.,

FELLOW OF THE ROYAL, GEOLOGICAL, LINNÆAN, ETC., SOCIETIES;  
AUTHOR OF 'JOURNAL OF RESEARCHES DURING H. M. S. BEAGLE'S VOYAGE  
ROUND THE WORLD.'

LONDON:  
JOHN MURRAY, ALBEMARLE STREET.  
1859.

*The right of Translation is reserved.*

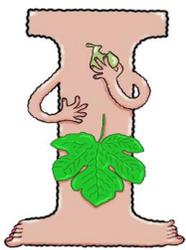


**f gardeners had been developing from the beginning of the world by natural selection they would have evolved ... into some kind of invertebrate. After all, for what purpose has a gardener a back? ... the back remains an inflexible thing which the gardener tries in vain to bend. The earthworm is also without a back ... Gardeners have certainly arisen by culture and not by natural selection. If they had developed naturally they would look differently; they would have legs like beetles ... But because the gardener is outwardly constructed as imperfectly as other people, all he can do is ... to maintain equilibrium against all the laws of gravity, to reach everywhere and avoid everything. -- Čapek, *The Gardener's Year***

**Charles Darwin (1809-1882):** *On the origin of species by means of natural selection.* London: J. Murray, 1859. *Ellis Aves B108*

**There is no ancient gentlemen but gardeners:** Because of its enormous social impact, *On the origin of species* was probably the most influential scientific book in the history of the natural sciences. Its publication aroused controversy around the world, both scientific and religious from scientist and non-scientist alike, and continues to do so, over 157 years later. The idea of evolution can be traced to the ancients, but it was Darwin who provided the concept of natural selection, the mechanism by which new species evolve through the ages; supported by sheer volume of evidence and by everything he wrote subsequently, he made that concept palatable to the world scientific community.

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'm ready to bet that very few of those who read these lines ... dreamed last night of heavenly gardens, celestial perfumes, and beautiful women. You are more likely to have dreamed ... that you were in the street or at a party ... and suddenly you noticed with horror that you were only in your shirt and that everyone was looking at you scandalized and that you were trying to hide yourself somewhere in a panic of shame and humiliation. -- Čapek, "On dreams" in *Intimate things*

**Johann Hermann Knoop (1700?-1769?):** *Fructologia*. Te Leeuwarden: by A. Ferwerda en G. Tresling, [1758?-1763? i.e. Amsterdam?: Allart? 1790?]

E2111

**Go figure:** No bit of greenery has been more maligned than the fig-leaf, which is guilty of nothing more than coming to the rescue of Adam and Eve in their ‘panic of shame and humiliation’ so they could at least leave Eden ‘in full fig’. Giving someone the fig is not at all a gesture of kindness and generosity, like giving someone an orange, but rather a gesture of contempt; to fig someone is to get rid of them, presumably with a poisoned fig; Iago in his famous garden speech shouts, “Virtue? A fig!”

Fortunately in this Dutch work on fruit culture, figs, apples, and bananas are given due respect from a botanical point of view. The fig is indigenous to Iran, Asia Minor and Syria and has a long and interesting medicinal, mythological and culinary history.

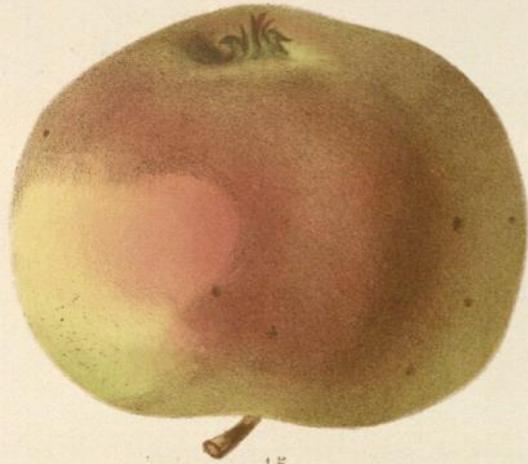
Bibliographically this work is mysterious: the 3 parts are separately paginated and signed; its title pages have the imprint of the Leeuwarden edition, first issued 1758-1763, but the text has the collation of the Amsterdam edition published by Allart, 1790. All parts have also been published separately, and in different combinations.

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Selenite - Barber County, Kansas

*Le Verger.*



15.



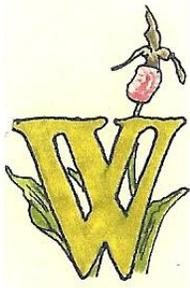
16.

*Pingéon pinx!*  
*dessiné par M. Sébanc.*

*E. Grabowski lith.*

15. ROUGEUR DE VIERGE. 16. PEARMAIN D'ÉTÉ.

*Imp. Bequet à Paris.*



**While one is in the prime of youth one thinks that a flower is what one carries in a buttonhole ... instead of digging in the garden one runs after girls, satisfies one's ambition, eats the fruit of life which one has not produced oneself, and, on the whole, behaves destructively. -- Čapek, *The Gardener's Year***

**Alphonse Mas (1817-1875):** *Le verger; ou Histoire, culture et description ... des fruits.* Paris: G. Masson, 1865-1873. 9 volumes.  
Tome V: Pommes précoces. D1557

**Them apples:** If you like the ones delineated above, there are a lot more where they came from, as well as pears, plums, peaches, cherries, and apricots, in this 19<sup>th</sup> century French periodical publication of tree culture and pomology. Just as the apple is responsible for the parentage of the human race, so the wild crab apple, *Malus pumila* is the parent species of our cultivated apples. Adam and Eve almost certainly didn't eat crab apples that fateful day because they are inedible raw, although the excellent jelly that's made from them may have been something Eve came up with to keep her man happy once they'd settled into domesticity.

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*Musa florens Hartecampi*

H. Niffman delin.

J. Vander Linn sculp.



**To produce new species, that is the secret dream of every passionate gardener!** -- Čapek, *The Gardener's Year*

**Carl Linnaeus (1707-1778):** *Musa cliffortiana*. Lugduni Batavorum, 1736.

*Linnaeana C118*

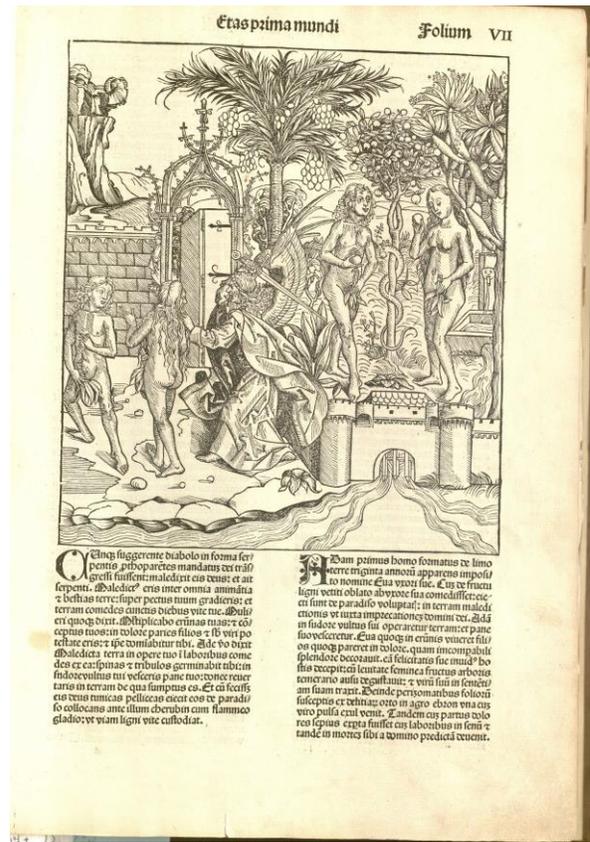
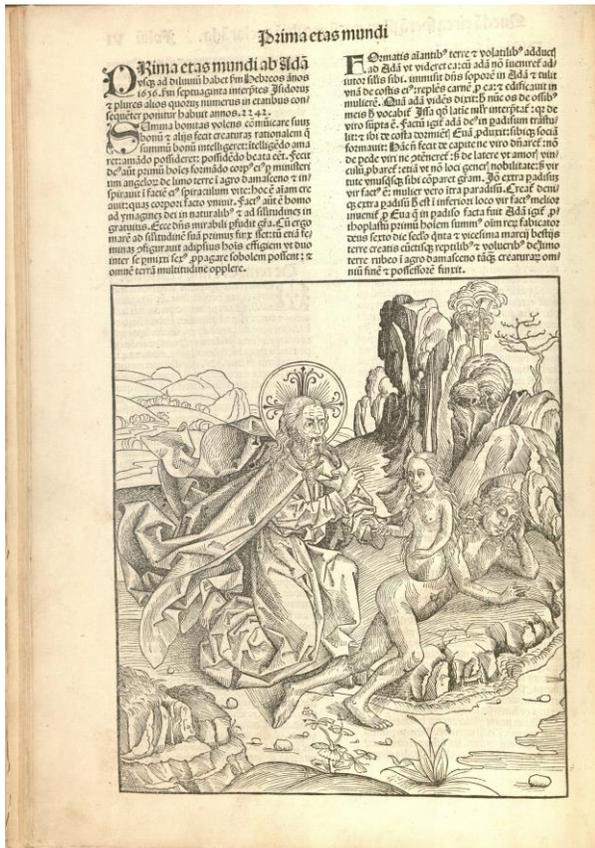
**Chiquita does Stockholm:** The many cultivated bananas are not new species at all, though gardeners in prehistoric times apparently had a hand in deriving them from wild forms. They all belong to the genus *Musa* but because they are all sterile hybrids they cannot be given exact species names.

Linnaeus's success in getting a banana to flower in a Swedish greenhouse was considered a miracle and in this monograph he suggests that the banana is the forbidden fruit of the Garden of Eden. When the plant waxed fruitful he sent bananas to the royal family in Uppsala, who may have been the only Swedes to taste them before the beginning of the 20th century and the founding of the Swedish Banana Company.

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Crinoid stem - South Central Kansas



**real gardener ... if he came into the Garden of Eden ... would forget to eat of the fruit of the tree of knowledge of good and evil; he would rather look round to see how he could manage to take away from the Lord some barrow-loads of the paradisiac soil ... and he would begin to mess about with the soil, innocent of what is hanging over his head. "Where are you Adam?" the Lord would say. "In a moment," the gardener would shout over his shoulder; I'm busy now." -- Čapek, *The Gardener's Year***

**Hartmann Schedel (1440-1514): *Liber chronicarum*. Nuremberg: Antonius Koberger impressit, 12 July 1493. *Summerfield H12***

**Alas my love you do me wrong:** This scene of Eden with Before and After views of Adam and Eve, for some reason wearing fig leaves even before the Fall, is from the *Liber chronicarum*, known as

the Nürnberg chronicle. It is a landmark in the history of the illustrated book from the “cradle” period of printing.

The woodcuts were made by Michael Wohlgemuth (to whom Albrecht Dürer was at that time apprenticed and may have had a part in preparing some of the cuts), and Wilhelm Pleydenwurff. The work is an account of world history from Creation to June 1, 1493. There is no direct mention of Columbus who had recently returned with news of his discovery of the New World, although there is a passage which might be interpreted as a counter-claim: that a certain Martin Behaim of Nürnberg and Diego Cano of Portugal had discovered some American islands during a voyage for the King of Portugal, earlier in 1493.

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**I**t is true that I have seen some rather special birds ... But I am thinking now of everyday birds and town birds. It seems that nature is getting less prolific and that birds are slowly dying out ... but sparrows and blackbirds are not decreasing, nor are pigeons; these birds seem to have sized man up and said to themselves that man and his existence do not worry them at all. In the struggle for life only those creatures survive which can get on with man. -- Čapek, "Birds", in *Intimate Things*

**René Primevère Lesson (1794-1849):** *Histoire naturelle des oiseaux de Paradis*. Paris: Arthus Bertrand, 1835. *Ellis Aves C994*

**A very fine gander:** The family Paradiseaeidae or birds of Paradise, inhabits New Guinea and adjacent islands. This monograph by French naturalist and antiquary Lesson includes, in addition to scientific descriptions of the species, an account of New Guinea and its inhabitants and 43 hand-colored engraved plates. There is also a large-paper copy of this work in our Ellis Aves Collection.

The bird-of-Paradise plant (*Strelizia reginae*) is a banana-like ornamental said to have flowers suggestive of the birds of Paradise.

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**D**amn!"thinks the gardener, looking at the Matterhorn ... "if only I had this mountain in my garden; and this bit of forest with its enormous trees, and this clearing, and the stream here ... and how about a herd of stags, or some chamois ... that rock there ... that oak grove ..." -- Čapek, *The Gardener's Year*

**Joachim Johann Nepomuk Spalowsky (1752-1797):** *Vorbothe der Naturgeschichte*. Wien: gedruckt bei Joseph Hraschanzky, 1789.  
*Ellis Aves D711*

**Mountains and molehills:** Alas, only the gardeners of Zermatt and other Swiss villages can boast of a Matterhorn out the kitchen window, and most of our gardens are not Peaceable Kingdoms at all, but battlefields for neighborhood tomcats and other critters who believe in the survival of the fattest.

Spalowsky's illustration shows us how we could be in the best of all possible worlds, so even if the barnyard gate into the garden is left

open, “The wolf shall dwell with the lamb ... And the cow and the bear shall feed. And the lion shall eat straw like the ox ...”

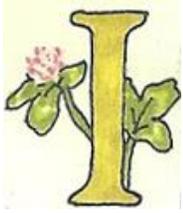
But having eaten of the Tree of Knowledge, we know better: the cow and the bear will feed, alright, on our newly ripened corn, and the straw-eating lion would devour the mulch protecting our strawberries while his friend the ox ate the strawberries.

As for moles, they do wonders for loosening the soil, but their hills can't compare to the Alps aesthetically and are far more treacherous for the gardener. *Scalopus* will claw the ground out from under our hyacinths and topple the tulips from below, his chunnel weaving and bobbing like a Kansas tornado as we watch helpless, finally to give chase and sprain an ankle in the trench designed as a speed bump. All we can do in revenge is catch and skin the little bugger and soothe our blisters with soft, furry moleskin.

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**f it were possible to make a compact with the devil ... the gardener would sell him his own soul; but for this soul the poor devil would pay damnably dear. “You miserable fellow”, he would say at the end, “rather than slave like this, get yourself gone to Paradise ...”**

**And lashing his tail in irritation, till he knock off all the flowers of the feverfew and helenium with it, he would go on his business, and leave the gardener to his immodest and inexhaustible desires. -- Čapek, *The Gardener’s Year***

**John Milton (1608-1674): *Le Paradis perdu*. A Paris: chez Defer de Maisonneuve, 1792. 2 volumes. Vol. 2. E178**

**Mea culpa:** In the latter part of the 18<sup>th</sup> century the French experimented with the technical aspects of printing book illustrations in color. Above is an example of the method known as *à la poupée*: a twist of cloth (the *poupée* or “doll”) was used to hand-ink the plate with different colors; the excess was wiped away and it was then printed in a single strike. Stipple engraving, with its closely placed dots, lent softness to the image and a suggestion of shading to the color.

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XII. Der Reizker. (Agaricus, Lactifluus, deliciosus. Pers.)

S. Wachspröp. M. und Abbild. Tab. M.

Dogleich dieser Schwamm nicht sehr empfohlen zu werden verdient, so gehört er doch zu den wichtigsten, die hier abgehandelt werden müssen, weil er an mehreren Orten im Gebrauche ist, ja sogar in Kärnthen, Keain und Tyrol auf eine ähnliche Art wie der Champignon cultivirt wird, da er doch mit einigen sehr giftigen Schwammarten so viele Aehnlichkeit hat, daß man ihn nur mit vieler Genauigkeit davon unterscheiden kann.  
 Er führt noch viele andere Nahmen, welche er jedoch auch zum Theil mit einigen der

Der Reizker.  
 Agaricus (Lactifluus) deliciosus. P.



It is golden, ruddy, violet, green. And again golden, russet, slate-blue, and brown with the brown of ochre, sienna, or sepia; red with vermillion, carmine, Venetian red, with the color of porphyry; cheese-yellow, chrome-yellow, Indian yellow, terra cotta, tawny; blue-green, yellow-green, blue, dark purple. -- Čapek, "The golden earth", in *Intimate Things*

**Leopold Trattinnick (1764-1849):** *Die essbaren Schwämme des oesterreichischen Kaiserstaates.* Wien und Triest: in Geistingers Buchhandlung, 1809.

B7536

**The Garden of Eatin’:** And while we’re talking Paradise, let’s not forget ‘shrooms, from truffles to puffballs. If Adam and Eve had stumbled onto these wonders of Creation they might never have gotten into so many other kinds of trouble – so long as they stuck with the comestibles described in this little volume of the edible mushrooms of Austria.

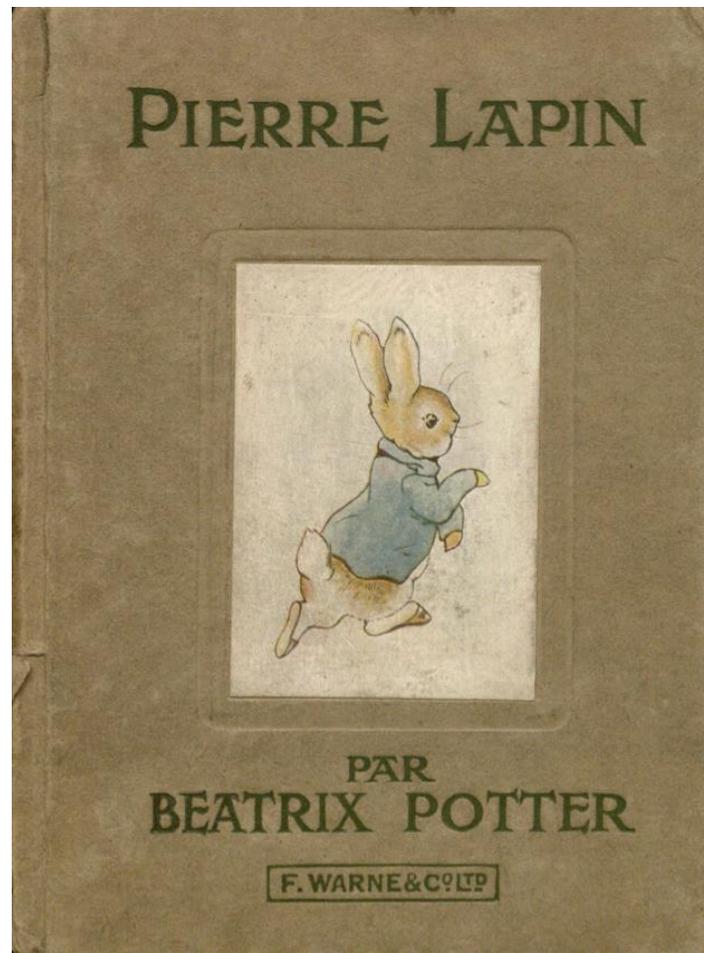
Leo Trattinnick was taken with the study of natural history from an early age and was especially enamored of entomology, mineralogy and botany: almost all his printed works are botanical, with beautiful illustrations. The hand-colored engravings herein depict mushrooms of many colors and flavors.

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## THE KINDERGARTEN

Polly Garter complains in Dylan Thomas's *Under Milk Wood*: "Nothing grows in our garden, only washing. And babies". Although we have yet to see babies or even children of kindergarten age browsing in the reading room, a few eight year-olds have become readers in the Department of Special Collections. And sometimes, but not always, they read books from the collection of late 18<sup>th</sup> to mid-20<sup>th</sup> century children's literature. Sometimes they read garden books.





**D**renched with sweat, without coat, in shirtsleeves, the breathless watcher bends over the pots, and with his eyes he draws up the sprouts which ought to come out.

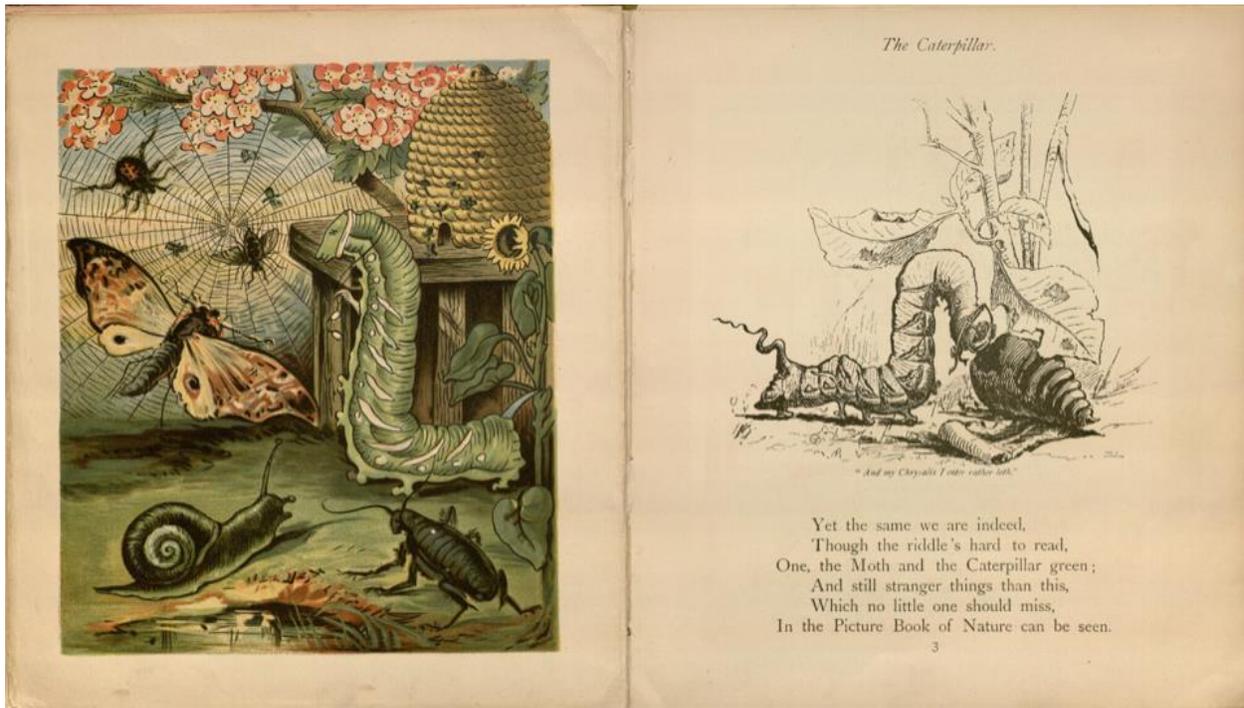
... The first day nothing comes up and the watcher tosses in his bed at night ... The third day something creeps up on a long white leg and grows like mad. He exalts almost aloud that it is here already, and he tends the first seedling like a mother nursing her child. -- Čapek, *The Gardener's Year*

**Beatrix Potter (1866-1943):** *Histoire de Pierre Lapin*. Traduit de l'anglaise par Victorine Ballon & Julienne Profichet. London; New York: Frederick Warne, 19--. *Children A105*

**“Helas!”:** Pierre, of course, feels sick all evening, so his mother has him drink some chamomile tea and puts him to bed. Who can imagine a more pleasant way to end a day of mischief than to be punished by being sent to bed by a soft rabbit mother who has just given you a cup of hot chamomile?

Few folks looking at this exhibition need an introduction to Beatrix Potter's Peter Rabbit, but not so many realize that this English natural history illustrator and storyteller (Beatrix, not Peter), made a great number of scientifically accurate drawings of other animals, insects, and plants, including a series on fungi. Her own pet rabbit was the model for Peter, the Flopsy Bunnies, Benjamin Bunny and the Fierce Bad Rabbit. *The Tale of Peter Rabbit*, shown here in a French edition, was her first book, published in 1900. She settled in Lancashire as a farmer and sheep breeder and was chairwoman of the Herdwick Breeders' Association.

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**ramp:** [kneeling by the dead **CHRYSALIS**]: Dead. She's dead too. Poor Chrysalis – and you 'ad such hopes ... They don't seem skeerd o' death, these little mites don't. Life's a rapture to them, and death's a rapture. -- Čapek, *The insect play*

**Francis Andrew Spilsbury Reid (1848-1921):** *Comic insects*. With illustrations by Berry F. Berry. London: Frederick Warne, 1881?  
*Children C161*

**Callipidder:** And, as the caterpillar in Reid's poem "The caterpillar" points out, seeing can be deceiving: he, after all, is now "A caterpillar green/ Not the prettiest you have seen", but will come out of his chrysalis in the spring as a beautiful moth. The poem ends, "Ne'er again will you rely/ For convictions on the eye,/ As appearances have often led astray."

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**I** f I ran as far as Benešov, I should see less of the spring than if I sat in my little garden. You must stand still; and then you will see open lips and furtive glances, tender fingers, and raised arms, the fragility of a baby, and the rebellious outburst of the will to live ... -- Čapek, *The Gardener's Year*

**Robert Ellice Mack (active 1886-1902):** *When all is young.*

Illustrated by Harriett M. Bennett. New York: E.P. Dutton; London: Ernest Nister; printed at Nuremberg, 1888?

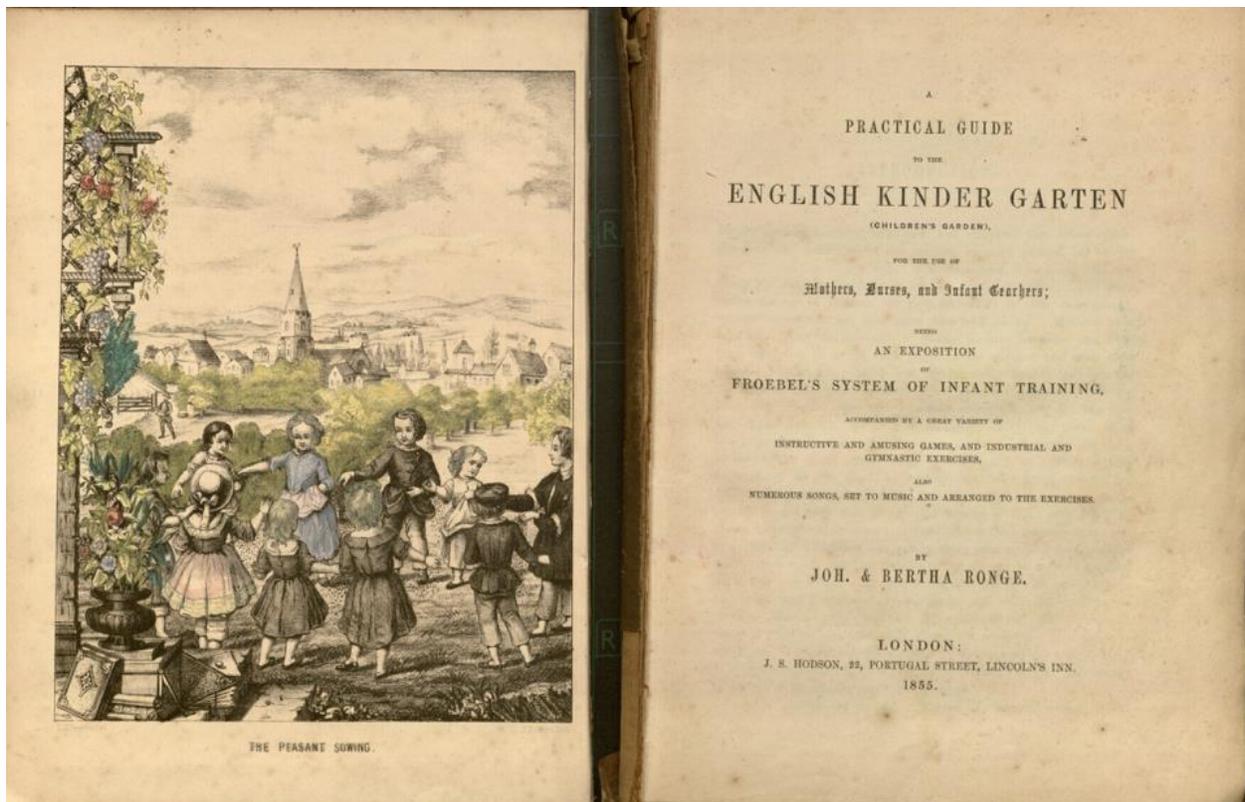
*Children C160*

**Playpen for plants:** A cold frame is a shallow frame of boards around a bed of soil with a glass cover to protect plants from wind and low temperatures (and small children), especially early in the growing season. A hot bed is the same bed of soil enclosed in a low glass frame, heated, usually by fermenting manure, and used for forcing, or raising seedlings. Neither one is recommended as a

sandbox or a hiding place; better to hold your nose and run behind the compost heap.

As a small girl I often sought shelter from a Jersey thunderstorm in the greenhouse, and kept company with the heavenly-smelling *Nicotiana tabacum*, its aroma almost as delicious in the form of Grandpa's home-made smokes, his vice enjoyed in secret from Grandma, who never guessed what became of those sticky-flowered, wonderfully stinky plants at the end of the growing season ... she knew why grandpa always smelled of calamus root, pulled from the banks of the Rancocas Crick where he liked to swim (he kept a hunk in his pocket and bit off pieces to chew on all day) ... but whence the *other*?

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**A** gardener does not grow from seed, shoot, bulb, rhizome, or cutting, but from experience, surroundings, and natural conditions. When I was a boy I had towards my father's garden a rebellious and even a vindictive attitude, because I was not allowed to tread on the beds and pick the unripe fruit. -- Čapek, *The Gardener's Year*

**Johannes Ronge (1813-1887):** and **Bertha Ronge.** *A practical guide to the English kinder garten.* London: J.S. Hodson, 1855.

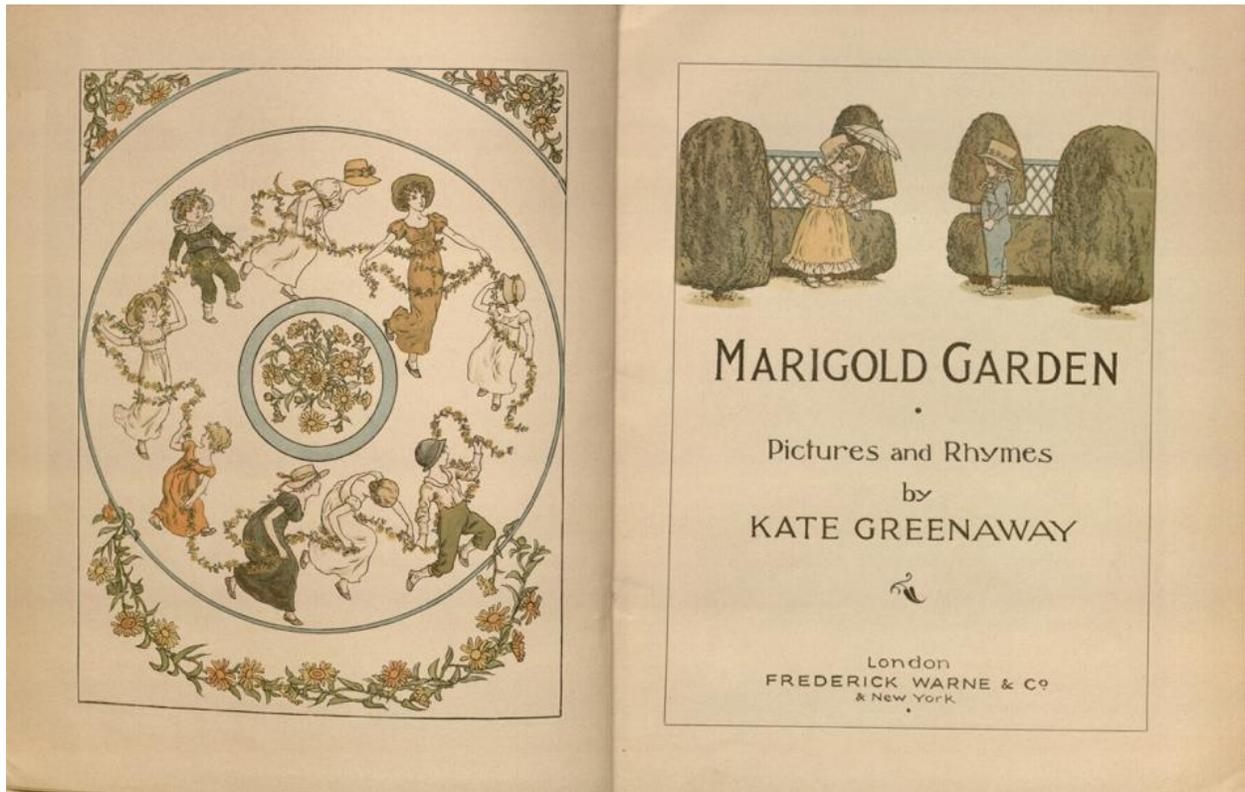
*Children D37*

**Nurturing nature:** Kindergartens were the invention of German educational innovator Frederic Froebel, whose system for teaching children not WHAT to think but HOW to think came into existence in about 1837.

At first Froebel thought the neglect of preschoolers could be remedied by educating mothers; apparently this failed and thus was born the movement which fostered such an atmosphere of freedom that Prussian officials prohibited kindergartens in 1851. His philosophy was that first-hand experience was the basis of knowledge, that children would learn best by a combination of having obstacles removed, and being in an educative environment.

Wherever possible children were to be in the open air and each was *to cultivate a little garden.* The teacher, not the child, was referred to as the "kindergartener". Kindergartens were introduced in England in 1854 and this guide appeared a year later. Even further out of reach of the Prussians, the movement began in the United States in 1867 and the first American kindergarten started up in St. Louis in 1873.

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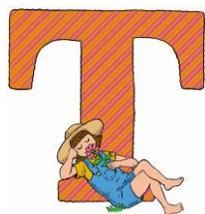
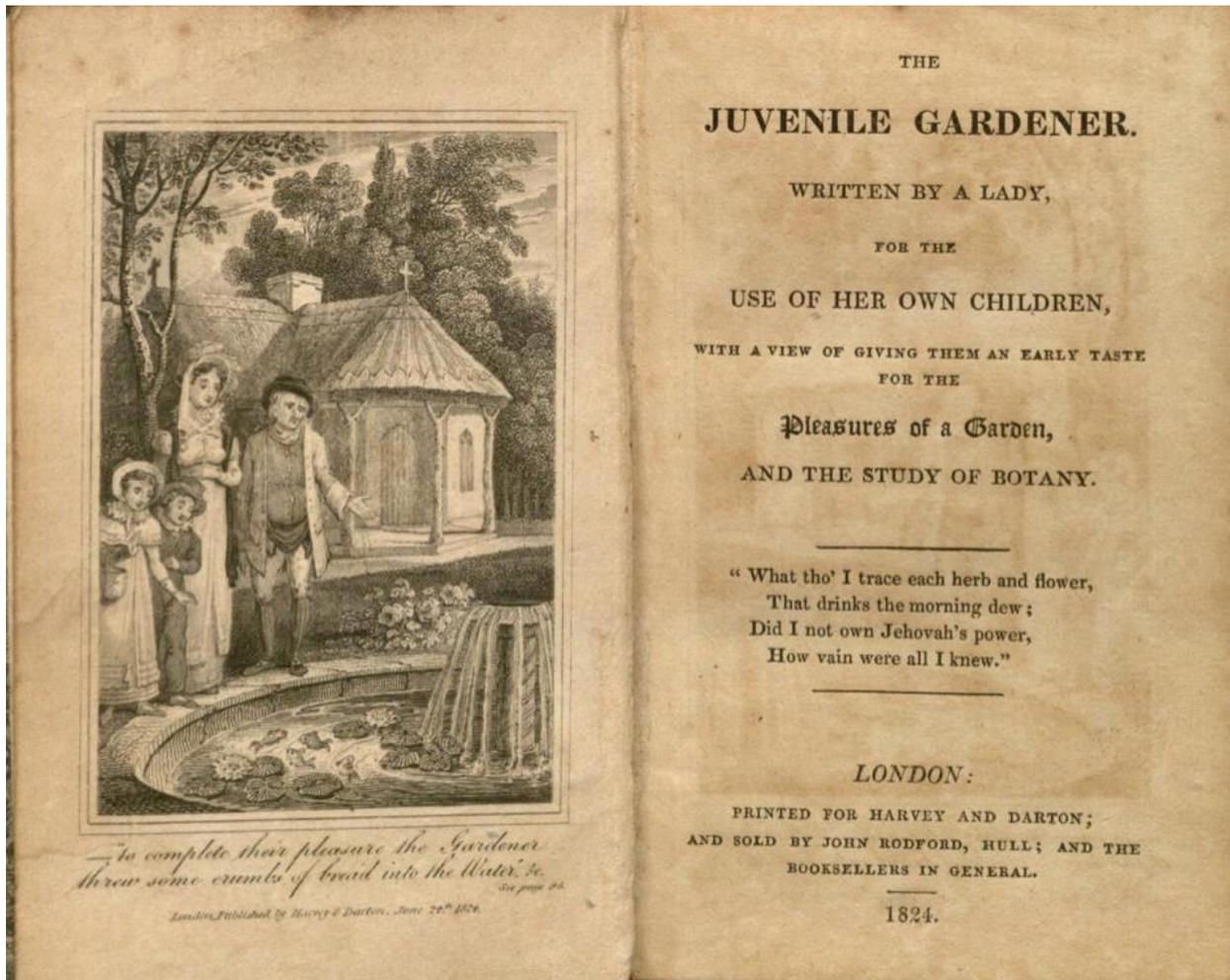
**Adam – just like us children – picked the unripe fruit, and therefore was expelled from the Garden of Eden; since then the fruit of The Tree of Knowledge has always been unripe. -- Čapek, *The Gardener's Year***

**Kate Greenaway (1846-1901): *Marigold garden*. London; New York: Frederick Warne, 1888?** *Children D38*

**You're lookin' at country:** rural scenes, cherry trees, pets, small children in pretty dresses and playsuits – these were the images Kate Greenaway had a feeling for and drew, possibly as a result of living on a farm in her own early years. As a professional artist she began by making valentines, Christmas cards and drawings for magazines, but real success came with her illustrations of child life. She designed bookplates as well.

The *Marigold garden*, for which she wrote the poetry, is thought by many to be the most charming book produced by Greenaway and her engraver-printer Edmund Evans, either separately or in collaboration.

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**There are several different ways in which to lay out a little garden; the best way is to get a gardener. --**  
Čapek, *The Gardener's Year*

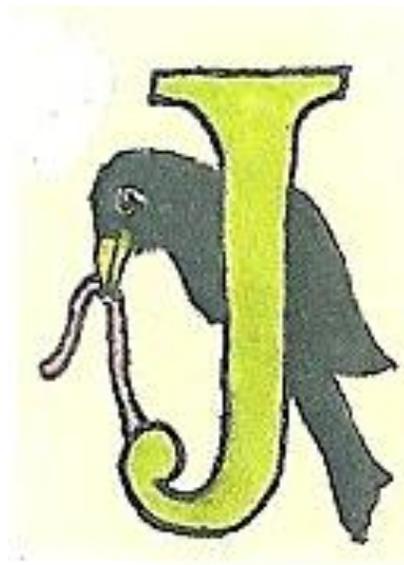
*The Juvenile gardener.* London: Printed for Harvey and Darton; and sold by John Rodford, Hull, 1824. *Children A57*

**So grow up already:** Mother in *The juvenile gardener* says, “... we will endeavor to make some progress in our new lessons ... in another month, you will see the crocus, snowdrop, and aconite, which will serve for examples, till fine weather brings us a greater variety. I shall procure Mrs. Wakefield’s *Introduction to botany* (which is a very good one) and Dr. Thornton’s *Grammar of botany*, from which we derive much assistance”.

On that note, poor Frank probably took off to find the early 19<sup>th</sup> century equivalent of the video game; on the other hand, maybe he became a botanist.

A member of the Swedish Academy of Sciences, William Odelberg, has written, “Many Swedish boys and girls have been tormented by the Linnaeus heritage, just as others have found it to be the greatest asset in their mental development. Until about 1960 ... every school child ... was required to collect and press ... plants every summer. In many cases these herbaria were handed down ... and the labels ... rewritten. But even the child who couldn’t be bothered ... did learn to recognize ... plants and to know their names in Latin and Swedish.”

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**Today you should celebrate bacon and peas, children, and life, and all that you buy for your work, and that you pay for with your work.** -- Čapek, *The Gardener's Year*

**Randolph Caldecott (1846-1886):** *Sing a song for sixpence.*

London: George Routledge; Edmund Evans, engraver and printer, 1880?

*Children C159*

**Sowing the lower-40:** As the result of a childhood bout with rheumatic fever, this English artist, illustrator, painter, and sculptor was to have only forty years of life. He was a bank clerk until age twenty-five, but spent his last fifteen years as a professional artist. His illustrations grace a number of the works of Washington Irving and he was a frequent contributor to various illustrated London papers such as *Punch*, but is best known today for his illustrations for children's books.

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One day you will open your eyes and the garden will be green, long grass will glisten with the dew, and from the tangled tops of the roses swollen and crimson buds will peep forth ... -- Čapek, *The Gardener's Year*

**Robert Louis Stevenson (1850-1894):** *A child's garden of verses.*

Illustrated by E. Mars and M.H. Squire. Chicago; New York; London: Rand, McNally, 1902.

*Children B657*

**Quiz:** for which of his writings did R.L. Stevenson win a silver medal?

**Answer:** it was **NOT** for *A child's garden of verses!* Before Stevenson took up writing full time, he had studied law, and before that engineering, at Edinburgh University. He won the silver medal for a paper on lighthouse apparatus, from the Edinburgh Society of

Arts. Lighthouse keeping came as naturally to him as did writing: the Stevensons had been engineers for over a hundred years building lighthouses along the Scottish coast.

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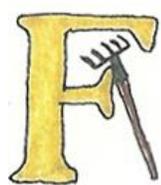
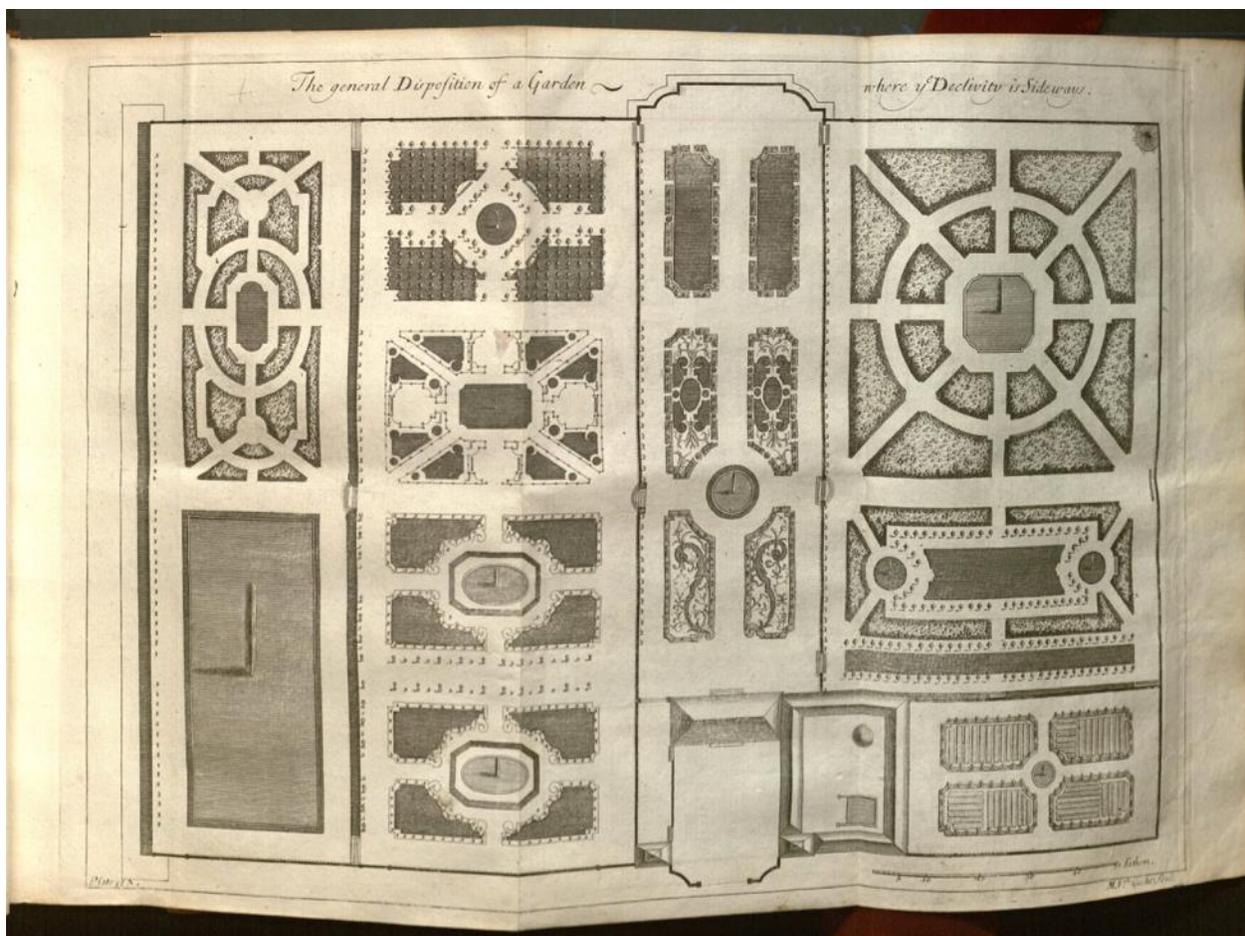


## THE LANDSCAPE GARDENER

**Most of us find ourselves in the predicament of Karel Čapek's poor gardener whose handbook has told him to " 'Use the winter period for repairing the pergola, arches or summer-house' except that we have no pergola, arches or summer house. Or he reads, 'Even in January it is possible to lay down a lawn' – perhaps in the attic? Or, 'The chief thing is to watch the temperature in the greenhouse' ".**

**You guessed it, no greenhouse, except that in this exhibition everything *IS* under glass.**

**At any rate, the Department of Special Collections has a fair group of books on landscape gardening, but perhaps they should be considered to supplement our collections of fantasy and science fiction, rather than our architecture collections.**



**First of all we want to have an English lawn, green like a billiard cloth, and dense like a carpet, a perfect lawn, a grass-plot without blemish, turf like velvet, a meadow like a table. Well, then, in spring we find that this**

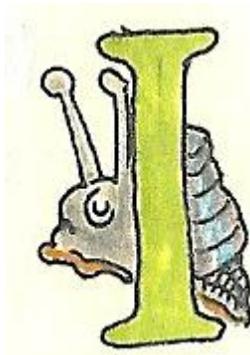
**English lawn consists of bald patches, dandelions, clover, clay, and a few hard and yellow tufts of grass.-- Čapek, *The Gardener's Year***

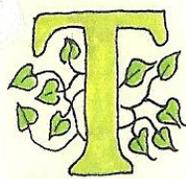
**Antoine-Joseph Dezallier d'Argenville (1680-1765):** *The theory and practice of gardening*. Done from the late edition printed at Paris, by John James. 2<sup>nd</sup> edition. London: Printed for Bernard Lintot, 1728. D771

**Acrophobes need not read further:** Can you find the *ha-ha* in this picture? Geometry combined with horticultural skill could be said to characterize the classical formal French style of gardening and garden architecture in fashion universally at the end of the 17<sup>th</sup> and during a large part of the 18<sup>th</sup> century. The ideas of Dezallier d'Argenville, so popular in France, were the inspiration for the English style through the translation of his *La theorie et la pratique du jardinage* by John James.

The plan shown supposedly includes the first English delineation of a feature associated with English landscape gardening: the *Ha-Ha*. To quote James: "At present we frequently make through views, called Ah Ah which are openings in the walls, without grilles to the very level of the walks, with a large and deep ditch at the foot of them, lined on both sides to sustain the earth, and prevent the getting over, which surprises the eye upon coming near it, and makes one cry *Ah! Ah!* from whence it takes its name."

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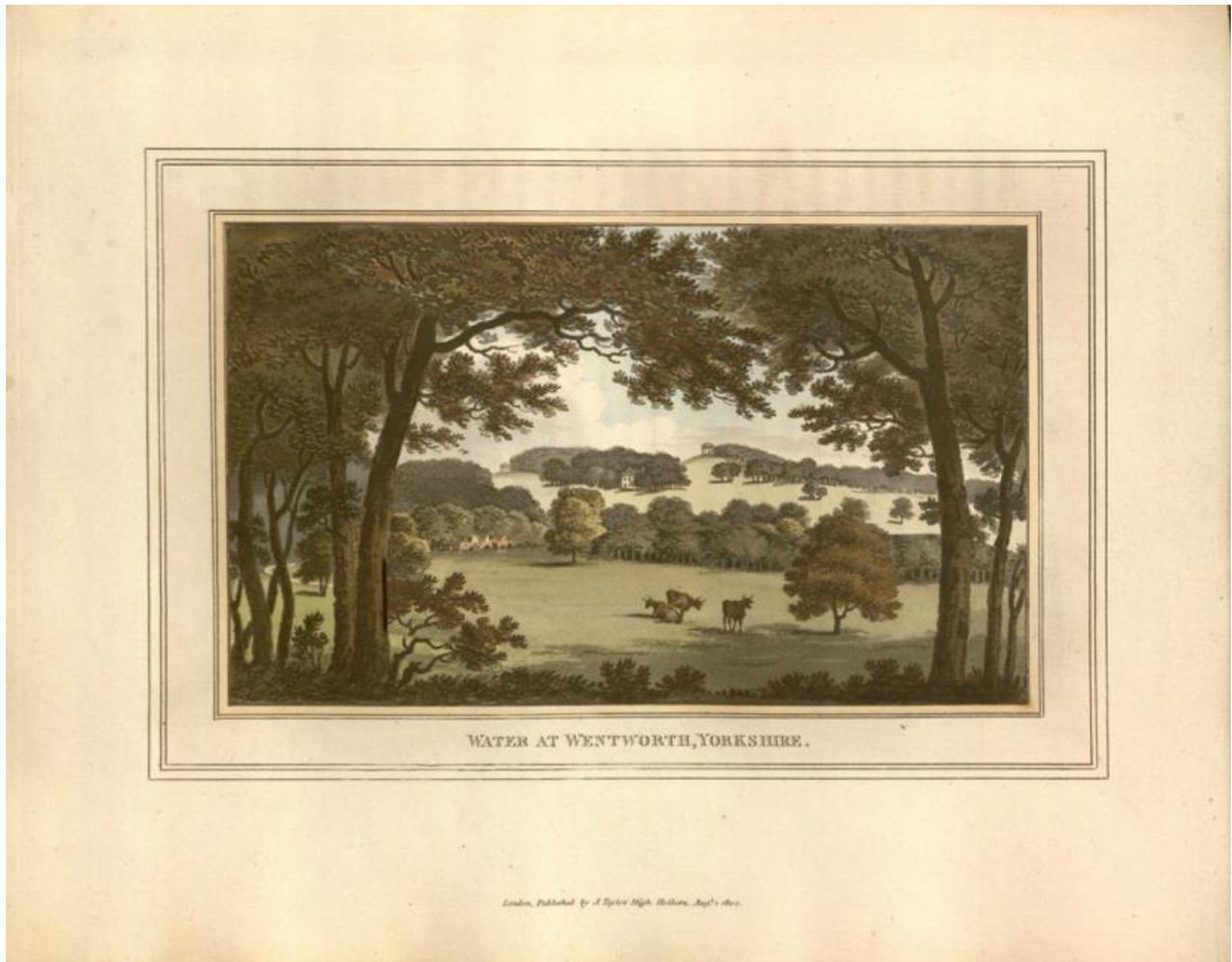


**he more anxiously you work, the more damage you make; only years of practice will teach you the mysteries and bold certainty of a real gardener, who treads at random, and yet tramples on nothing; or if he does, at least he doesn't mind. -- Čapek, *The Gardener's Year***

*Paxton's magazine of botany and register of flowering plants.*  
London: Orr and Smith, 1834-1849. 16 volumes. Vol. 5, 1838. C2840

**Prince of the Crystal Palace:** Most of the plants in this beautifully illustrated periodical are of the exotic flowers so beloved by Joseph Paxton (1801-1865), who was, respectively, gardener of the Horticultural Society of London; head gardener to the Duke of Devonshire at Chatsworth where he was the first person to coax the *Victoria amazonica* to bloom in captivity; founder of one horticultural magazine and editor of a couple more; author of several garden books; and designer at the Crystal Palace. This plate shows his design no. 1 for a “garden of limited extent”, but it’s all relative, of course.

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**That luxuriant meadow would also look nice in my garden, or a strip of seashore and a ruin of a Gothic cloister would be splendid. And I should like to have that ancient lime-tree there, and that antique fountain would do quite well ... -- Čapek, *The Gardener's Year***

**Humphry Repton (1752-1818):** *Observations on the theory and practice of landscape gardening.* London: printed by T. Bensley, for J. Taylor, 1803. E177

**No more fallen arches:** Under the influence of Lancelot “Capability” Brown (1716-1783), probably the greatest English landscape gardener of the 18<sup>th</sup> century, landscapes and gardens were no longer geometrical, but they were still highly formalized, disguised though that formality was. All “unnatural” objects were removed from view in what Sir Walter Scott called “affectation laboring to seem simple”.

Humphry Repton was the last exponent of this school of landscape design but was moving away from rigid formality towards an honest naturalism. By the end of the 18<sup>th</sup> century fake ruins and fallen arches were out. Repton's philosophy was that a working garden could contain some of the artificiality of the nearby buildings as well as some of the naturalness of the surrounding parklands without straining to be picturesque. In his suggestions for the improvement of a place he used the device of before-and-after pictures: with the flap down one got the original view; under the flap one could see the same view after his improvements.

This work is important not only as a record of Repton's work - he published a number of books, whereas "Capability" Brown left no printed works - but also as one of the finest examples of books illustrated by the aquatint process.

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Use the winter period for repairing the pergola, arches, or summer-house". Exactly; only I happen to have no pergola, arches, or summer-house. "Even in January ... it is possible to lay down a lawn" - if only there were a place for it; perhaps in the hall, or in the loft. "The chief thing is to watch the temperature in the greenhouse". Very well, I should love to, but I have no greenhouse. These handbooks of gardening don't tell you very much. -- Čapek, *The Gardener's Year*

*Ideenmagazin für Liebhaber von Garten.* Unter der Aufsicht von Johann Gottfried Grohmann herausgegeben. Leipzig: bei Friedrich Gotthelf Baumgartner, 1796-1799. 3 volumes. Vol. 2, part 1. E1247

**Amusement park:** Subtitled "A magazine of new ideas for the decoration of gardens and parks in the English, Gothic, and Chinese styles", this three-volume work in French and German contains a wealth of romantic copper plate designs, over 230 in all, many hand-colored, featuring a *Gesundheitspferd* or health horse, an early 19th century equivalent of the exercise bike; seesaws; well disguised and camouflaged johnnys-on-the-spot; statues; and pavilions such as this exotic Persian room.

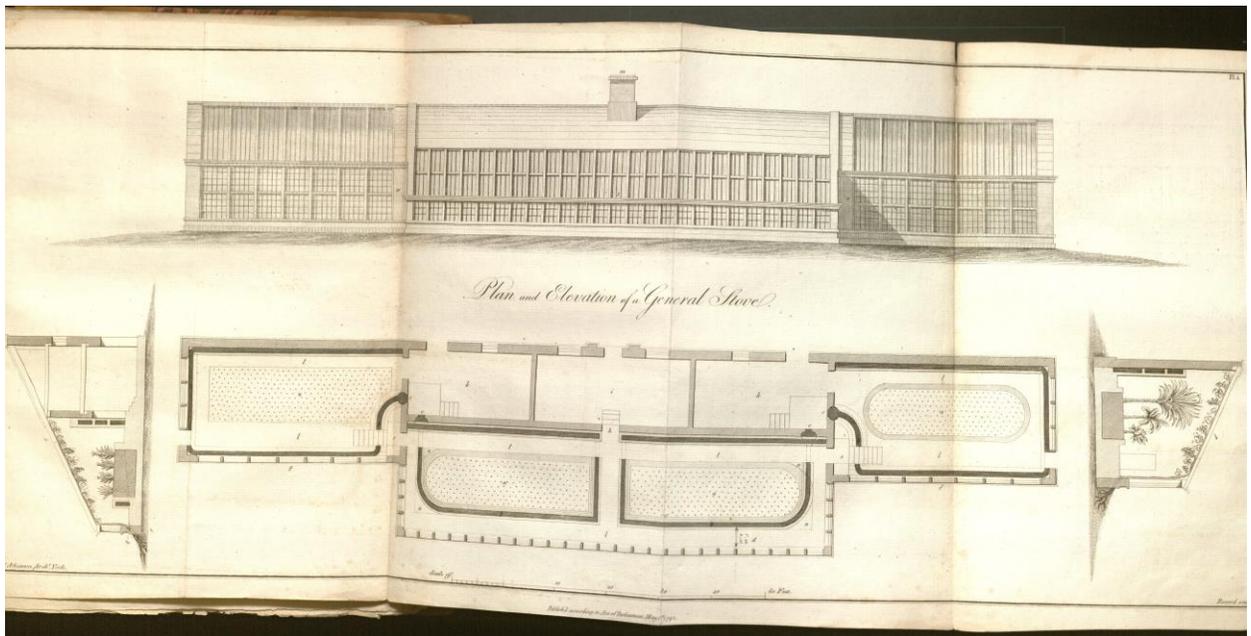
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EXPLANATION of the PLAN of the GENERAL STOVE.

- a a a a. Back-Pits, and Area for Plants.
- b b b b. The Flues.
- c c c c. The Fire-Places.
- d. The Distance from the Stem of the Vine in the Stove to the Fire-Place.
- e e. Water Cisterns, over which the Steps go, at the Entrance into the Centre Part of the Stove from the Wings.
- f. East Wing, with a Back-Pit, for the Reception of all Exotics from the Centre Part of the Stove.
- g. West Wing, or Green-House Part.
- h. Back-way into the Centre of the Stove.
- i. Stove-Rooms.
- k k. Coal-Houses, or Clofe Sheds.
- l l l l l l. The Walks.
- m. Common Chimney for all the Flues.
- n n n n. Angles at the East and West Ends of the Back-Pits in the Centre of the Stove, upon a Level with the Back Wall, upon which may be placed some Dry Stove Plants.
- o. Section of the Centre Part of the Stove.
- p. Section of the Wings.
- q. Level of the Border in the Front of the Stove.
- r. Foundation of the Front Wall.
- s. Apertures in Foundation of Front Wall for the Vine Roots to run into the Border in Front of Stove.
- t. Lead Spout that catches the Water in Front of Stove.
- u. Pipe that conveys the Water from one Half of the Roof to the Cistern in the East Wing.
- v. Pipe that conveys the Water from the other Half of the Roof into the Cistern in the West Wing.

It should be remarked, that Hot-Houses erected within the last Half Century have, in general, a Back-Pit towards the Back Wall, for the Principal or Fruiting Fire-Apple Plants, and another for the Succulent Plants, in the Front of the Fruiting-Pit, which requiring the Building to be of wide Dimensions, of Necessity demands a strong Body of Fire-Heat to sufficiently warm the internal Air of the House in Winter: But Stoves of narrower Dimensions, built after the Plan here given, need but one Fire-Place (without Shutters or other Covering over the Roof-Glass) to heat sufficiently about forty Feet in Length of the Stove. Whereas to guard against the Effects of excessive cold Weather, Double-piped Stoves ought to have two Fire-Places for the above Length of Building.



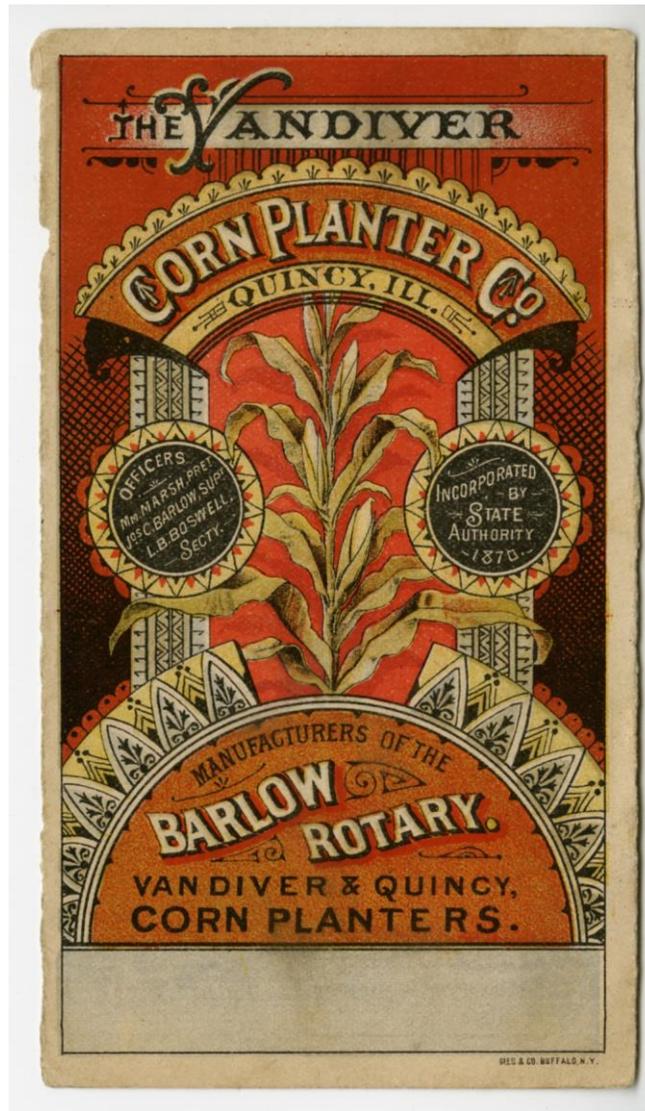


**H**e feels himself immeasurably humiliated, because in this fight he is powerless to assist in defeating and beating down the tyrant winter. ... but he can't do more than wait every evening with his wireless for the latest weather forecast, savagely cursing zones of high pressure over Scandinavia, or deep disturbances over Iceland; for we gardeners know from where the wind blows. -- Čapek, *The Gardener's Year*

**Richard Steele**, of Sion Hill, near Thirsk. *An essay upon gardening*. York: Printed for the author, by G. Peacock; and sold by B. White [and others], 1793.  
D2291

**Escape from landscape:** The title *An essay upon gardening* continues, “containing a catalogue of exotic plants for the stoves and green-houses of the British gardens”.

The “stove” depicted here was a kind of hothouse with controlled humidity used especially for the cultivation of tropical plants. During the 18<sup>th</sup> century thousands of new plants were arriving on English shores and the English became avid plant collectors. Lancelot “Capability” Brown’s idealized natural parks suffered under the onslaught and the pastoral green of the landscape gardener gave way during the 19<sup>th</sup> century to the showy flowerbeds and exotic shrubbery of the horticulturist. Garden fever, Victorian gaudiness and all, quickly spread to the United States where well into the 20<sup>th</sup> century the wealthy were hiring English gardeners by the boatload to care for their exotic plants.



## WEST OF EDEN: NATIVE AMERICANS

The fields, forests, and gardens of the New World, from Tierra del Fuego to the Arctic, have furnished our globe with some of its most important food and drug plants, including the potato, cinchona, Indian corn, chocolate, vanilla, and the members of the sunflower genus. Many rare and botanically interesting species such as curly-grass fern of New Jersey and the carnivorous Venus' fly-trap are

**indigenous Americans. Early American botany is an area of active buying by the Department of Special Collections and in active use by students of American botany.**

**West of Eden: SUNFLOWERS**





**am professionally an earthy creature; I have no prophetic dreams; I cannot read thoughts unless they are particularly stupid ones ... -- Čapek, “The inner voice”, in *Intimate Things***

**Jean Gourdon (1824-1876):** *Nouvelle iconographie fourragère*. Par M.M. J. Gourdon, P. Naudin. Paris: P. Asselin, 1865-1871. 2 volumes. Vol. 2, 1871. D1390

**Diabetic’s delight:** And no, this “earthy creature” is not a turnip, so quit making like Scarlett O’Hara. It’s *Helianthus tuberosus*, also known as the Jerusalem artichoke, a real misnomer, because it’s not from Jerusalem and it’s not an artichoke, although the true artichoke does belong to the same family as the sunflowers: the Compositae.

The underground stem tubers of the Jerusalem artichoke are delicious, can be eaten boiled, baked or raw, and taste like slightly sweet almonds. And although *H. tuberosus* might well have been consumed in unusual quantities during our Civil War, it’s certain that this native of North America was welcomed by the starving when it arrived in Europe after the 30 Years War. Known in France as the *topinambour* or *girasol* (of which word “Jerusalem” is a corruption), its tubers are reasonably nutritious, and because they are not easily damaged by frost are more reliable than their fellow tubers the potatoes (but like the turnip, unrelated botanically). Nevertheless, folks over our northern border call it the Canada potato.

Here in Kansas the tubers planted in early spring can be dug up at leisure in the autumn and winter. My Kansas grandmother would thin-slice these crispy-as-a-radish critters into a Depression glass bowl filled with salad greens and feed them to her finicky New Jersey granddaughter who only later learned to appreciate them. Gram Beals also baked them or added them to the “stone soup” when extra farmhands were expected for dinner. And they sweeten the pot for diabetics because of the presence of inulin, a sugar

diabetics can stomach. Heck, even Scarlett might have liked 'em if she'd given 'em a try, and hey, tomorrow is another day.

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**ut if you are a gardener of virtue and rank, you will not plant near your hedges any raspberries, or knot-grass, or sunflower, or other plant which, so to speak, will tread on the private property of your neighbor. -- Čapek, *The Gardener's Year***

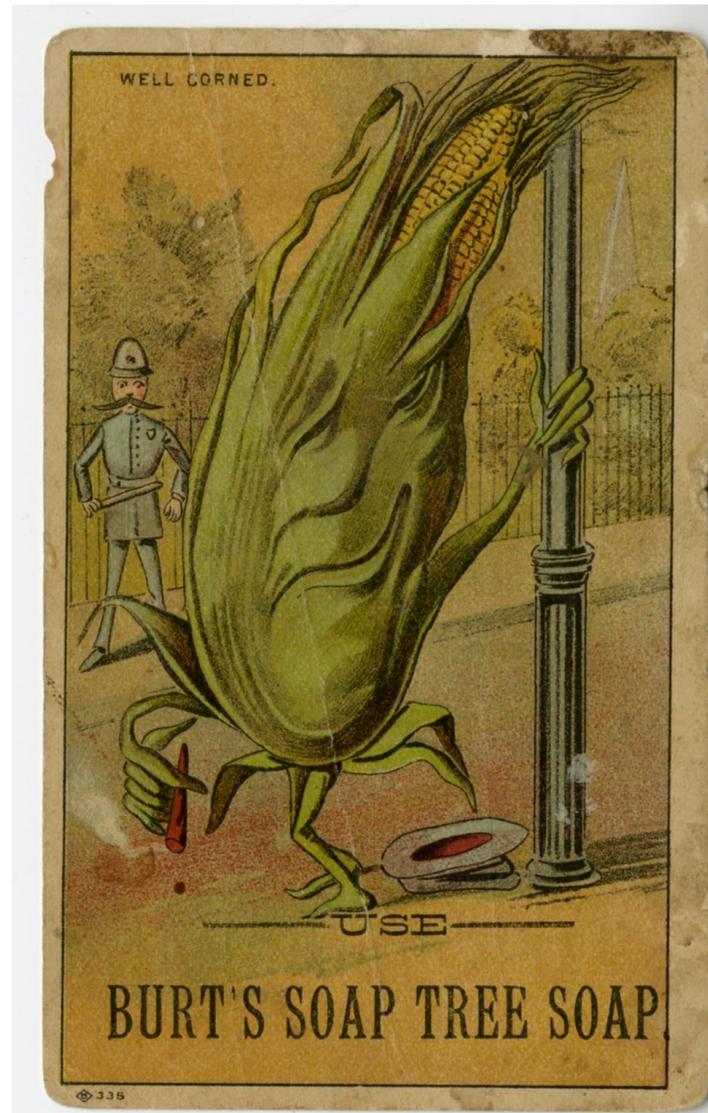
**Thomas Meehan (1826-1901): *The native flowers and ferns of the United States*. Series I. Boston: L. Prang, 1878-1879. Series 1. 2 volumes. Vol. 2, part 22, 1879.**

D4149

**Max to-the-max:** Those of us who like sunflowers (usually not including the farmer who has to clear these pests from his corn fields) consider them all ornamental, but *Helianthus maximiliani* is a favorite of the ornamental gardener not only because it is one of the most attractive of sunflowers, but also because it grows well in a variety of soils; it can be seen throughout Kansas in late summer.

This work together with a simultaneously issued second series contains 192 chromolithographed plates of native American plants. Meehan was editor of *The gardener's monthly* from 1859 to 1887.

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## De CHIMALATL PERVINA Flore Solis. Cap. XV.



Panis.

Flos Solis  
minor.

CHIMALATL PERVINA, seu Magna, quam *Ambilion*, & Florem Solis appellant quidam, herba est folia ferens magna, serrata, infernè candescentia, & Vrticæ æmulantia formam. caulem unicum, rectum, decem quindecimvè pedes procerum, brachium crassum, rotundum, cauum, atque exaturato colore virefcentem. florem in summo orbicularem, aureo micantem fulgore, speciosis radiantibus per ambitum luteis folijs, media verò orbita quampluribus flosculis flavescentibus refertum, è porulis, faui mellis instar ordine dispositis, ortum ducentibus. ijsq; decidibus semina insurgunt illis Melopeponum forma (etsi teretia ferè sint) lenitate, temperie, & cætera prope natura similia. radices verò aliquadantenus tuberosas, ac fibratas. Semina, licet liberalius devorata dolorem capitis excitent, pectus tamen leniunt, ardorem extinguunt, & apud aliquas gentes rufa, coacta in panem, assaque, frumenti præbent usum. etsi non desint, qui dicant, appetitus venereos excitare. maximè pediculos foliorum teneros, absteris pilis in craticula coctos, sale, oleoq; conditos esui suaves, orique gratos. Huius aliud observatur genus, cuius caulis brevior, ac minor est, ac ramos duos, tres, pluresvè ferens, ac in singulorum summo flos insurgit priori similis, multò tamen minor. Nascitur in Perù, alijsque nonnullis Americæ provincijs sponte, in alijs verò quibusvis locis planis, atque campestribus semine, lætior tamè campestribus, & cultis.

*Flos Solis Indicus etiam Europa à multis annis innotuit. eiusque magna conspicitur varietas in magnitudine foliorum, & floris, in altitudine & crassitie caulis, in colore florum, qui quandoque albus reperitur.*

*Consulendus etiam Monardes cap. 68. cum notis Clusij.*

De



**Autumn is a very fertile time; spring compared with it is a bit fastidious; autumn likes to work on a grander scale. ... you may have to put into the ground a root of helianthus or sunflower in April, and now golden flowers wave ironically at you from above, so that you can't reach them with your hand, not even if you stand on tiptoe. Things often get out of proportion in a garden. -- Čapek, *The Gardener's Year***

**Francisco Hernández (1517-1587):** *Rerum medicarum Novae Hispaniae thesaurus*. Romae: ex Typographeio Vitalis Mascardi, 1651. *Summerfield E1025*

**Nahuatl Chimalatl:** This is the third edition, the only complete version with all the illustrations, of the first work written on the plants of Mexico. Hernandez was sent to the New World by Philip II of Spain to survey the plant and animal resources of “New Spain” or Mexico. Several factors were in his favor for completion of this huge task: Aztec names for many plants had taken into account habitat and properties; local doctors, herbalists and artists who knew the medicinal plants were willing to help him; and the Aztecs had recorded a great deal in pictographs that was still decipherable by educated locals.

The “Chimalatl peruina” or “sun with large flowers, from Peru” shown here, is the *Helianthus annuus*. It is, in fact, not from Peru at all; the southern limit for both the wild and the cultivated forms is northern Mexico. According to Hernandez it was used for food although too much would cause a headache, which must at times have interfered with the effects of the aphrodisiac properties ascribed to it. As medicine it was used to ease chest pains. Because Hernandez recorded Mexican names of plants in several native languages this work is Spanish Gold to linguists and ethnobotanists.

If, after practicing your Latin and Nahuatl on this tome you're still up for another good, if no longer up-to-date read, check out *The Sunflower*, by Charles B. Heiser, Jr., Norman, University of Oklahoma Press, 1976.

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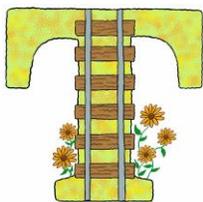
n the springtime ... he makes a hullabaloo which would wake the dead ... Naturally, when the eggs make their appearance ... he begins to call his wife “little mother”, sits on the eggs himself at times, and feeds his downy young ones with exemplary care.  
-- Čapek, “Birds”, in *Intimate Things*

**John Miller (1715-1790?):** *Illustratio systematis sexualis Linnaeani*.  
Francofurti ad Moenum: Varrentrapp et Wenner, 1789. 2 volumes.  
Vol. 2. *Linnaeana C71*

**Sputnik meets Spitnik:** Most sunflower seeds grown in the United States today are for the birds, although they are a popular snack for humans, too, ever since they were introduced as “Russian peanuts” by Russian and German immigrants. As bird feed, in the past they were often mixed with the fruits of *Cannabis*, which is not to suggest you’d have had more fun eating birdseed; shelling the unshelled sunflower seeds in the mouth is not only difficult, but in polite company, indelicate, and in this art (of being delicate, while shelling sunflower seeds with whatever is left of one’s teeth, and simultaneously speaking Russian) the Russians are way ahead of us. You might even call it *Spitnik*.

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**he railway flora grows in the signalmen's gardens. It comprises especially *Althaea*, which is also called hollyhock, and sunflower ... ; as is well known, these are mostly plants reaching over the hedge, possibly to cheer the passing engine-driver. -- Čapek, *The***

*Gardener's Year*

**Rembert Dodoens (1517-1585):** *Florum et ... herbarum historia.*  
Altera editio. Antverpiae: ex officina Christophori Plantini, 1569.

*Summerfield B1832*

**The second First printed illustration of the sunflower:** The first printed illustration of the sunflower in Europe appeared in 1568 in an herbal by the great Belgian botanist Rembert Dodoens. This second edition was printed one year after the first with an identical illustration of the sunflower.

There are 67 species in the sunflower genus *Helianthus* (from the Greek *helios*, or “sun” and *anthos* meaning “flower”) and some of these species themselves have many varieties. They are all native to the New World, mostly North America, with a handful, mostly shrubs from the Andes. Our Kansas state flower is the wild *Helianthus annuus*; the sunflower known all over the world with the huge head and the edible seeds is another form of the same species.

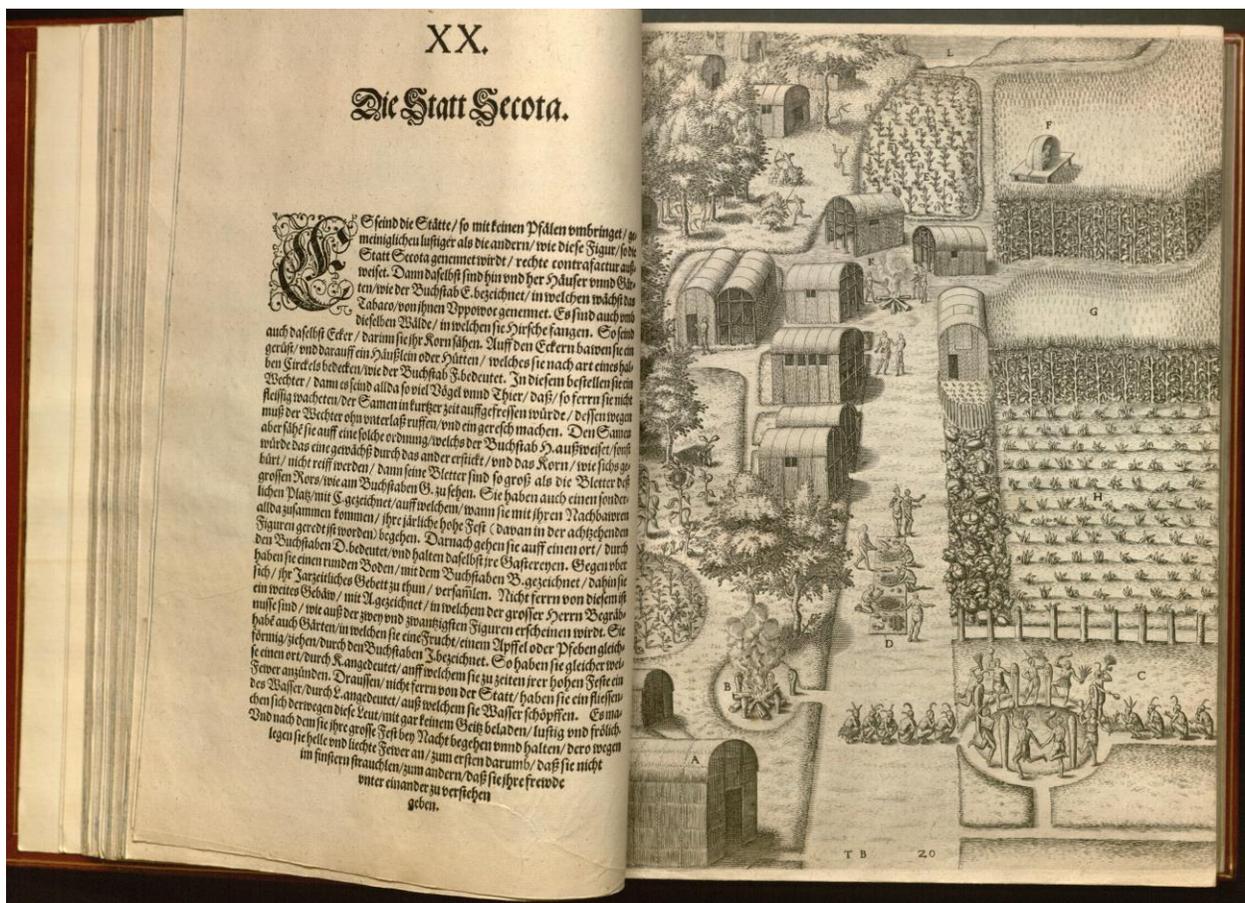
New World Indians were the first to use the sunflower in ancient times and it was one of many American plants introduced to Europe soon after the Discovery. A garden curiosity at first, it was commonplace in England by the early years of the 17<sup>th</sup> century, and long before any medicinal value was attributed to it, it was popular as a food plant. The flower heads were eaten like artichokes, the buds were said to be tasty, but apparently not until the end of the century were the seeds eaten as well.

It realized no great economic success until it reached Russia, where being new it was not on the list of foods with high oil content prohibited during Lent. It had traveled via Eastern Europe and arrived in Russia, exact date not known, probably at the end of the 18<sup>th</sup> or in the early 19<sup>th</sup> century. It was not until the end of the 19<sup>th</sup> century that the popular variety developed in Russia and known as the Mammoth Russian, came back to the home of its ancestors.

In recent years sunflower oil has ranked second to soybean as a world source of vegetable oil. Two-thirds of cultivated sunflowers are grown in Russian lands and for this reason many people think of the plant as a Russian native. For various reasons, both economic (until post-World War II it had not been pushed as a crop plant in the US) and biological, tied in with the economic (a plant has natural enemies where it is native, mostly insects and fungi) the US sunflower is now becoming competitive on the world market, and the seeds are rivalling the peanut in popular American taste, if Kansas chambers of commerce have anything to say about it. Disease-resistant hybrids now being developed are becoming successful, and is turning out to be a food oil crop as well.

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### West of Eden: FOOD PLANTS





**T**he soil will never be standardized; nations and cultures may change and succeed each other, but that on which they tread will not be carried away or interfered with. Perhaps that is why we are so fond of talking of our native soil; we want to hold fast to its durability. -- Čapek, "Ploughland", in *Intimate Things*

**Theodore de Bry (1528-1598):** *Wunderbarliche doch warhafftige Erklärung, von der Gelegenheit und Sitten der Wilden in Virginia.* Gedruckt zu Franckfort am Mayn: bey Johann Wechel; in Verlegung Dieterich Bry, 1590. 4 volumes. Vol. 1. *Summerfield E730*

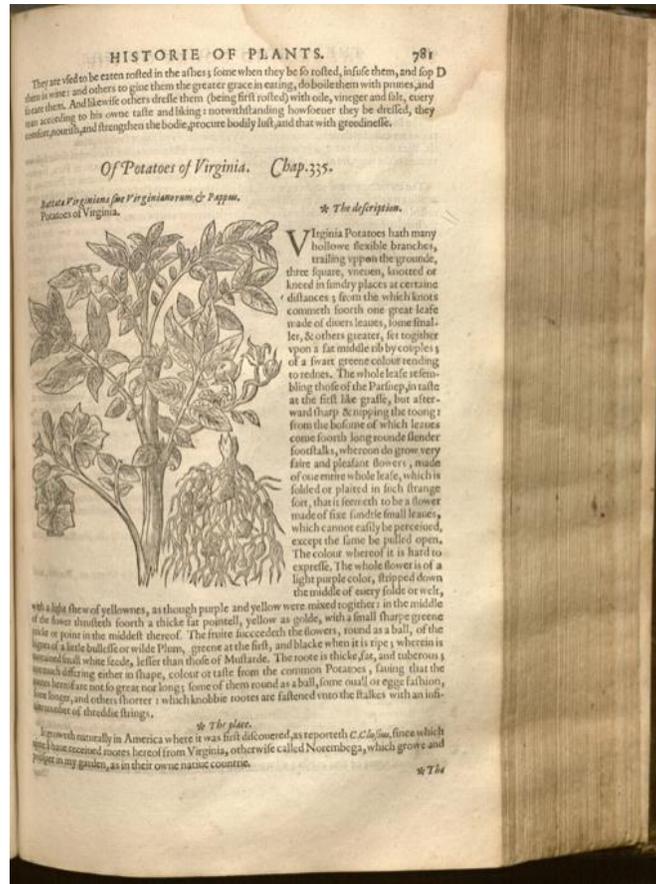
**Succotash:** A human scarecrow sits in a blind at F (upper right) in this depiction of the town of Secota situated in present-day North Carolina. Because he is human he could probably dance like Ray Bolger; and the scarecrow from Oz, once he got his brain, could probably speak Secotash.

The *Wunderbarliche doch warhafftige Erklärung* was originally written in English by Thomas Hariot (lived 1560-1621) and published in London in 1588 under the title *A brief and true report of the new found land of Virginia*. The latter work is rare, known in only five copies, and about which the Arents Catalog on the history of tobacco notes: "This is the earliest English book relating entirely to any part of what is now the United States, and the first work selected by De Bry for his famous series known as the "Great Voyages", which preserved the records of travelers to the West and East Indies".

The work shown here is the first German edition of Part I of the Voyages. Hariot was author, astronomer, and Sir Walter Raleigh's mathematical tutor and literary adviser. He spent almost a year in the Virginia Colony. In this depiction of the town of Secota the sections Marked E, at left near the sunflowers, and at top, are for

cultivation of tobacco (uppòwoc): F and G are easily recognizable as fields of another native American plant: maize, or Indian corn.

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**N**

o, to-day, somehow I could not bear you, you fat, scientific book; for my brain is dull and stupid. I should like to read something which will not remind me of my dullness and slow-wittedness ... -- Čapek, "A cold", in *Intimate Things*

**John Gerard (1545-1612):** *The herball*. Imprinted at London: by Iohn Norton, 1597.

E260

**First printed illustration of the white potato:** Recently, a hearty meal out with friends turned mean when we got into a lively discussion about the terminology for the foods we were eating.

“What did the Romans call the potato?” one asked. “No potatoes in Rome”, we shot back. The Latin is *Solanum tuberosum*, but neither the potato nor its name ever burned ancient Roman tongues, for it is native to the New World.

The potato didn't reach Europe, in fact, until relatively long after the Discovery, when conquistador Francisco Pizarro (circa 1470-1541) returned to Spain with spuds in the hold. Written descriptions of the potato appear in the mid-1500s, but this is the first printed illustration of the white potato. And not only is it often misspelled, Dan Quayle style, but misnamed as well: “Virginia”, like “Irish” potato is a misnomer: home for the potato is the temperate Andes of South America where 5,000 varieties have been domesticated for over 10,000 years.

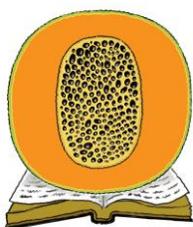
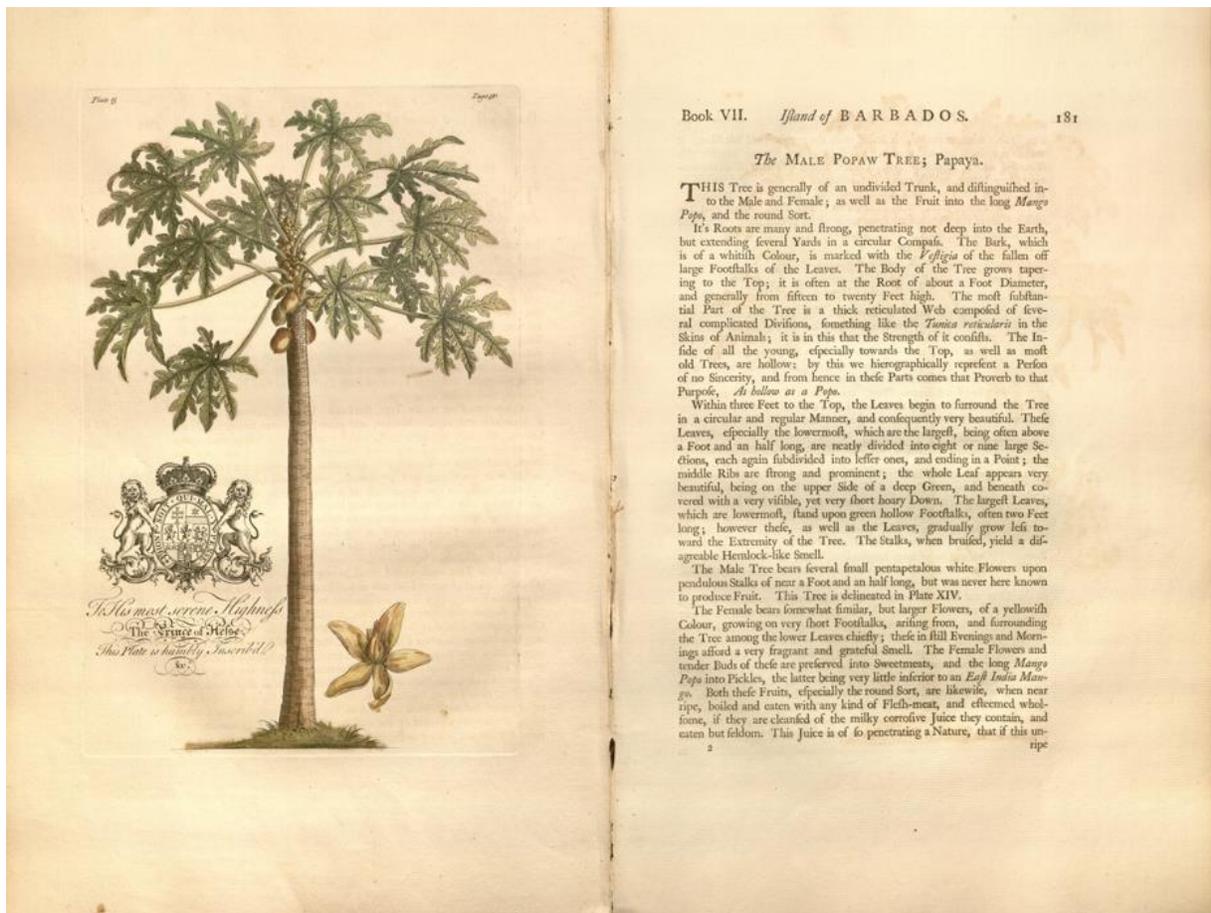
The potato arrived in North America via Europe in 1621, and since then it's difficult to imagine a plant that's had a greater effect on history and economics, not only as food, but with its pathogens and constituent chemicals providing us with everything from famine to bio-degradable diapers and time-release pills. But solanine, the alkaloid that gives the family Solanaceae its Latin name, accumulates in the potato's skin – a defense mechanism that can be toxic to the consumer. Better to take your potato poison in the form of vodka.

In England the name Gerard is almost synonymous with the word herbal; his was certainly one of the most celebrated herbals produced anywhere, and also one of the worst. George H.M. Lawrence once described it this way: “Gerard ... an unscrupulous barber surgeon of London, purloined an unfinished English translation of the last edition of Dodoens's *Pemptades* of 1583, bungled his part in the completion of the translation, laced it through with anecdotes, legends and fables – usually presented as facts – and published the whole thing as his own! Today's amateur herb lover may cherish the volume for its massiveness and antiquity and because its quaint English is readable. But the student of the

history of science knows that almost every statement is suspect and that it is the production of a rogue.”

Nevertheless it is the first work to describe many other American plants. It was rewritten by a competent botanist by the name of Thomas Johnson and reappeared in 1633; unfortunately, the publishers, apparently banking on the popularity of Gerard, chose to call it *Gerard's* and not *Johnson's Herball*.

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**On a journey a man will read Baedeker ... and topical pamphlets. ... Besides these there are a great multitude of books which I am at a loss to classify, nor can I say in what exceptional**

**circumstances they are read ...** -- Čapek, “For bookworms”, in *Intimate Things*

**Griffith Hughes (1707?-1750s):** *The natural history of Barbados.*

London: Printed for the author, 1750.

*Ellis Aves G42*

**Barbados Baedeker:** The Papaya is an amazing tropical fruit that contains an enzyme capable of breaking down protein. This herbaceous tree and all its relatives are New World natives. All parts of the fruit have commercial value: besides being the most popular raw breakfast fruit of the tropics, it can be eaten as a vegetable, boiled or baked like squash; sliced into salads; candied; made into pickles, pie fillings, jellies and sherbets. And because of its ability to digest meat it is used in the processing of canned meats. Brewers use it to clarify beer.

What a shame that only a traveler with very large pockets could use this as his natural history Baedeker on a journey to Barbados. The catalog of the Hunt Botanical Library in Pittsburg, Pa. compares this work with Catesby's *Natural history* (this library has several editions of Catesby's great work) and states that Hughes had an advantage over Catesby in that most of his Barbados plates, including our papaya, were drawn by the great German draughtsman and engraver Georg Dionysius Ehret (1708-1770); only three of Catesby's are “from that gifted artist's hand”.

This work is interesting bibliographically and Kansas University is lucky to have three variants. Hunt notes that “in some copies the plates are colored”. Brunet and Grässe say “some LP [large paper] copies” are colored. One Kansas copy (shown) has colored plates, and another has duplicate plates, colored and uncolored. The third KU copy, in royal quarto, is uncut and measures 15 x 9.7; its plates are uncolored and it has no paste-on errata slip. Although it is common to print both large and small paper copies, it was not common to print them in different formats because this required a re-imposition of the type.

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**f there are plant-lice on the roses, buy tobacco extract, and syringe them with it while the dew is on, or after a rain. Nothing else need be done at present. -- Čapek, *The Gardener's Year***

**Benedetto Stella.** *Il tabacco*. In Roma: per Filippo Maria Mancini, 1669. *Summerfield B2447*

**Drink your vegetables:** We include this volume with American food plants because the idiom for smoking in a number of languages is “drinking smoke”. The title-page of this work on tobacco tells us that it is a compendium, a medical and moral treatise concerning the origin, history, culture, preparation, quality, nature, virtue, and use of the plant in the form of smoke, leaf, snuff and medicine.

Tobacco, yet another New World member of the Potato or Nightshade family, has had more written about it than just about any other plant in the world, ever since two of Columbus’s men first saw native American’s “drinking” the stuff. First used in Europe as medicine, probably because of its resemblance to henbane, it quickly caught on as a panacea.

The tobacco of eastern North America was *Nicotiana rustica*, considered an inferior species for smoking; by about 1610 the Virginia Colony had obtained the superior *N. tabacum* from Trinidad – and the rest is history. The United States is no longer the leading producer; mainland China, India, and Brazil lead the pack.

We’ve long been aware that nicotine can act as stimulant, depressant, or tranquilizer, and new research suggests that it is a potent drug and will have medicinal uses in the treatment of some brain diseases such as Alzheimer’s, Parkinson’s and Tourette’s Syndrome. Mankind is probably more addicted to the alkaloid nicotine than to any other naturally occurring plant substance: we puff, dip, snuff and sneeze, chew, spit, and in the USA we hold tobacco-spitting contests. The record as of the mid-80s was 24 feet, 10  $\frac{3}{4}$  inches. We have not checked to see if anyone has bested this record recently.

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here are fields the color of very weak cocoa ... or like milk with a dash of coffee. ... The most

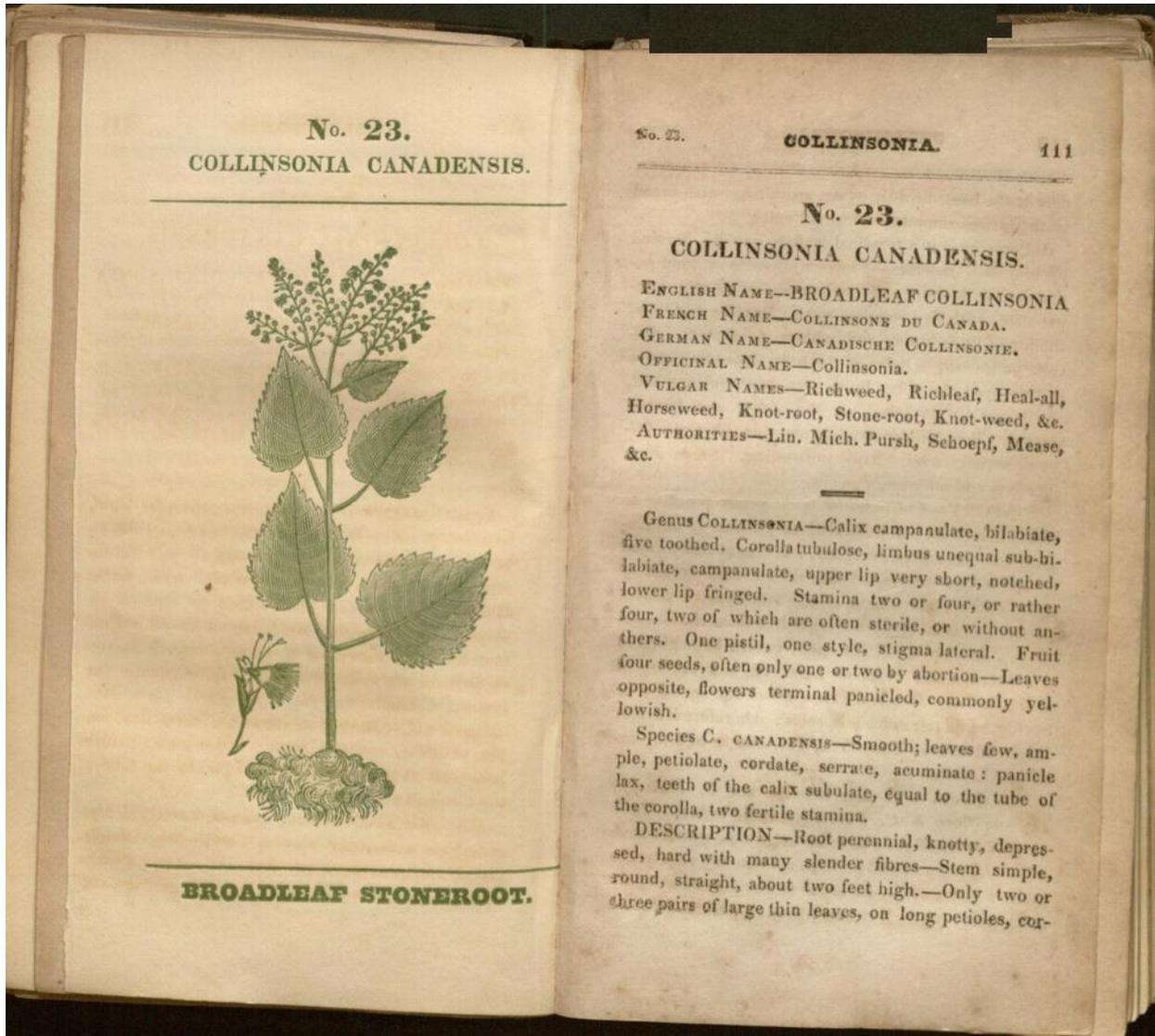
**extensive is the scale of browns ... from loamy tints to intense reddish-brown like chocolate; coffee brown, chestnut brown, the brown of earthenware jugs or the warm baked crust of loaves ...** -- Čapek, "Ploughland", in *Intimate Things*

**Johannes Zorn (1739-1799):** *Icones plantarum medicinalium*.  
Nürnberg: auf Kosten der Raspischen Buchhandlung, 1779-1790. 6  
volumes. Vol. 4, 1787. *Linnaeana C84*

**From the Halls of Montezuma:** The Latin binomial *Theobroma cacao*, means "Cacao, gift of the Gods", but the introduction of chocolate (cacuatl) into Europe from tropical America where it was native, got a mixed reception: on the one hand it was thought to have great medicinal powers, especially in the treatment of depression. And the story went that the Aztec emperor Montezuma kept the intestinal parasites under control and never suffered Montezuma's Revenge because he drank a mixture of liquid from cacao with tabasco sauce every morning; this story was lent credence when Cortes discovered a drink in Mexico called *chocolatl*, made from crushed cacao beans with pepper and spices added. Upon taking it back to Spain, sugar was soon added to the mix, whereby the drink gained popularity.

*T. cacao* is today most widely cultivated in West Africa, where Ghana grows one third of world production. Indeed the alkaloid theobromine, extracted from the hull of the cocoa bean, acts as a diuretic, or, in sufficient quantity, as poison; the cocoa bean also contains the weaker diuretic common to coffee, tea, and cola drinks: caffeine. *Icones plantarum medicinalium* is a collection of 600 hand-colored engraved plates of medicinal plants, flowers and fruits.

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So I am not the least bit superstitious, and I only speak from my own experience. There are some signs which work out with fatal regularity. ... If, for instance, I begin by seeing the tram sail away just before my nose ... it is an infallible sign that that day nothing, absolutely nothing, will go right with me at all ... That day is ordained by Fate to bring me bad luck, trouble, humiliation, disgrace, and failure. It will be inhospitable, malevolent, and nasty till the

**evening; there will be no saving grace in it, no advantage nor honour.** -- Čapek, "Portents", in *Intimate Things*

**Constantine Samuel Rafinesque (1783-1840):** *Medical flora.*

Philadelphia: Printed and published by Atkinson & Alexander, 1828-1830. 2 volumes. Vol. 1, 1828. *Ellis Omnia B335*

**He perished publishing:** This is the most important and one of the rarest works of the prolific, colorful, and some would say, insane, American naturalist C.S. Rafinesque. American medicine in the middle of the 19<sup>th</sup> century was based on *vegetable materia medica* and in his *Medical flora or Manual of the medical botany of the United States of North America* Rafinesque attempted to provide a *vade-mecum* for American physicians and pharmacists.

The genus *Collinsonia* is peculiar to North America; *C. canadensis* acts as a diuretic: that is, chemicals in the root and rhizome induce a net loss of fluid from the body and are often used to rid it of excess liquid and toxic materials.

The Department of Special Collections has an excellent collection of the printed works of Rafinesque. He was a genius and eccentric whose temperament and behavior eventually estranged him from fellow scientists, as his ideas were ahead of his time and he antagonized colleagues with his opinions on matters of classification, evolution, higher education, and germ theory. Unfortunately he also had a passion for describing new and often imaginary species, whereby he quickly lost all credibility. He wrote on a wealth of topics in addition to botany, including Native Americans, herpetology, and banking, and even founded a savings-and-loan association. Nevertheless he died an impoverished and broken man, overworked and under-appreciated.

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**oice of Ant-Commander: *And see that you take no prisoners. ...***

**Chorus: *For life is eternal, and rises from death where you think that it sleeps.***

**Third Moth: *Life is eternal. It cannot fail. All hail to life - [falls dead] -- Čapek, *The Insect Play****

**John Ellis (1710?-1776): *De Dionaea muscipula*. Aus dem Englischen übersetzt and herausgegeben von D. Iohann Christian Daniel Schreber. Erlangen: im Verlag Wolfgang Walthers, 1771.**

*Linnaeana D62*

**Quiz: do you get more flies with (1) honey, (2) vinegar, (3) *Dionaea*?:** Charles Darwin called it “the most wonderful plant in the world”. The *Dionaea*, or Venus’ flytrap, is an insectivorous plant that grows in pineland bogs, mostly in the Carolinas and neighboring states. The two lobes of its hinged leaves stand at about 40 degree angles to each other and are constructed to fold in half when the hairs around their edges and on the upper surface are touched. The leaf closes over its prey like a trap and excretes juices that digest and absorb the parts of the animal the plant needs. Because bogs are low nitrogen areas, it is believed that carnivorous plants may have evolved the mechanism to absorb necessary nitrogen from animal bodies.

John Ellis, Irish-born London merchant, was an amateur botanist interested in plant introduction, especially from the Americas, and attempted to solve the problems of the transportation of plants and seeds from far-away places. He devised a system of assuring viability of seeds over long distances and through extremes of temperature variation, by enclosing them in wax.

This discussion in German of the Venus’ flytrap was translated by Johann Schreber from Ellis’s *Directions for Bringing Over Seeds and Plants from the East-Indies and Other Distant Countries*, London, 1770.

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Geode - Argonia, Kansas



P. J. Redoute del.

G. B. C. sculp.

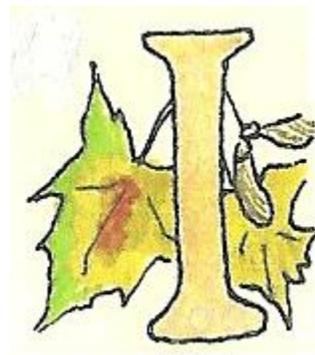
Dogwood.  
*Cornus florida.*

**P**raised be the constancy of old things and of eternal order. ... Confronting you, fiery forests ... face to face with you I am content with my few white hairs, my fatigue, and my strength. For it is all in order as it has been through the ages. Golden and green, white and black. -- Čapek, "The golden earth", in *Intimate Things*

**François André Michaux ((1770-1855):** *The North American sylv.* Translated from the French. Paris: Printed by C. D'Hautel, 1819. 2 volumes. Vol. 1. D603

**Michaux, mon beau:** French botanist and traveler François André Michaux was an intrepid explorer of the mountain areas of Spain and Persia, from which he introduced many eastern species into France. He came to North America in 1785 where he remained for twelve years, but on the return trip to France he was shipwrecked and lost almost all of his collections. Nevertheless his works describing the trees and other plants of America are classics.

The French edition of this work was published 1810-1813; this is the first English edition, published in both Paris and Philadelphia. The *Cornus florida*, native to the eastern US Michaux recommends to the attention of Europeans for the quality of its wood, the beauty of its flowers and the fact that "it is better adapted than almost any other North American tree, to the embellishment of forests, parks, and gardens."





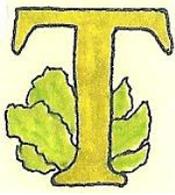
## PRUNINGS

**The natural history collections in the Department of Special Collections are so rich that the exhibition maker was quickly frustrated by space limitations and had to eliminate from display many a worthy and attractive volume. The works shown here are some of the ‘prunings’ and themselves constitute a selection made only with trepidation. It’s the dilemma of Czech writer Karel Čapek’s poor gardener, who in April finds that all his tables are covered with pots of some hundred and seventy seedlings and, “who, with a fading plant in his hand, runs around his little garden twenty times looking for an inch of soil where nothing is growing.”**

XXII



PHYSALIS prostrata.



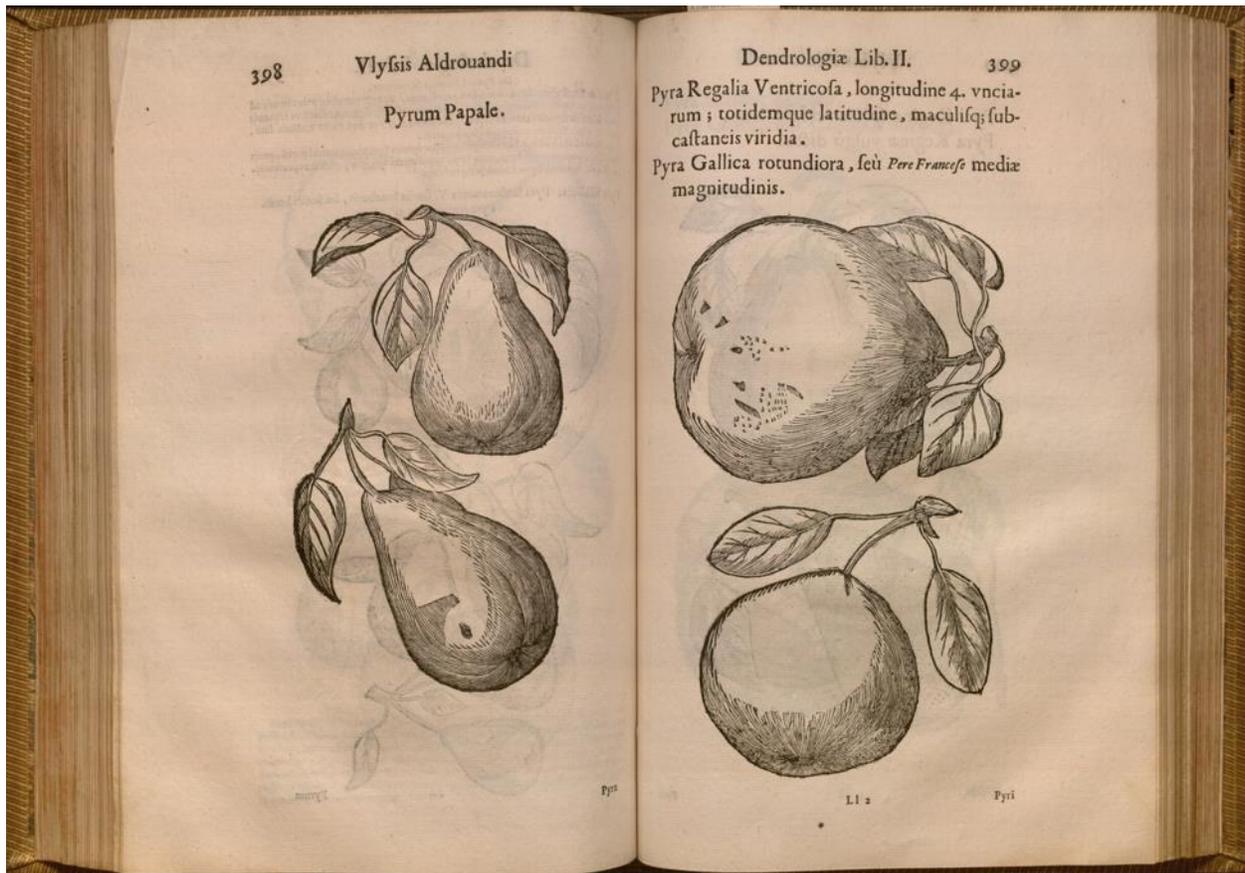
he cultivator of a rock garden is not only a gardener, but a collector as well, and that puts him among the serious maniacs. You need only show him that your *Campanula morettiana* has taken root and he will come in the night to steal it, murdering and shooting because he can't live any longer without it; if he is too much of a coward, or too fat to steal it, he will cry and whine to you to give him a tiny cutting. That comes from having bragged and boasted of your treasures before him. -- Čapek, *The Gardener's Year*

**Charles Louis L'Héritier de Brutelle (1746-1800):** *Stirpes novae*. Parisiis: ex Typographia Philippi-Dionysii Pierres, 1784-1785. 6 parts. Part 1. Fasciculus 3, 1785. J10

**Thus spake Nietzsche:** Though Friedrich Nietzsche died exactly a century after L'Heritier de Brutelle, this volume would go a long way in proving Nietzsche's contention that "everything else in Europe [other than French culture] which calls itself 'culture' is a misunderstanding", and that "as an artist, a man has no home in Europe save in Paris".

Certainly the *Stirpes novae* is one of the most beautiful flower books of the 18<sup>th</sup> century. L'Heritier de Brutelle was a talented amateur botanist. And the young Pierre-Joseph Redouté, whom Frans Stafleu has called "The Raphael of flowers, the most successful flower painter of all time", made 54 of the 91 drawings for this work, including the depiction of one of the more ornamental of the solanaceous winter cherries, *Physalis prostrata*.

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**I**f there is no snow, he complains of pernicious black frosts; if thaw sets in he curses the mad winds which come with it, and have the damnable habit of upsetting his brushwood and other coverings in his garden, or perhaps, devil take them! Will even break the trees. -- Čapek, *The Gardener's Year*

**Ulisse Aldrovandi (1522-1605?):** *Dendrologiae*. Bononiae: typis Io. Baptistae Ferronii, 1668 [colophon dated 1667] *Ellis Aves E69, v. 13*

**Aldrovandi on trees:** Italian physician and naturalist Aldrovandi was the first director of the Botanical Garden of the University of Bologna. This work on trees is but one volume of a 14-volume collection of his natural history writings. Aldrovandi is said to have formed one of the first institutional herbaria, a collection of dried plants mounted and systematically arranged.



*Chenopodium del.*

*M. Dani del.*

1. *Gossypium herbaceum.* 2. *G. arboreum.*

*Published by George Allen & Co. London, 1811.  
Drawn by G. Dani.*



**L**ook, for all the bustle of tilling and digging, planting and cutting, we could not talk about the greatest pleasure and special pride of the gardener, his rock or Alpine garden. It is called the Alpine garden probably because this part of the garden gives its owner opportunity for performing hazardous mountaineering feats ...  
-- Čapek, *The Gardener's Year*

**John Forbes Royle (1798-1858):** *Illustrations of the botany ... of the Himalayan mountains, and of the flora of Cashmere.* London: Wm. H. Allen, 1839. 2 volumes. Vol. 2, 1834? *Ellis Omnia G53*

**Cashmere and cotton:** John Forbes Royle, English surgeon and naturalist, was sent to Calcutta as a surgeon by the East India Company and went to Bengal and the North-West Provinces as a member of the medical staff of the Bengal army. There he was in charge of the garden at Saharunpore and eventually put together a valuable collection of economic plants, such as *Gossypium*, or cotton, displayed here.

It was at Royle's suggestion that cinchona was introduced into India. The results of his eight years of research on botany and other natural history subjects were published after his return to England.

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*Erica speciosa* L.

*Erica speciosa*

J. B. Smith, Sculp.

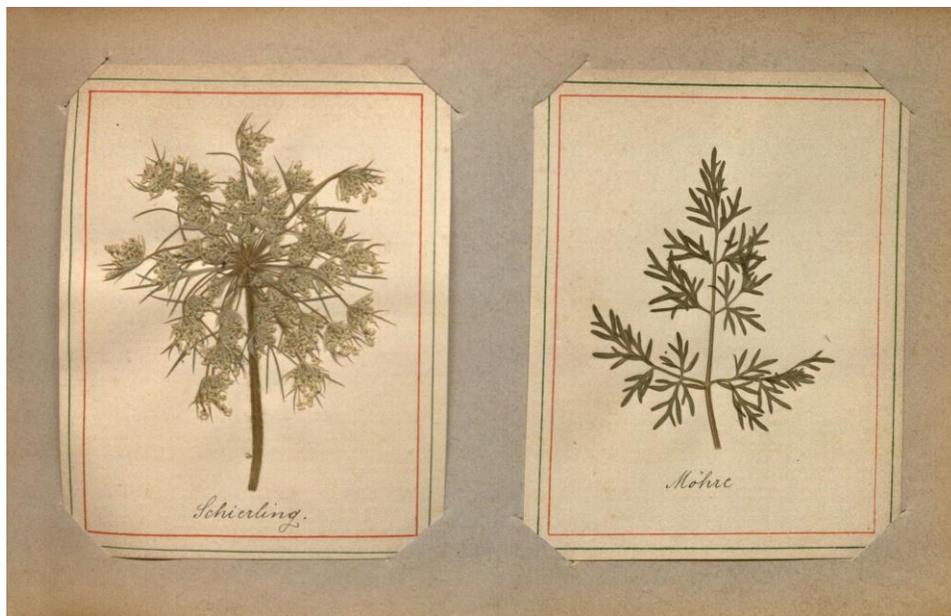


**One** who has not cultivated all these plants ... should not talk of the beauties of the world; for he has not seen the most graceful thing which this harsh earth has produced in a moment of tenderness (which lasted only a few thousand years) ... But what is the use of telling you? Only the owners of rock gardens know this sectarian rapture. -- Čapek, *The Gardener's Year*

**Henry Charles Andrews (active 1799-1828):** *Coloured engravings of heaths*. London: Published by the author; printed by T. Bensley, 1802-1809. 3 volumes. Vol. 2, 1805. *Linnaeana G21*

**Heathens:** American poetess Emily Dickinson, who claims she “never saw a moor”, nevertheless also knew “how heather looks”. These words would lead one to think she might have owned a copy of Andrews’ *Heaths*, often thought to be the finest work every produced on the Ericaceae, the heath family, comprising 216 hand-colored engraved plates by botanical artist and engraver H.C. Andrews.

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**D**amned thing: what's its name?, well never mind, I will give you a bulb'-- Čapek, *The Gardener's Year*

**Pierre-Joseph Buc'hoz (1731-1807):** *Le jardin d'Eden.*

Paris: chez l'auteur, 1783-1784. 2 volumes. Vol. 1. 1783.

*Ellis Omnia H55*

**Buc'hoz the Fetid:** French physician and naturalist Buc'hoz produced a great many books of natural history, but gained a reputation for inaccuracy and ignorance of his subject.

There seems to be something of a tradition amongst naturalists of the 18<sup>th</sup> century to diss one's enemies by naming the less attractive forms of life after them. So L'Heritier de Brutelle unkindly named the evil smelling *Buchozia foetida* after Buc'hoz, but the genus name was changed subsequently, wiping out even that little bit of immortality. Nevertheless, *Le jardin d'Eden* with its 200 plates of plants in the Trianon Gardens in Paris is one of the most beautiful of all French books.

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**Is it not beautiful enough, this dark and airy soil? Is it not more beautiful than a bed of pansies or carrots? -- Čapek, *The Gardener's Year***

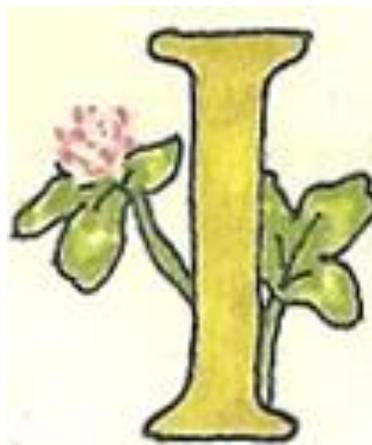
**Joachim Johann Nepomuk Spalowsky (1752-1797):** *Zweiter Beytrag zur Naturgeschichte der vierfüssigen Thiere.* Wien: Gedruckt bey Ignaz Alberti's Witwe, 1795. *Ellis Aves D504 [v. 8]*

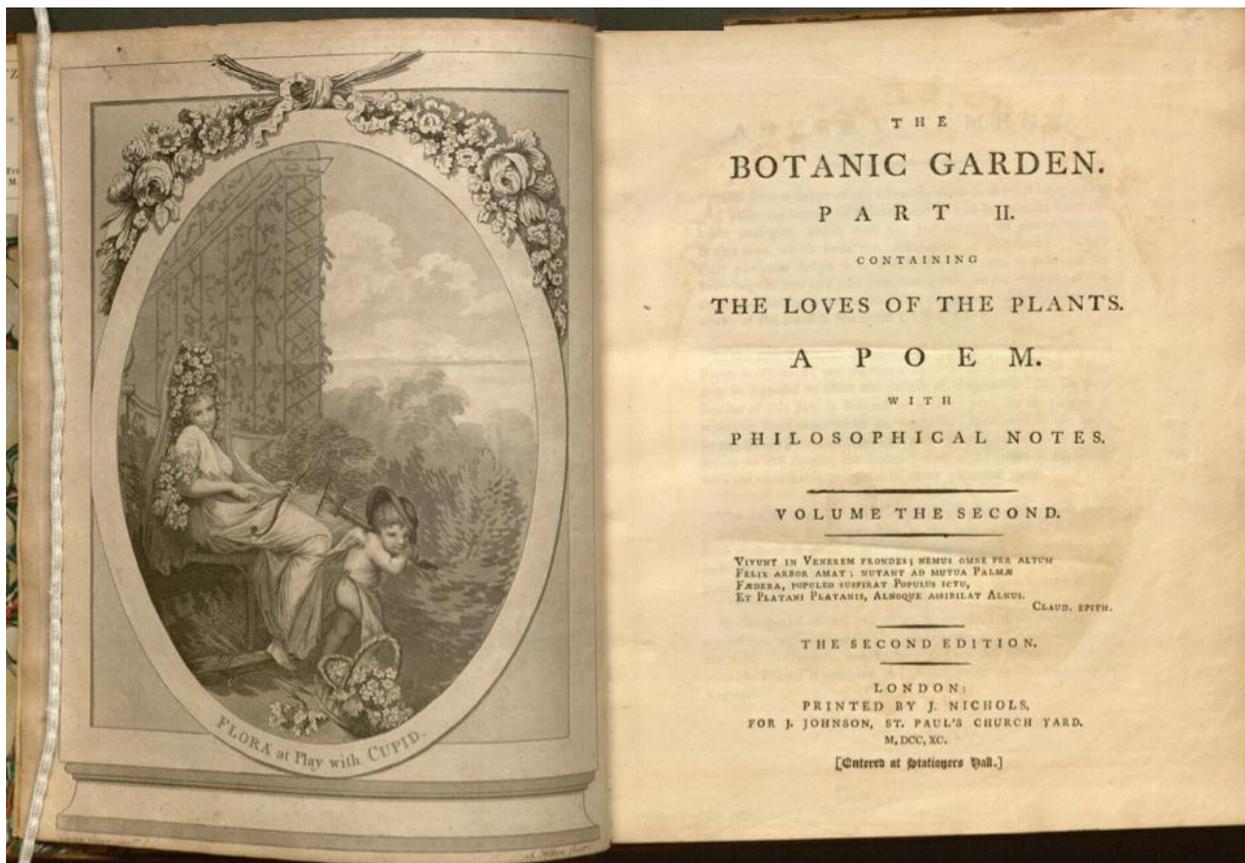
**Wascally Wabbit:** Rabbits have a way of multiplying, and so do the good rabbit images in our collections; in fact, the Spencer could do a major exhibition on rabbits and hares, without having to burrow. This picture of *Lepus cuniculus*, the true rabbit, is from the Ellis Collection of natural history. The following poem is from George Beckenbaugh's *Cotton Tails* in the Children's Collection:

### **"The Cause of His Paws"**

*The crows were eating mush-and milk,  
As Mr. Hare came by:  
The latter wore a vest of silk, and a glass in his right eye.  
Said he, "I have a long report  
To make – excuse my paws."  
"Why, Sir", said they, "Your tail is short;  
Will you please tell the Caws?"*

\*\*\*





**N**o pudding could be more complicated than the preparation of a garden soil; as far as I have been able to find out, dung, manure, guano, leaf mould, sods, humus, sand, straw, lime, kainit, Thomas's powder, baby's powder, saltpetre, horn, phosphates, droppings, cow dung, ashes, peat, compost, water, beer, knocked-out pipes, burnt matches, dead cats, and many other substances are added. -- Čapek, *The Gardener's Year*

**Erasmus Darwin (1731-1802):** *The botanic garden*. Part II. Containing *The loves of the plants*. 2<sup>nd</sup> edition. London: Printed by J. Nichols for J. Johnson, 1790. 2 volumes. Vol. 2. *Linnaeana D34*

**The origin of Darwin:** English physician, philosopher and poet, and grandfather of Charles Darwin, Erasmus Darwin bought eight acres of land near Lichfield and made it into a botanic garden. Poetry he wrote about it turned into his famous scientific poem "The Botanic Garden": Part I "The economy of vegetation" was nothing less than a

survey of science, technology and, yes, evolutionary theory; Part II, “The loves of the plants”, was a poetical elucidation of Carl Linnaeus’s sexual system of classification of the plant kingdom. 300 footnotes and 115 pages of appendices provided a great deal of additional scientific information.

Some of his imagination and curiosity, and even the concept of organic evolution appear to have been inherited by his famous grandson who was destined to turn the scientific world and society at large upside down when he published, in 1859, *On the origin of species by means of natural selection*.

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here are maniacs who want to have in their garden everything that belongs to sixty-eight genera of Dicotyledons, fifteen genera of Monocotyledons, two genera of Gymnosperms – of the Cryptogams at least

**all the Filices, for with Lycopods and Mosses there is trouble. --**  
Čapek, *The Gardener's Year*

**Johannes Hedwig (1730-1799):** *Species muscorum frondosorum descriptae*. Lipsiae: sumtu Joannis Ambrosii Barthii; Parisiis: apud Armand Koenig, 1801. C2728

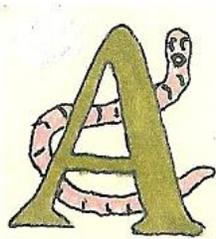
**Trouble with Lichen:** Carl Linnaeus's system of classification divided flowering plants into 23 classes according to number of stamens, their relative lengths, etc.; however, what he called the cryptogams, or the ferns, mosses and other plants which appeared to be flowerless, he threw into a single 24<sup>th</sup> class. The time was not yet right for the description of the cryptogams, which would depend on refinements in microscopy for the investigation of the plants' parts and processes of reproduction.

Hedwig, who began his career with an interest in mosses, had a few books, and a microscope, made the necessary improvements in the scope himself, and was soon on his way to becoming the founder of modern bryology, the science of mosses. Just as Linnaeus's *Species plantarum* is the starting point for nomenclature in the flowering plants, so Hedwig's *Species muscorum* marks the beginning of nomenclature for the musci.

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Gold



**August is usually the time when the amateur gardener forsakes his garden of wonder and goes on leave ...either because the nomadic instinct has awakened in him or to keep his neighbors from talking. He departs, however, with a heavy heart, full of fears and cares for his garden; and he will not go until he has found a friend or relation to whom he entrusts his garden for that time. -- Čapek, *The Gardener's Year***

*Herbarium, 1903.*

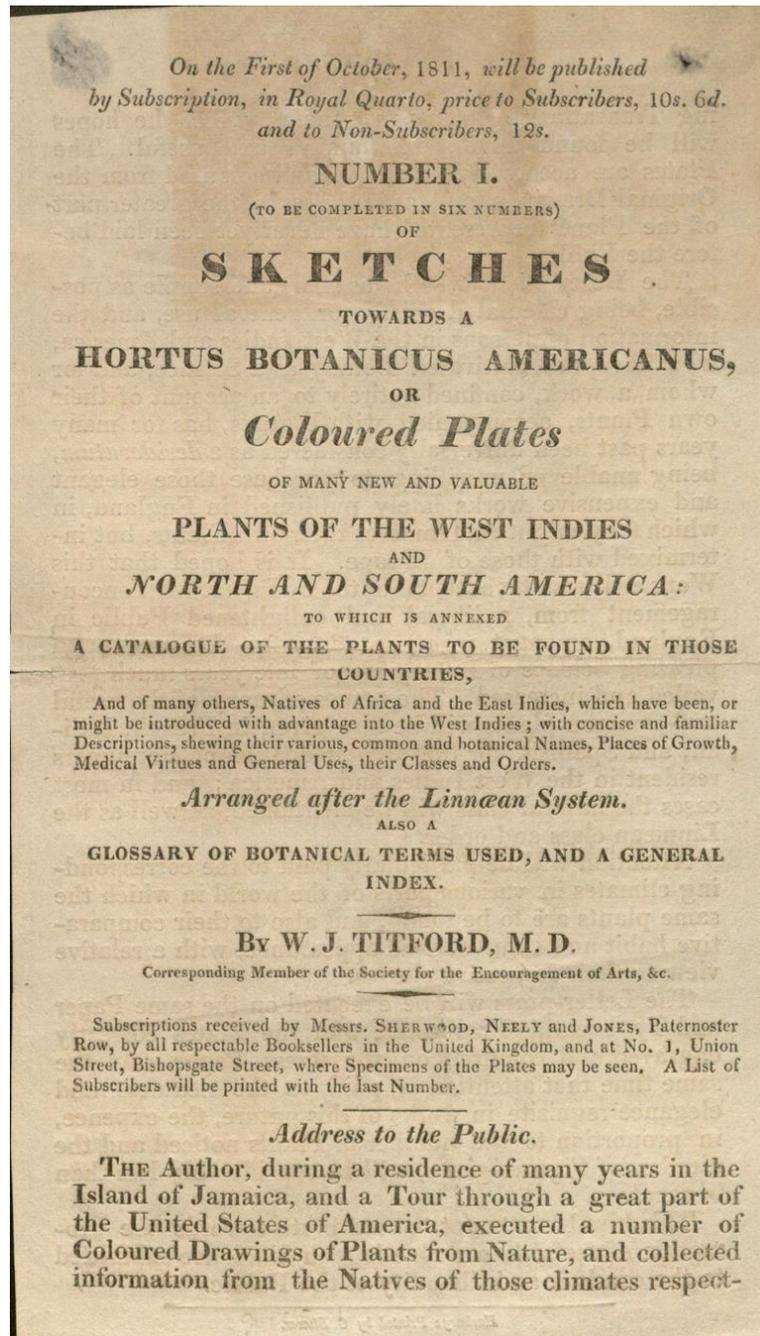
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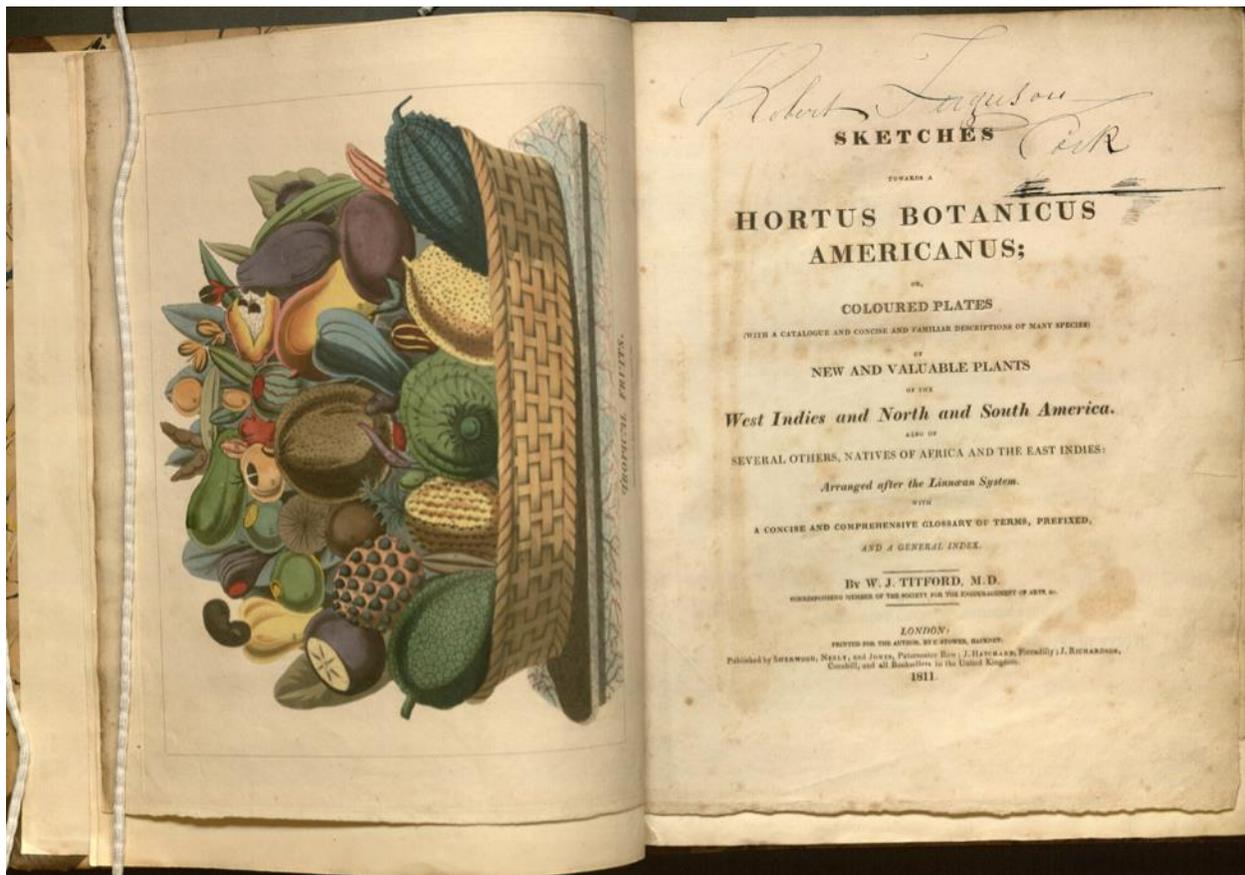
**Sour grapes:** Someone once said that e-mail bears the same resemblance to a personal encounter that a *hortus siccus* does to flowers growing in a meadow. But who could click delete on a volume so sweet?

A *hortus siccus* is literally a dry garden, or an arranged collection of dried botanical specimens, also known as a herbarium. This German

herbarium of 30 plant specimens with common names listed, is from the P.S. O'Hegarty Collection of (mostly) Irish materials. This volume was once a Christmas gift from a certain Jurgen Fassendorfer "zur freundlichen Erinnerung", in friendship; recipient unknown.

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nd then, you know, even in flowers the man is a little of a chauvinist; if a Czech rose were to win at a show against the American “Independence Day” ... we should swell with pride and burst with joy. -- Čapek, *The Gardener's Year*

**William Jowit Titford (1784-1823 or 1827):** *Sketches towards a Hortus botanicus Americanus*. London: Printed for the author by C. Stower; published by Sherwood, Neely, and Jones, 1811-1812.

*Linnaeana E6*

**Only copy of prospectus:** For bibliographers, Titford's *Sketches* represents a challenge, for it is said to be a cataloger's nightmare: we haven't tackled it yet, but the agony may be made up for by the fact that we have the only known copy of the prospectus, shown here above it.

This is the kind of printed ephemeron that, like publishers' wrappers, often gets tossed, but that besides being intrinsically interesting can sometimes provide important evidence, especially for taxonomists trying to establish priority in nomenclature: even title-pages will not usually nail down the day a species description has appeared in print, but wrappers often will (the second date in the above citation comes from the wrappers of the last three parts, not the title page) and prospectuses, too, like modern-day dust-jackets, will often provide important dates and other info not findable elsewhere.

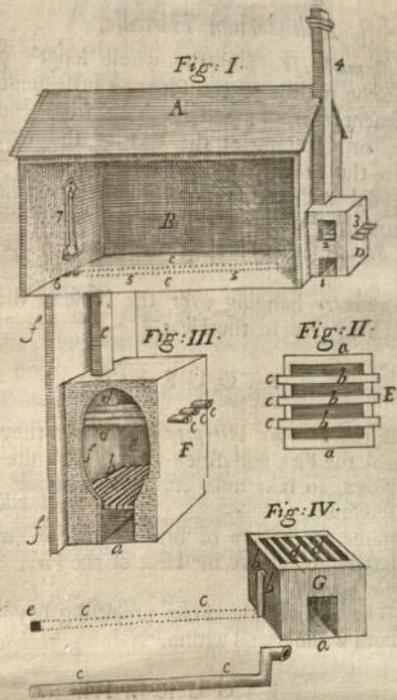
The interest in our prospectus is simply that it may be unique. Unfortunately our copy lacks the errata slip. There are 18 hand-colored engravings plus the aquatint frontispiece, showing an arrangement of tropical fruits in a basket.

Your homework for tonight is to unload the basket and name the contents (hint: in spite of the title, over a third of the fruits and vegetables are of Old World origin).

Not much is known of Titford himself, except that he was a physician born in Jamaica where he lived for many years; he visited the United States and was eventually called to London where he published the *Sketches*, his only known printed work. What happened to him after that, not yet aged 30, is as much a mystery as why his book was printed and put together the way it was.

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Note, That in this Plate or Perspective of the Green-house, Fig. I. D. the Stove-Pipes at 3 are plac'd a little too low, and near the Grate; and somewhat too high from it in Fig. III. c c c; easily reform'd in the Structure of the Furnace.

FIGURE I.

The Whole Green-house and Furnace in Perspective.

- A. The Roof whether round or flat within.
- B. The North blind Wall.
- C. The Area, or Floor within.
- D. The Stove or Furnace.
- 1. The Ash-hole, } The Mouths of both to be fitted with Doors
- 2. The Fire-bearth, } or Plugs, for regulating of the Heat.
- 3. The Extremities of certain Pipes, passing thorow the Brick-work and Furnace, and projecting both without and within the House.
- 4. The Funnel or Shaft applied to the Wall without, which carries up both the Smoke of the Fuel, and exhausted Air of the Green-house, thorow the Air-pipe, &c.
- 5. The

M m m m m



ven January is not a time for idleness in the garden”, say the handbooks on gardening. Certainly not; for in January the gardener cultivates the weather. -- Čapek, *The Gardener's Year*

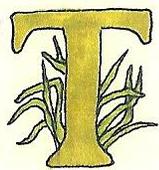
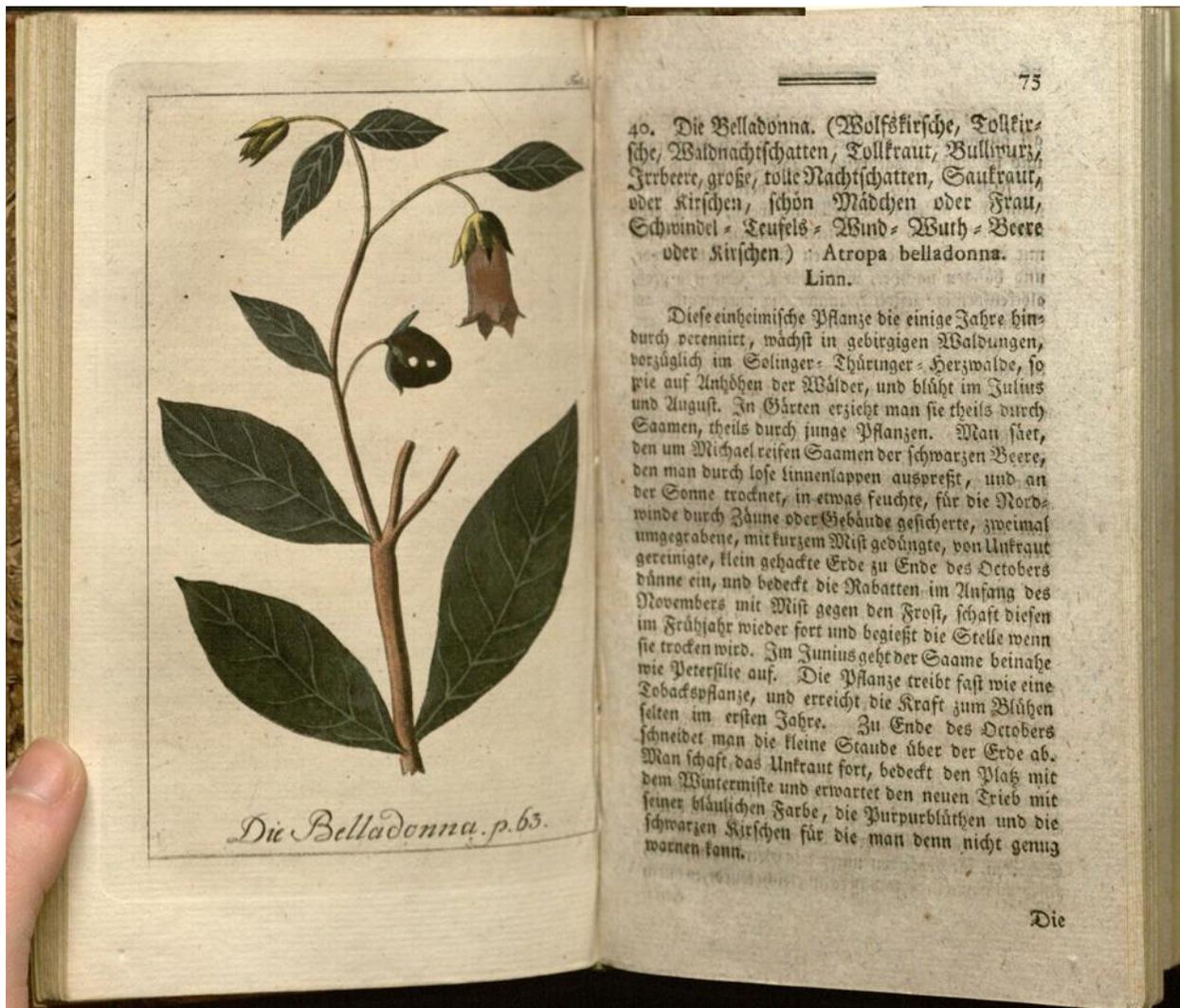
**John Evelyn (1620-1706):** *Silva*. 4<sup>th</sup> edition with *Kalendarium hortense*. 10<sup>th</sup> edition. London: Printed for Robert Scott; Richard Chiswell; George Sawbridge; and Benj. Tooke, 1706. E175

**Who said Brits don't know about central heating?:** One of the most popular gardener's calendars, the *Kalendarium Hortense* was published in many editions, both with the *Sylva* first appearing in 1664, and separately. The increase in cultivation of flowering plants during the last two decades of the 17<sup>th</sup> century required a change in the nature and design of greenhouses. Evelyn first published in 1691 an interesting scheme for a heated greenhouse, shown here in the 1706 edition of the *Kalendarium*: cold air is expelled from the bottom of the greenhouse through an underground pipe by suction generated by the furnace; it is replaced by outside air heated by the furnace in earthenware pipes and drawn back into the greenhouse.

Although gardeners knew the importance of light, it was some years before a greenhouse with more than a single side of glass came into common usage.

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**he rose is beautiful, but not mysterious; among the mysterious plants are ... poisonous and medicinal herbs ... Where the mystery lies I can't say... -- Čapek, *The Gardener's Year***

**Johann Samuel Halle (1727-1810): *Die deutschen Giftpflanzen*. 3. Aufl. Berlin: bei Wilhelm Oehmigke, 1794-1795. 2 volumes. Vol. 1. B7537**

**Say it with flowers:** it took a while before English speakers learned not to write "Gift" on CARE packages going to Germany after the wars of the 20<sup>th</sup> century. It may have taken only slightly less time for Germans to learn that this *Gift*, the German work for "poison" had a usually more benign meaning in their sister language, English.

Speaking medicinally, *Atropa belladonna*, of course, both giveth and taketh – life itself.

Halle's work on the poisonous plants of Germany contains 24 hand-colored illustrations. The *Atropa belladonna*, or deadly nightshade, is one of the best-known medicinals and most poisonous members of the potato family. It is known in England as dwale, from the Old Norse word for sleep or trance.

The name belladonna probably comes from the fact that women would put a drop of the juice in their eyes to dilate their pupils before going to parties. One wonders how these *belles dames* managed to navigate the room without appearing tipsy as well as drop-dead gorgeous.

Ophthalmologists use belladonna in eye exams where it has proven more effective than synthetics, but its primary value is to the medical doctor: its alkaloid atropine is an antidote for poisoning by the deadly insecticide parathion, and it is the only known antidote for that colorless, odorless nerve gas developed during World War II.

Another of its alkaloids, scopolamine, was combined with morphine to produce "twilight sleep" so popular for erasing the memory of pain at childbirth at the beginning of the 20<sup>th</sup> century, but abandoned because of a high infant mortality rate due to its use. Many children die every year of belladonna poisoning after eating the berries.

## A note on the initials ...

Many of the decorated initials were created back in 2000 by our then Librarian in Graphics, Jim Helyar, to whom the original manuscript of the exhibition was given for typing: time was short before the opening, and who knows at what point the idea struck him, but the text came back to me with initials here and there throughout! For this rendition of *Gardens* I asked my friend, Kansas native and illustrator Loel "Annie" Barr (who now lives and works in the Hudson Valley of New York), to fill in with her wonderful, whimsical letters wherever Jim skipped over one for lack of time. The copyrights for these initials are held by the creators and all rights are reserved.

