

ORNAMENTAL PLANTS  
IN 16th AND 17th CENTURY GARDENS

An annotated List of Plants  
to assist with the proper Reconstruction  
and Maintenance of Historic Gardens from these  
Centuries, to which Introductory Remarks have been added

by

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(mainly for the 16th century)

&

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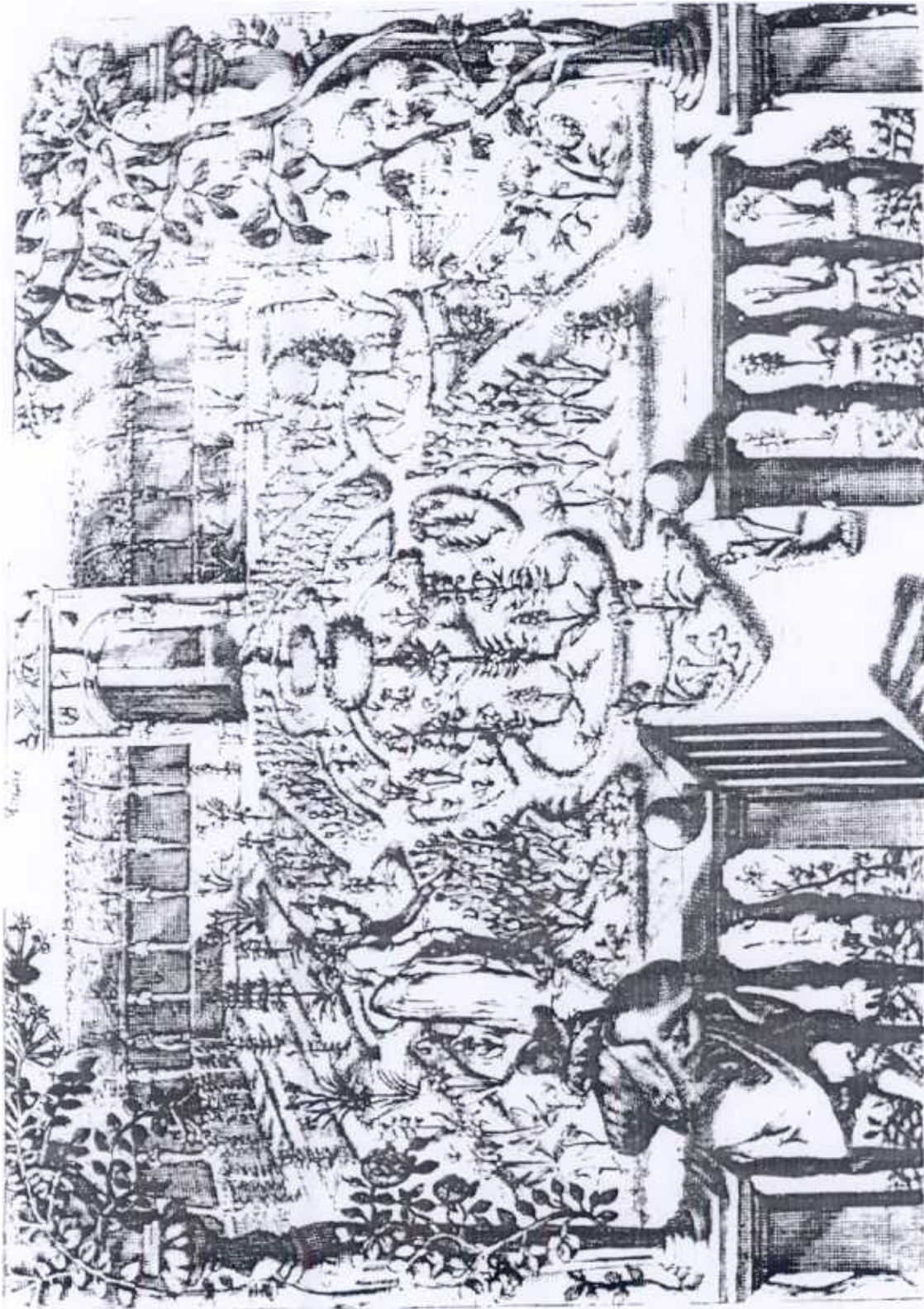


FIG. 1 : Early 17th century (flower) garden.-Engraving from Crispijn van de Pas 1614: Hortus Floridus (frontispiece).

I Introductory note.

The present paper is an attempt to draw some general outlines of the history of ornamental plants in the 16th and 17th centuries.

For practical reasons we used, as our sources, but a very small selection of books from the rich, original literature of that time on scientific botany and gardening, namely the "Fromond List of Plants", Leonart Fuchs's "New Kreüterbuch", Rembert Dodoens's "Cruijde Boeck" and Jan van de Groen's "Den Nederlantsen Hovenier". Besides, we consulted some general reference works on the history of botany.

The first author of this paper is mainly dealing with ornamental plants in the 16th century; the second author with those in the 17th century.

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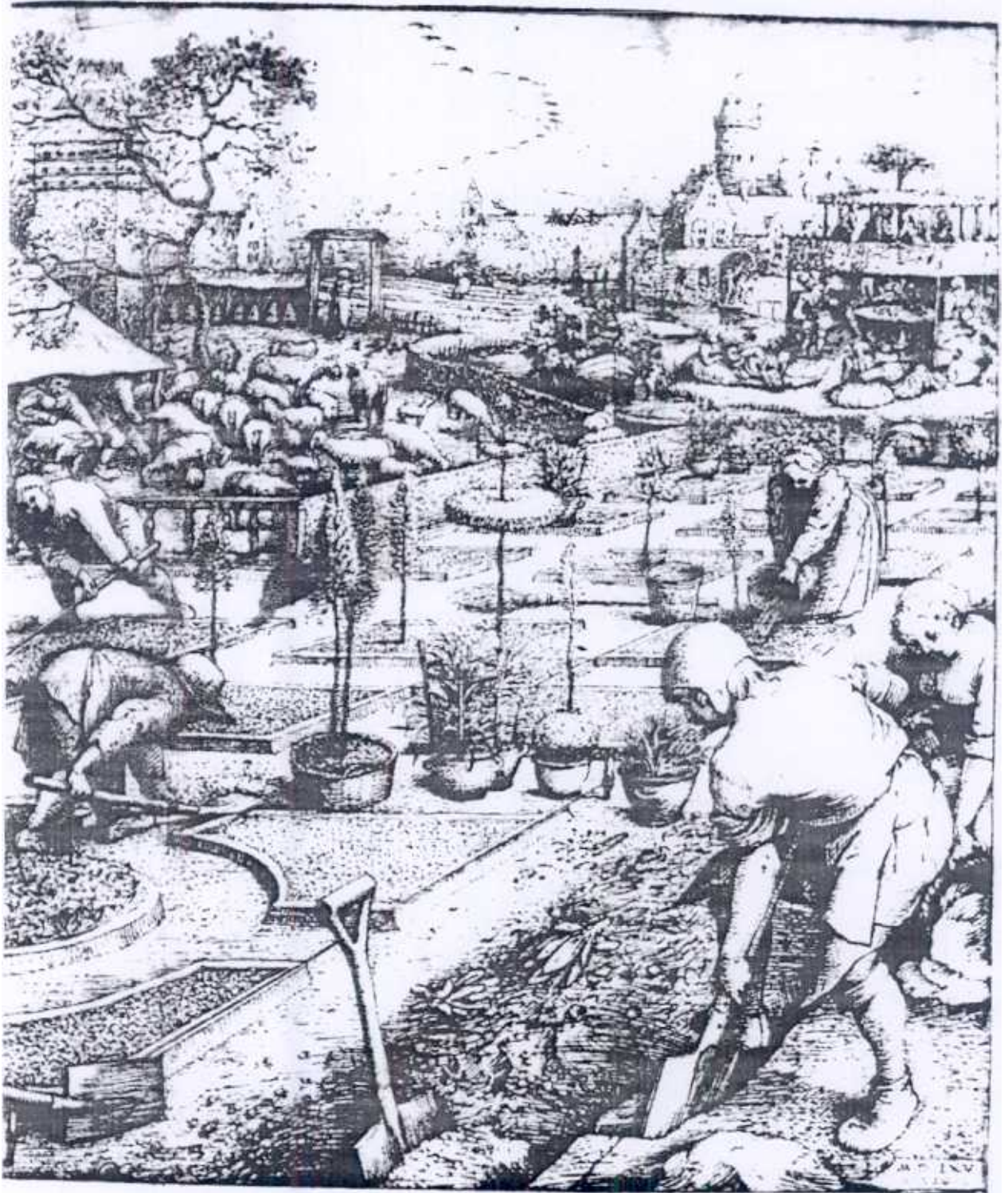


FIG. 2 : A basket and different kinds of pots in the 16th century.- Detail from "The Spring", drawing of Pieter Breughel the Elder (1565), (Vienna).

## II A few comments on the reconstruction of historic parks and gardens.

The reconstruction of historic parks and gardens has proved not to be easy. To which period should the reconstruction revert? To the period in which the house and the garden reached their peak of beauty and harmony, or do we just want to conserve all existing items as are today?

In view of financial considerations we are fortunate if we can achieve proper maintenance without introducing any alterations in the present outline.

In recent times the services for the preservation of Monuments, of the Environment, and of Recreational facilities, place an increasing emphasis, not only on the restoration of the historic houses, but on the entire estate. For example they advocate a simultaneous restoration of a French Royal Palace and its beautiful Renaissance gardens, a wealthy merchants house backed by its formal town garden, or a monastery with its walled orchard, vegetable and herb gardens. House and garden stem from one and the same period. The garden must give the inhabitants the same intimacy, security and liberty as does the house. The planning, construction and arrangement of the garden are open air creations, while the architecture of the house, its planning and furnishings are human conceptions destined for enclosed spaces. House and garden are parallel expressions, they supplement each other, whilst at the same time each forms a separate entity.

The reconstruction of "historic gardens" must be viewed with this principle in mind. It is all too easy, when the lay-out of a particular garden is still known, to plant it with an arbitrary selection of tulips, or with all sorts of "cultivars" of the Viola, Rosa, or Aquilegia genera, without taking into consideration the plant-species current at the time the garden was projected. Such a procedure merely tells us about the present day fashions in the selection of plants and their colours. Just as in the beginning of the 17th century, when the tulip came into fashion, only the nurseryman, who produced the most startling colours, really counted, so also the present day nurseryman conforms to the current fashion. The resulting restriction in the varieties which are easily obtainable, constitutes just one of the difficulties to be faced in the reconstruction of "historic gardens".

As appears from the attached list of plants, many were originally wild plants, which were first put into cultivation for their often medicinal qualities, and later for their ornamental merit. In the course of centuries cross-breeding produced bigger, stronger, longer flowering, and more colourful ornamental plants, and consequently it is now very difficult to

obtain the original wild plant species.

Why should we aim for this? Why should we prefer a border of African Marigolds such as they were when imported from Mexico in the 16th century to the vast present day *Tagetes* assortment, or the wild Stock to the large flowered summer Stocks now available? For the same reason that we do not put modern furniture into an 18th century castle which we have just restored. We either leave it empty, furnish it in 18th century style, or attempt, as far as possible, to trace the original furniture. The success we obtain in this depends on the information we have about the building in question and its inhabitants. If we do our best to harmonize the various components, the general impression transmitted to the person of this century will be as authentic as possible, and will help in our understanding of the people of those times.

The same applies to the garden and its flora. The extensive geometrically planned sand, grass, or stone plots, bordered by Box or Yew hedges in a 17th century formal garden, should not be planted with Scarlet Sage (*Salvia splendens*). Likewise we should not grow all kinds of Roses in a 17th century flower-garden (fig. I). It is preferable to leave the formal geometrical plots unplanted, unless we have sufficiently reliable information to do otherwise. Let us emphasize the need to grow 17th century plants in a 17th century flower garden and let us make every endeavour to rediscover the original garden decorations such as, statues, fountains, arbours, trellis-work, etc., or drawings of them so, that the impression given by the garden helps us to a better insight of the period concerned.

There is no doubt that it is much easier to make these simple statements than to put them into practice. Our 20th century nursery-stock flowers much longer, and this reduces the labour needed for proper maintenance of the garden. Besides, present day flowers are bigger and brighter in their colours; the general public would appreciate this, but will also learn to appreciate the beauty of less spectacular plants, particularly if they are interested in the development of historic gardens. The growing of fruit trees (especially the low fan-trained tree) should be discouraged, the fruit might prove too tempting!

Let us hope that the comprehensive list attached will provide a large enough selection of 16th and 17th century ornamental plants to remove objections against the use of historic varieties.

### III What is an ornamental plant?

The most simple answer on this question is: a generally beautiful plant for the garden. It is true that our authors of the 16th and 17th centuries do not explain their definitions of an ornamental plant, but they clearly indicate the criterions as to the beauty of a plant. As main criterions they mention form, colour and smell.

#### FORM

The size of the fully grown plant was an important characteristic; large, medium and small were simple indications to distinguish closely related species and to mark the "ornamental" size. It is likely that the plant-lover of the 16th and 17th centuries had but little interest in small sizes if he also had a choice out of larger related species.

Of old the form of the leaves was one of the most important criterions to classify plants. It is difficult to state that there were fashions in leaf-form, but it is sure that, in the art of gardening, one was alive to leaf-form.

#### COLOUR

The colour of the flower was also regarded as a characteristic of the plant. In the 16th century, when cultivating of plants was in its first rise, we meet with several primary colours of ornamental flowers: white, red, yellow, blue and violet. In the 17th century the other primary colours - orange, green and indigo - were added to them, as well as all possible variations which the growers could produce at that time.

The colour of the leaf did not know much variation. In the 16th century one only had the disposal of the original colour of the wild plant. In the 17th century, however, one could make a choice out of light-coloured and variegated varieties.

#### SMELL

In every age odouring plants were very popular. In the 16th and 17th centuries it appears that plant-lovers preferred a sweet smell. Nevertheless, stinking plants occurred between the ornamental plants of those times, but they derived their ornamental value from other properties than smell.

To the attached register of ornamental plants we have also added garden plants without ornamental value following the above-mentioned criterions. But they played an important part in the parks and gardens of the time on account of their utility, their origin or some special curiosity.

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#### UTILITY

Primarily, the ornamental plants were not cultivated for their utility as a medicinal plant or a food plant. Still among the ornamental plants we must count plants with another kind of utility, namely those in the shape of shelter belt, hedge, fence etc. protecting the ornamental ones from external influences. In the 17th century this group of plants was increasing by the developing landscape gardening.

#### ORIGIN

Some garden plants simply found a place among the ornamental plants on account of their exotic origin. They were regarded as curiosities of general interest, e.g. the Coffee-Tree, or as symbols of distant countries, e.g. the Orange. In the course of the 16th and 17th centuries their number in species increased, mainly of tropical and subtropical origin, although but a few specimens by species were present in the garden. Some of them were planted solitarily and on a striking place in the garden. Others were living in the orangery in winter and put outside in baskets, pots, boxes and tubs in springtime.

#### SPECIAL CURIOSITY

A small group of garden plants fascinated the plant-lover for their curious botanical features. A popular example is the sensitive *Mimosa pudica*, the Humble Plant.

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IV The (medicinal) ornamental plants in the so-called "pleasure gardens" of the Middle Ages.

In the writings of Albertus Magnus (1193-1280), we not only read about the "vegetable" gardens of those times with their separate plots for fruit trees, vegetables, and medicinal herbs, but also, for the first time, about a flower garden, or so-called "pleasure" garden, where one could repose and converse. In this "pleasure" garden, beauty was the criterion for the flowers chosen from the large assortment of plants with which one had been familiar since medieval times, namely, various kinds of medicinal plants such as Roses, Peonys, Violets, white Lilies, Lilies of the Valley, white and blue Irisses, and wild Strawberries. The noblemen sat in this flower garden, or reclined against a so-called grass bank, which was a wall topped by grass and flowers.

According to Fischer (1929) the painting of the Garden of Eden by an Upper Rhine Master from Staedel/Frankfurt am/Main in 1410, gives an excellent impression of such a "pleasur garden".

To indicate how many 16th century ornamental flowers, as specified by Dodoneus, still had medicinal properties, an extra column has been inserted in the register, in which these properties are tabulated. The writings of Leonart Fuchs or Dodoneus are a most reliable guide to the medicinal qualities of each plant.

CSO-E

V The interest taken in the native wild Flora in the 16th century and the resulting influence on the gardens of that time.

- a) 16th century "botanical" literature (Fromond Trade List, Leonart Fuchs, Rembert Dodoens).

The first problem to be overcome in the completion of the register of plants, was to determine which 16th century European sources were best consulted for supplying the necessary information. One would have preferred to use sources covering the beginning, the middle, and the end of the 16th century as well as sources from those countries in which "botanical" knowledge ( which then formed a part of medical science) was most advanced.

Fromond Trade List, published in Harvey's Early Gardening Catalogues (1972) counts as such a source for England at the beginning of the 16th century. This list, owned by the British Museum (Sloane Ms. 1201), is a manuscript incorporated in a cookery book, and is written in a late 15th and early 16th century handwriting. Thomas Fromond (overleden 1542) was most likely the owner of this manuscript which was undoubtedly in use in the 16th century, and which had probably been adapted from an earlier work. The plants in the Fromond Trade List are first entered alphabetically, and subsequently placed in the following groups: herbs for the soup; herbs for sauces; herbs for potting; herbs for salads; medicinal herbs; herbs for their fragrance and beauty; roots (as food) for in the garden and the plants for in the "pleasure garden". The herbs for potting", the "herbs for their fragrance and beauty" and the "plants for the pleasure garden" are the ones which appear on our list of plants.

From the names which appear on the Fromond List it is evident that several plants were imported into England earlier than had previously been thought. The situation with regard to England's native flora does not figure prominently on this list, as special attention was given in the first place to those plants which could be used for flavouring.

The original 16th century names were translated into modern latin nomenclature by John Harvey. A question-mark in front of the X marks in the tables denotes his uncertainty as to whether the said plant was indicated.

A second good source, for compiling the list of plants, was the book of herbs by Leonart Fuchs entitled: New Kreüterbuch (1543). This book was one of the first to deal with the "doctrine" of sense perception. Till roughly 1500 life in the Middle Ages was completely dominated by Christianity, that is to say by ecclesiastical authorities, who determined how the people

should think and act. Officially no other view was permitted than that dictated by the church.

Albertus Magnus wrote his experiences and observations in the form of a commentary on the works of Aristotle. For him Aristotle was an authority second only to the Divine Revelation, but Albertus Magnus' works had little influence because the time was not yet ripe for them.

Little by little man's own contribution became more important. As interest in nature grew, so also did the approach thereto become more critical. Thanks to the invention of printing (with separate letters) and of woodcarving, it was possible to produce important "botanical" books which reflected considerably more advance insights.

Leonart Fuchs describes some 400 species of plants of which about 300 grew around his home in Tübingen, Germany, and of which approximately 100 were exotic. Fuchs was interested in every plant he came across, but he himself scarcely travelled abroad.

In the first half of the 16th century emphasis was laid on the study of local flora, most of which could be found in the gardens of that time.

The plants from Fuchs' book of herbs, published in this list, are those of which he himself says that they were cultivated as ornamental garden plants.

Beside the English and German sources already referred to, one may not overlook the late 16th century Italian and French representative sources. Although it seemed logical to select Matthioli's "Commentarii in Dioscoridem" (1554) or D'Aléchamps' "Historia Generalis Plantarum" (1586-87) for this purpose, one was reluctant to do so for mainly practical reasons. Rembert Dodoens' (Dodoneus) "Cruydeboeck" (1554) was firstly easier to work with, secondly it soon appeared in French (1557) and in English (1578) and finally it was frequently used in France as well as in England by physicians and plant-lovers. This "Cruydeboeck" (Book of Herbs) provided us with a fairly simple introduction to the ornamental plants because they were methodically classified. In the 2nd book Dodoneus reviews those plants which are "pleasing to the eye", whilst in the 6th book shrubs and trees are dealt with. Books 1, 3, 4 and 5 respectively, deal with plants without any interconnection, medicinal herbs, edible plants, and plants used in food stuffs.

The group "Umbelliferae" from book 2 has been omitted, as they are mainly plants used for seasoning, whilst the group of fragrant plants, mostly "Labiatae" (also out of book 2), are included in our list of plants, for the simple reason that they could be grown not only in the herb garden but also in the flower garden and as potted plants. In general, only those

plants from book 2 have been selected, on which Dodoneus reports that they were cultivated in the gardens of plant-lovers. From book 6 a selection was made from the shrubs and trees which decorated the flower garden, or were used as a hedge round the flower beds and the garden as a whole.

b) The location of the plant in the 16th century garden.

The list of plants is divided into several columns, one of which indicates the place required for planting. This information is only then given when mention of it was made in the original 16th century works.

As far as 16th century plants are concerned, not much more was indicated than the location, such as: "pleasure garden" (Fromond List) hedges (if mentioned as such by Dodoneus) and pot or basket. The plants which, in the 16th century, were placed in pots in the flower garden, were generally sweet scented or beautiful in appearance. Fig. 2 shows an attractive example of the kind of pots used. Undoubtedly much more is known about where plants were "placed" in the 16th century, (knowledge acquired from miniatures, prints and paintings) but as, on compiling our list, we have restricted ourselves to the information supplied by the above mentioned original sources, it seems only right to do likewise in the matter of the setting of the plants.

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FIG. 3 : Wallflower (*Cheiranthus cheiri* L.).- Woodcut from L. Fuchs 1543: *New Kreüterbuch*.

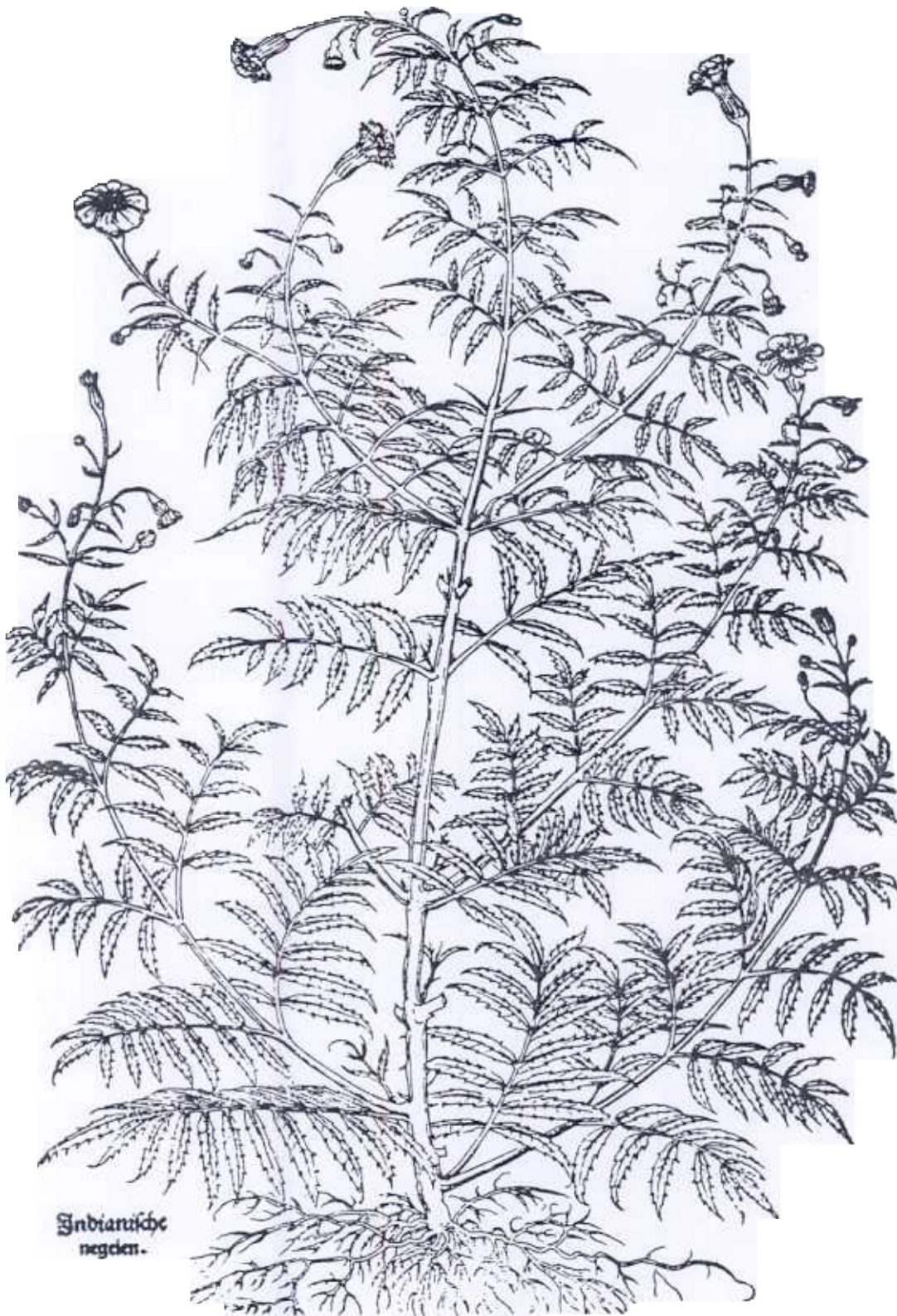


FIG. 4 : Spreading Marigold (*Tagetes patula* L.) introduced from Mexico.- Woodcut from L. Fuchs 1543: New Kreüterbuch.

# Van Lelien. Cap. xxxvij.

¶ Tgheslacht.

Lelien sijn tweederleye van gheslachte/wit ende root.

¶ Tlatloen.

Lilium.  
Witte Lelien.



Lilium rufum.  
Roode Lelien.



FIG. 5 : Madonna Lily (*Lilium candidum* L.), left, and Orange Lily (*Lilium bulbiferum* L.), right.- Woodcut from R. Dodoens 1554: *Cruijde Boeck*.

## VI Ornamental plants in the 17th century.

The birth of modern scientific botany in the 16th century was partly due to the inclination of the Renaissance man to collecting. To him collecting of all possible plants in a garden was one of the more subtle expressions of status. To the European kings, princes and rich amateurs the 16th century offered an excellent opportunity to fulfil their exquisite wishes. The not always friendly relations of the Holy Roman Emperor and the Republic of Venice with the Ottoman Empire brought us a stream of Oriental plants, of which the bulbs are the most renowned ones. The opening of the sailing routes to South Africa, Asia and America presented us with the first tropical exotics. Within Europe, too, there was a vivid exchange of native plants between the nations. The main direction seems to have been from the Mediterranean region and Central Europe to North-Western Europe. A network of plant-lovers covered gardening Europe headed by that eminent botanist and horticulturist Carolus Clusius (1526-1609).

About the middle of the 16th century botany as a science found its first organized form in the foundation of the Italian university gardens with their rather chaotic but unique assortment of medicinal, ornamental, native, exotic and food plants.

But not all garden plants of the European upperclass and scientists became common features of landscape gardening. It is striking to observe that but a quarter of the available assortment found its way to the parks and gardens of the Renaissance and Baroque. Fuchs and Dodonaeus enumerated about 150 kinds of ornamental plants; a well-provided university garden of that time held up to 600 items. In the second half of the 17th century Leiden academic garden numbered about 3000 plants; out of them the Dutch horticulturist Jan van de Groen (1669) ascribed some ornamental value to an 800. The same Leiden garden, in the 20's of the 18th century in its zenith, enlisted nearly 6000 kinds; the contemporary anonymous coauthor of De la Court van der Voort's book on horticulture mentioned about 1500 ornamental plants.

It is also notable that it took one or two or even more generations of human life before newly imported garden plants and new technical inventions in gardening became popular.

Introduced to Europe in 1572 the Tulip was spread all over the continent by Clusius in the 80's and 90's but this Oriental bulb gained its first popularity shortly after 1600 as illustrated by Crispijn van de Pas in his



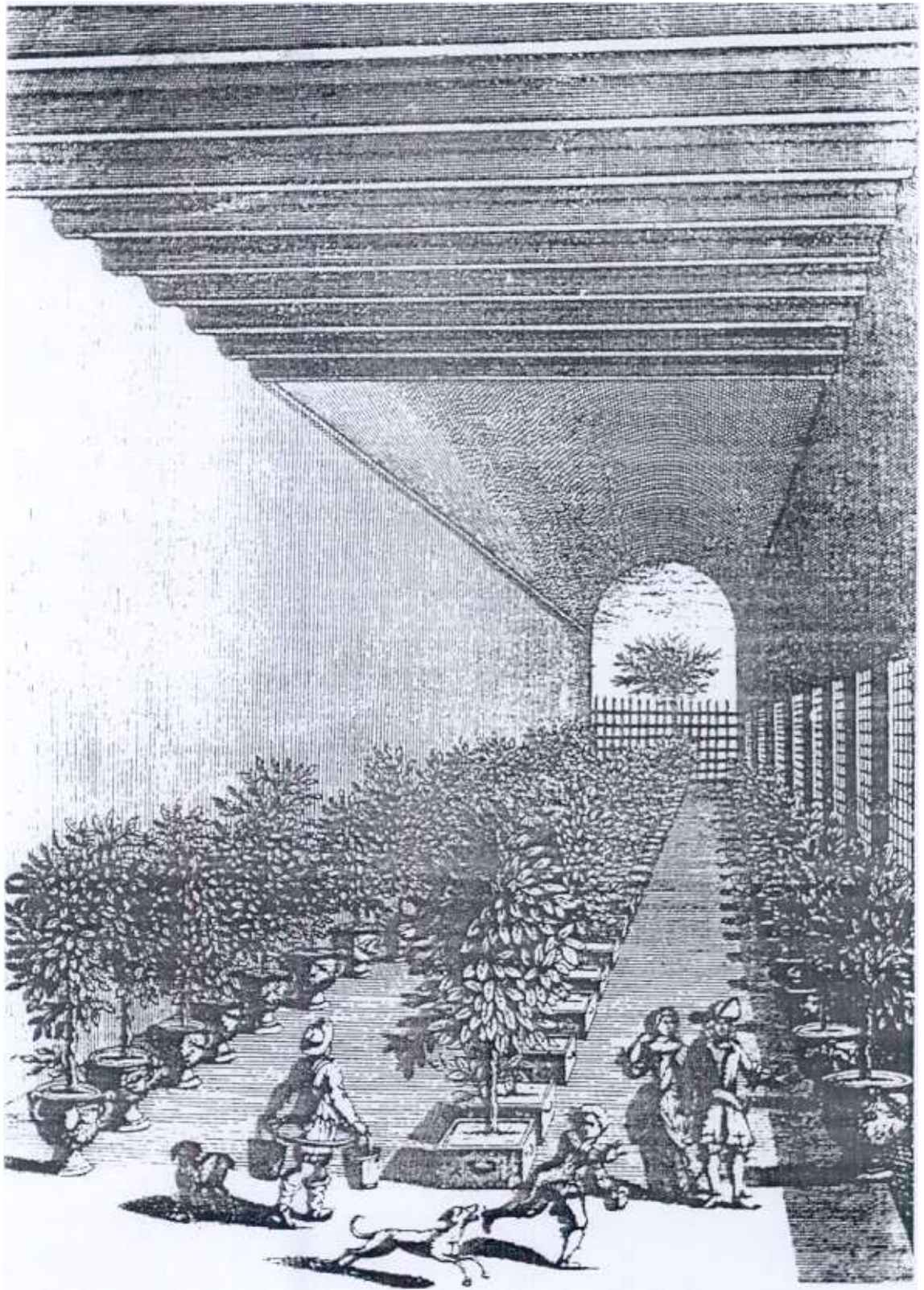


FIG. 6 : Interior of a 17th century greenhouse.-  
Engraving from J. Commelin 1676: *Nederlantze Hesperides*.

"Hortus Floridus" (1614). The following generation of plant-lovers indulged itself in the notorious Tulip mania of 1634-1637.

The greenhouse, although of old age, was still a very rare and rather primitive construction in the 16th century. The introduction of the Orange in 1562 demanded a more reliable building for sheltering tender plants. In Holland the first well-known greenhouse was the Leiden "Ambulacrum" built of brick and wood in 1599. Seventy years later, when Van de Groen published his survey of Dutch ornamental plants, this type of greenhouse was the vogue, for he incorporated many subtropical and tropical varieties and cultivars hibernating in the orangery.

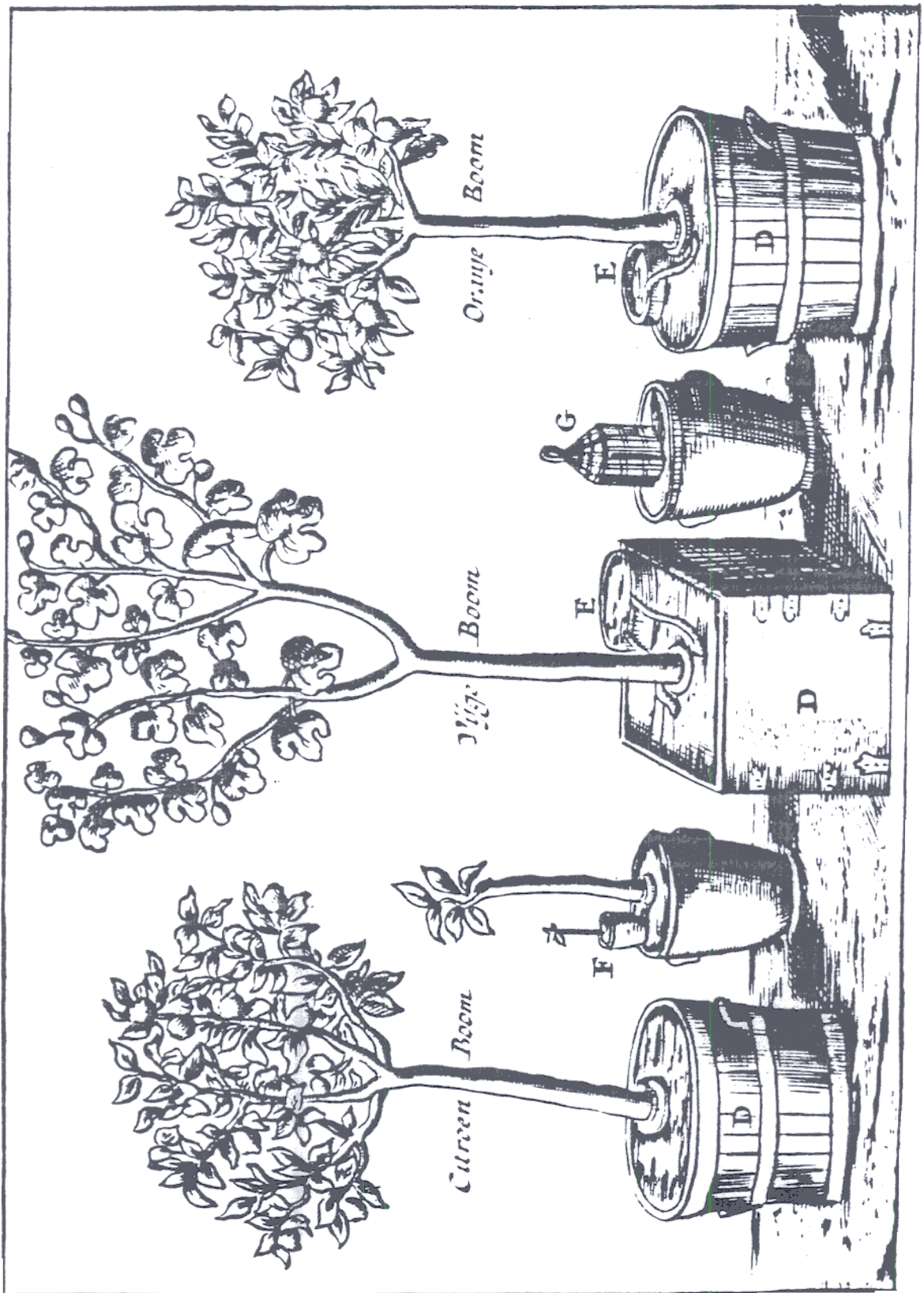
It is rather risky to describe, in general terms, the development of size and contents of the assortment of ornamental plants in the 17th century. It is true, in many cases we know the exact date of introduction of any garden plant, but it is not easy to trace, when a garden plant achieved the status of ornamental plant and when the latter became popular. Besides, the development of the assortment was a very complex and gradual process with numerous aspects; till now it is hardly to periodize. But we can draw some rough lines; we will restrict ourselves to the situation in North-Western Europe.

The increase of the number of kinds of ornamental plants has already been mentioned above: 150 (about 1550), 800 (in 1669) and 1500 (about 1720). However, these numbers do not give a correct picture, for the pre-Linnean kinds include modern species as well as varieties and cultivars. It appears that, in the first place, the increase of the assortment was due to the increase of the number of popular varieties and cultivars, and only in the second place to the introduction of new species. Consequently, on reconstructing early parks and gardens, we have to study old varieties and cultivars more seriously than the newly imported species.

The assortment of the second half of the 16th century mainly consisted of renowned medicinal plants and native plants from Central Europe and the Mediterranean. A few exotics of the temperate and subtropical regions of Asia and America were the marvels of the common private garden.

The first half of the 17th century shows us an increasing interest in representatives of Central Europe and the Mediterranean. The voyages to Asia and America, more regular now, brought more and more exotics within the scope of the general public which consequently applied itself to the building of greenhouses.

The second half of the 17th century was the flourishing period of the the orangery dominating the flower garden as a sacred house (Fig. 6). The medicinal and native plants were pushed into the background. The



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Mediterranean and non-European plants were prevailing; representatives of a new flora, those of South Africa, joined them. But it is also the time that the first reliable hot-houses with their luxurious wealth of tropical flora penetrated into the gardens. The 18th-century nurseryman had the difficult but grateful task to acclimatize the tender tropical plants for outdoors conditions.

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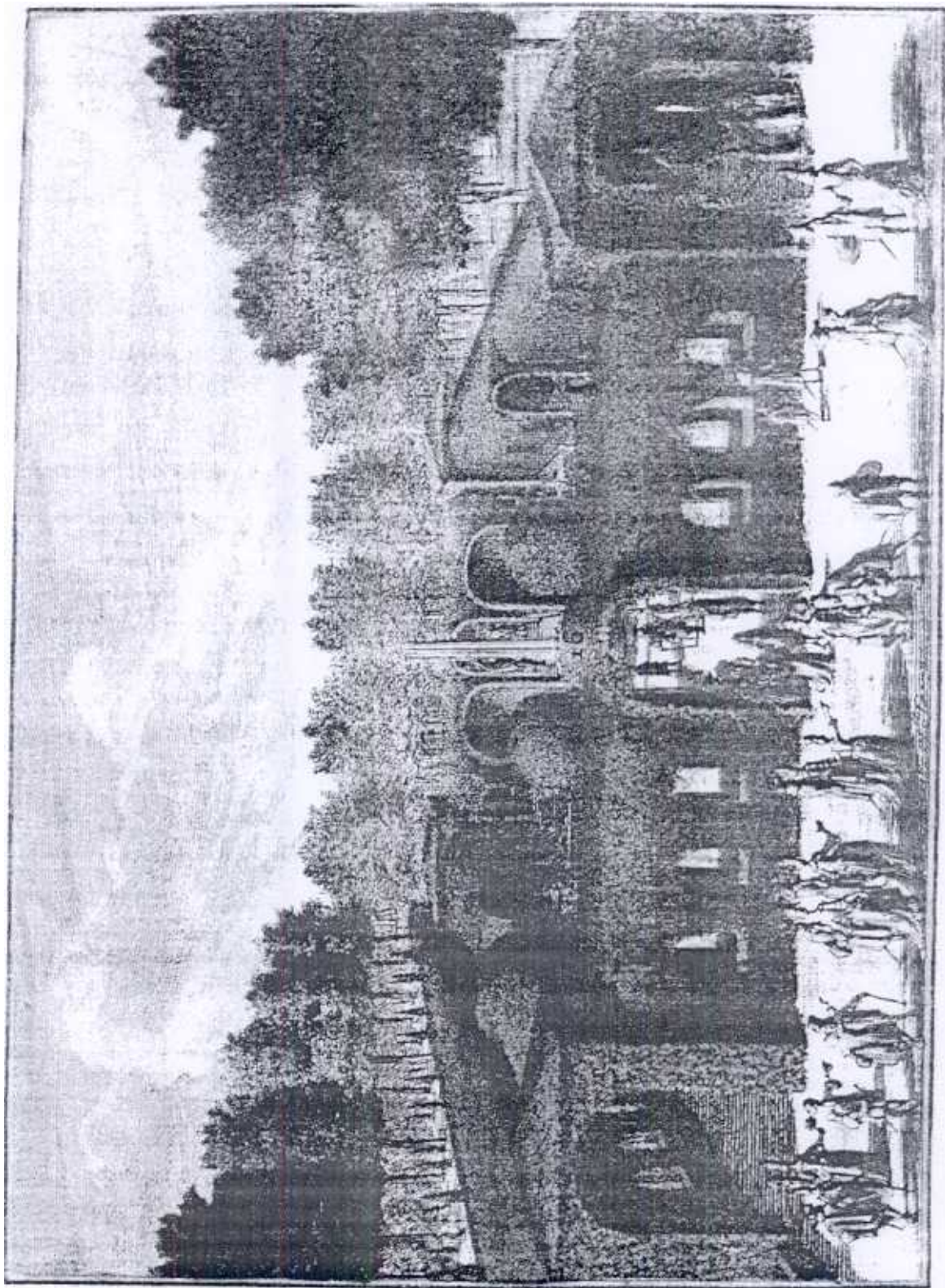


FIG. 8 : Arbours of Sorgvliet, The Hague.- Etching  
by Johan van den Avelen, about 1695.