

themselves, suppressing the name of the ingenious Spaniard; but this person, whose name was Joseph Lucatelli, was a native of Carinthia, one of the provinces of the house of Austria, who having made his experiments before the emperor Leopold in 1663, at the castle of Laxemberg, near Vienna, obtained a certificate of its utility from the imperial court, and then came to that of Madrid, and performed other experiments equally successful at the Buen Retiro, in the presence of Philip the 4th, from whom he obtained an exclusive patent for the sole vending of his plough for 24 reals plate in Europe, (about 11*s.*) and 32 reals plate (about 14*s.* 6*d.*) in America, of which a printed account was published by Lucatelli, at Seville, in 1664. A model of this plough was sent by Lord Sandwich, then ambaffador at Madrid, to John Evelyn, Esq; who presented it to the royal society, with a letter describing its use, which was inserted in the philosophical transactions of the 23d of February, 1669-70, and the model deposited in Gresham college.

Nothing can be more bleak and dismal than the general aspect of the country round the seat of its monarch, with a great want of trees, to which the Castilians have such a dislike, from a false notion that they increase the number of birds to eat up their corn; as if this reason would not hold good in other countries, where shade is not so necessary, as it is in Castile, to support
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the moisture of the soil ; or that it was ever an objection in Valencia, a kingdom so fertile and wooded : the Castilians not reflecting, that the seeds of plants, and leaves of trees, afford nurture for insects, and birds, and prevent them from destroying the grain as they do in Castile, for want of other food ; besides the advantage of screening the earth in hot weather, and preserving a due moisture after dews and rain ; for without their aid, the scorching beams of the sun parch up the earth, and render it unfruitful ; so that what little comes up is devoured by birds, in a climate where nature seems to have designed it should be otherwise ; for the climate of Madrid is not in itself averse to the propagation of trees, as may be seen by the public walks, and modern improvements and plantations. The old historians speak particularly of the woods, and of their advantageous situation for forest beasts, as appears from a book written by king Alfonso el ultimo, called *Libro de Monteria del Rey Don Alonso*, in which that monarch extols the country near Madrid, for its shady situation and extensive woods, well adapted for hunting the stag, wild boar, and even of bears (a).

(a) Libro de Monteria por G. Argote de Molina 1582. This curious book was drawn up by the particular command of King Alfonso ; Argote de Molina being only the editor. It contains three books, and is very serviceable for the right understanding the geography of Castile, and Leon in those days. Besides particular directions for breaking of dogs, and training them properly, there is a circumstantial detail of the various woods, and situations, proper for venary, and forest beasts, understood under the title of *Monteria*, such as the bear,

I shall not particularize the various improvements that have taken place of late years; however the new regulations and extension of commerce with their American colonies, are worthy of notice, particularly the open and free trade with each other granted in 1764, to the provinces of Peru, New Spain, Guatimala, and kingdom of Granada, in America. In order to render this plan more compleat, and facilitate the intercourse with Europe, eight packet boats for conveying letters were built at Coruna, one to sail the first day of every month, with a mail for the Havana. Accordingly the first packet named the *Cortes*, sailed for the Havana the 1st of November, 1764. Five packet boats were established to sail from the Havana to Vera Cruz, from whence a post road was made as far as Mexico, with its necessary branches, and communications, with the different provinces; so that letters come every month from those distant places, and often sooner, than from European courts. At Porto Rico, four galliots were established for the correspondence of Terra Firma, and Peru, receiving the letters brought by the Coruna packet boats, and bringing back the answers, by which means they receive letters from Carthagena, and Santa Fe, as quickly as by

stag, wolf, and wild boar, which sport was the delight of Spanish princes, while they disregarded the beasts of the chase, such as the buck, fox, marten, and hare. His present Catholic majesty takes great pleasure in shooting wolves and wild cats.

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the Havana. Two galliots were likewise stationed at Carthagena, for the correspondence between Porto Bello and Panama. To extend this advantage further to the southward, six packet boats were appointed in 1767, to sail from Coruna to the river of Plate, and city of Buenos Ayres, from whence six expresses were to proceed annually with the letters for Peru and Chili, and other provinces of those extensive dominions; all which has been conducted with so much activity and spirit, that communications have been opened over the famous *Cordillera* of Chili, between that kingdom and Peru, and a regular post for letters kept up, in the most remote jurisdictions; where, before that period, even the very idea or name of a post-office was unknown. For the conducting of which, the general post-office have 25 vessels; viz. 14 from the Coruna to the Havana, Montevideo and Buenos Ayres; 5 from the Havana to Vera Cruz; 4 from Porto Rico to Carthagena; and 2 from Carthagena to Porto Bello.

The Royal cabinet of natural history, at Madrid, was opened to the public by his majesty's orders in 1775; a handsome house having been purchased, of which the first floor was appropriated for the royal academy of San Fernando, and the second for the purpose of receiving an ample collection of natural curiosities, which had

been collected in Paris by Don Pedro Davila (a) a native of Peru, which his majesty has accepted of, and appointed him director thereof; and was also at the charge of bringing them from Paris. Every thing is ranged with neatness and elegance, and the apartments are opened twice a week for the public, besides being shewn privately to strangers of rank.

The collection of beasts and birds, at present is not large, but may be supposed to improve apace, if they take care to get the productions of their American colonies. They have the skeleton of an elephant that died lately at Madrid; also a little American ox stuffed, called Zebu, by Mr. de Buffon, and Zebulo by the Spaniards. The great Ant bear from Buenos Ayres, the *Myrmecophaga Jubata* of Linneus, called by the Spaniards *Osa Palmera*, was alive at Madrid in 1776, and is now stuffed and preserved in this cabinet. The people who brought it from Buenos Ayres, say, it differs from the ant-eater, which only feeds on emmets and other insects; whereas this would eat flesh, when cut in small pieces, to the amount of four or five pounds. From the snout to the extremity of the tail this animal is two yards in length, and his height is about two feet. The head very narrow, the nose long, and slender. The tongue is so singular, that it looks more like a

(a) See catalogue des curiosités du cabinet de Davila. 3 tomes, avec figures. Paris, 1767.

a worm,



Ursus Palmira. Myrmecophaga Sabata, Linn.

The GREAT ANT BEAR — from BUENOS AIRES. Published at the Art Depot, No. 157, No.

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TRAVELS THROUGH BRAZIL

The first part of the journey was very tedious, the heat of the day being oppressive, and the night being very cold. We were obliged to travel in the open air, and to sleep on the ground.

The second part of the journey was more agreeable, the weather being more temperate. We saw many beautiful scenes of nature, and many interesting objects. We were particularly struck with the beauty of the mountains, and the fertility of the valleys.

The third part of the journey was the most difficult, the country being very mountainous, and the roads very bad. We were obliged to travel on foot, and to carry our baggage on our backs.



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a worm, and extends above sixteen inches. His body is covered with long hair, of a dark brown, with white stripes on the shoulders; and when he sleeps he covers his body with his tail.

The mineral part of the cabinet, containing precious stones, marbles, ores, &c. is very perfect. Amongst other curiosities they have a grain of gold of 22 carats, which weighed sixteen marks, four ounces, four ochavos, Spanish weight, found in California, and sent by the viceroy of Mexico as a present worthy of his majesty's acceptance (a); also several curious specimens of silver ore, from the Guadalcanal mine in Estremadura, of that sort called *Rosicler*.

Specimens of Mexican and Peruvian utensils, vases, &c. in earthenware of that kind, which the Spaniards call *Barra*, wretched both in taste and execution. Some productions likewise of Otaheite, which the Spaniards call *amath*.

A curious collection of vases, basons, ewers, cups, plates, and ornamental pieces of the finest agates, amethysts, rock crystals, &c. mounted in gold, and enamel,

(a) A curious treatise, now very scarce, was published at Mexico, by the viceroy, in June 1771, intituled *Noticia Breve de la Expedicion Militar de Sonora y Cinaleo, su Exito feliz y ventajoso estado, en que por consecuencia de ello se ha puesto ambas provincias*. See a further account of this expedition in Robertson's history of America. Note LXV. vol. 2.

set with cameos, intaglios, &c. in an elegant taste, and the most delicate workmanship, said to have been brought from France by Philip the fifth. There is likewise a valuable collection of books and prints daily adding to the cabinet by the said Don Pedro Davila.

Were painting and sculpture my objects, this would be the place to describe the many fine pictures in the royal palace and in the noblemen's houses at Madrid; but I pass them over in silence the more readily, as modern travellers have described the most beautiful of these pictures. I shall just observe that a late writer who spent some time at Madrid, speaking of the church of the visitation, called *Las Salesas*, where the late king Ferdinand and his queen are interred, tells us, that at the principal altar, there is a fine copy of Raphael's transfiguration; whereas it happens to be a good picture of the visitation, in allusion to the name of the church, and done by Francisco de Muro at Naples. It is true a most excellent copy of Raphael's transfiguration may be seen at another church belonging to the convent of St. Teresa, placed there by the founder, the Prince de Astillana, who considered it as an original of Raphael, and valued it at ten thousand pistoles (about £7000). It is supposed to have been done by Julio Romano, the ablest and favourite scholar of Raphael. The same writer speaking of the pictures in the palace
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of Buen Retiro in the saloon, named *De los Reynos*, calls one picture "Santa Cruz succouring Geneva"; whereas it is the surrender of Genoa to that officer, being placed amongst other historical pieces of the times, which are termed by him, "Scripture subjects of the old testament."

That beautiful equestrian statue of Philip the 4th, by Tacca of Florence, which stands in a little flower garden of the Retiro, is worthy of the highest admiration. The attitude of the horse is surprisngly bold, with both his fore feet in the air; and was imitated from a picture of Velasquez, sent to Italy for that purpose. When seen by the Florentine artists, they all agreed it was impossible to execute it; however Tacca with the assistance of Galileo happily applied the principles of equilibrium, and succeeded beyond expectation. This unfortunate artist died soon after of grief from the treatment he received from the grand duke's minister, concerning this statue, but his eldest son Ferdinand came to Madrid, and fixed the parts together, which were three in number, and placed the statue properly. Six hundred and fifty six quintals of 128 lb. of metal each, were employed in the casting. Its height, including the pedestal, is 84 palmos (19 feet 9 inches English) (a). In an inventory of the effects of the Retiro, it was valued at forty thousand pistoles (£.28.000) an enormous sum, and

(a) A Spanish palmo eight inches and a quarter.

much more than it could ever have cost. It was proposed a few years ago to remove this statue to some more conspicuous place, but it is said to have been objected to, by the then prime minister Marquis de Grimaldi, alledging that they must not pay any attention to the house of Austria, but he would have no objection if the head of Philip could be changed, for that of Charles the third.

Tacca also finished the equestrian statue of Philip the third in the Casa del Campo, left imperfect by John de Bologna, at his death, and was brought to Madrid in 1616, by Antonio Guidi, brother in law to Tacca, attended by Andrew Tacca, another brother of the sculptor, who brought with him the gilt metal crucifix fixed on the altar of the Pantheon at the Escorial. The mention of the Retiro has naturally led me into the agreeable gardens of that palace, and to the menagerie, where, amongst other curiosities, they have a crested falcon from the Carraccas. This curious bird, which is about the size of a turkey, raises his feathers on his head in the form of a crest, and has a hooked bill; the lower mandible rather straight; his back, wings, and throat are black, the belly white, the tail distinguished by four cinereous, and parallel stripes, and is an undescript bird not taken notice of by Linneus.



Published as the Act directs April 15th 1780.

Page sculpt.

The **CRESTED FALCON** From the *CARRACCAS*,
alive in 1778, in the Menagerie of Buen Retiro, at Madrid.

L E T T E R VIII.

Description of the palace and gardens of Aranjuez.

THE royal seat of Aranjuez, seven leagues distant from Madrid, and to which a most noble road has lately been made, is delightfully situated at the conflux of the rivers Tagus and Jarama; which run through the gardens, and add new beauty to this charming spot, where art and nature seem to go hand in hand with the most pleasing and rural simplicity. On one side, fine avenues of stately oaks and lofty elms, convey the truest ideas of magnificence, while they afford the most reviving shade; on the other, the sudden transitions to lawns and wilderness, the cascades of water breaking through the thickets, the tuneful songs of numberless birds, sheltered in these cool recesses, the occasional appearance and passage of the monarch, attended by the grandees of his kingdom; all these objects united, and centered in one point, fill the imagination with pleasing ideas, and impress the mind of a traveller with a thousand agreeable sensations, particularly in the spring, when every thing is

in high bloom and perfection, and engage him to look at Aranjuez as one of the most beautiful places in Europe.

The whole of these gardens may be thrown into three grand divisions, distinguished by the names of *La Huerta Valenciana* (a), *Los Deleites*, and *El Cortijo*. In the *Huerta Valenciana*, agriculture and gardening are carried on in the same manner as in that fruitful province, and they plough with horses. In the *Cortijo* they use oxen, as in Andalusia; and in other places they scratch up the ground with mules as is still practised in some parts of Spain. Which ever way one looks round, a constant variety pleases the eye and enraptures the mind. At one moment the sturdy buffalo moves before you, drawing his heavy burthen; soon after, the slow camel with his ponderous load; while the swift Zebra with his striped garment frisks over the plains. If you approach the farm, every object of convenience is consulted, and in the dairy every degree of neatness. The Dutch cow enjoys a luxuriant pasture, the brood mares greatly enliven the landscape, and the stables are filled with the most excellent horses. An immense nursery furnishes all manner of trees and plants, a cedar of Libanus, which

(a) By the term of *Huerta* is understood that kind of inclosure we call an orchard, but with a greater variety of cultivation. When they speak of an ornamented flower garden near a palace or nobleman's house, the Spanish term is *jardin*, the same as in French.

about twenty years ago was only a twig, is now thirty feet high: the garden called the *Isla* is particularly beautiful and rural. The Judas tree, which the Spaniards call *Arbol de Amor*, being happily dispersed there, has a very good effect early in the spring, when covered with flowers without a single leaf; the banks of the *Isla* are further enlivened by elegant yachts, for the amusement of the royal family. The fine avenue which also serves for a public walk, called *Calle de la Reyna* has nothing equal to it at Versailles. The extensive flower garden on one side, renders the walk extremely pleasant in an evening; and were I to mention the quantities of flowers and fruit, it would require many details. A great many elms and oaks have been planted this year, (1778) said to be 101.000, which must likewise include vines, olives, shrubs, &c. They have lately begun to cultivate pine apples, unknown in every other part of the kingdom.

At the noon-tide hour, when the freshness of the morning is past, the shady walks near the palace then become an object of singular luxury, as well as the elegant fountains, whose sportive waters give such a coolness to the air. Whoever has enjoyed the agreeable moments that pass in pleasing converse under these shady bowers, will surely be charmed with their admirable effect, independent of every idea of modern improve-

ments, or criticism upon fountains and water works. The nightingale and cuckow are heard here the latter end of April. That elegant bird the bee eater, called by the Spaniards *Abejaruxo*, the merops apiaster of Linnæus, which our travellers tell us comes no further South than Andalusia, is known not only to breed at Aranjuez and live there all the year round, but is also found at St. Ildefonso, which is 20 leagues more to the northward. The golden thrush is also seen here, a beautiful bird with a bright yellow plumage, the icterus of Edwards, called *oropendulo* by the Spaniards, and *l'auriot* by the French, the oriolus of Catesby and Linnæus. Amidst the great variety of birds in these woods, there is one about the size of a cuckow, called *Pito*, of a beautiful purple. Such a diversity of objects could not fail to excite the genius and fire of the Spanish writers; for my part I willingly join with that elegant poet Don Gomez de Zapia, who has so naturally described them, in a poem, of which the following lines are the beginning:

En lo mejor de la felice Espana

Do el Rio Tajo tertia su corrida,

Y con sus cristalinas aguas bana

La tierra, entre las tierras escojida,

Esta una Vega de belleza estrana!

Toda de verde yerba entretejida,

Donde natura y arte en competencia,

Lo ultimo pusieron de potencia (a).

(a) Parnasso Espanol Tom 3. Madrid 1773.

The Palace being an old building with several additions is more in the style of a hunting seat, as Philip the second designed it, than of a royal mansion, nor is there any thing very particular in the apartments, to take off from the enjoyment of so many fine objects abroad. The new wings to the Palace are finished; in one is a play house, and in the other a chapel. Part of the cieling of the former was painted by Mengs, who is now (1779) at Rome painting a holy family for the principal altar in the chapel.

There are seven fine pictures of Luca Jordano in the apartment called *El Gabinete Antiguo*, and six others in that *de los Mayordomos*; particularly one, is universally admired, in which a number of beasts are represented listening to Orpheus, and seeming to be struck with the melody of his lyre. The portraits of the grand Duke and Dutchess of Tuscany by Mengs, are in a new apartment called the king's dressing room. In the chapel, over the great altar there is a fine picture of the Annunciation by Titian, presented by him to Charles the fifth, and brought from the convent of Juste after the death of that Emperor. The Porcelain Cabinet where there are several large pieces of the king's own Manufactory, is also an object of curiosity to a traveller. In a word, this charming place is highly indebted

to Charles the third for bringing the whole to its present state of beauty, and making the new road from Madrid, and the noble stone bridge over the Jarama : if the design is continued of planting trees on each side of the road, it will add greatly to its magnificence.

A topographical plan of Aranjuez and the improvements there, has been executed by Don Domingo de Aguirre, captain of engineers, in sixteen sheets, and the views in eight more. In short, these rural places have so many charms, that they cannot fail of pleasing every fancy, and meeting universal acceptation, as Lupercio Leonardo de Argensola has happily expressed it, in a little poem in praise of these gardens.

Qualquiera aqui su condicion aplica,
Aunque su origen trayga de otra parte,
Do el sol menos, o mas se comunica!

But this is only to be understood with respect to the proper season of the year, suited to its situation, for as it lies in a bottom surrounded with mountains, the air is of course confined, which added to the great quantity of water, and numerous plantations, makes it agreeable when the hot weather begins, for which reason the court generally removes about the end of May, and goes soon after to St. Ildefonso, which is a very high situation amongst the mountains of Guadarrama, where
they

they begin a new spring and breathe a clear refreshing air during the scorching heats of summer.

Great quantities of liquorice grow wild near the road between Aranjuez and Toledo, as well as on the banks of the Tagus, where one also finds those curious reeds made use of by the Romans for writing, and celebrated by Martial, in an epigram addressed to Macer, who had been pretor in Spain.

Nos Celtas, Macer, et truces Iberos,
 Cum desiderio tui petemus,
 Sed quocumque tamen feretur, illic
 Piscosi Calamo Tagi, notata
 Macrum, pagina nostra nominabit, Lib. x.

The castle of Aceca dependent on the jurisdiction of Aranjuez though kept in good order, is more taken notice of on account of its former reputation, and antiquity, than from any other circumstance. Its district is supposed to have belonged formerly to a colony of Jews from Toledo, and so named from *axebe* in Palestine peopled by Joshua (*a*). There is no doubt that the Jews were in great repute in Spain in the early ages, inso-much that in 686, under the gothic king Ervigius, they had the boldness to assert, and endeavoured to persuade the king, that the Messiah was not come. Their de-

(a) Kings. Book 1. chap. 17.

scendants several years afterwards propagated fables, to prove their great antiquity in Spain, and in order to lessen the reproaches thrown on them by the Spaniards, they gave out, that they were not descended from those Jews who crucified our Saviour (a).

(a) Sandoval, bishop of Pamplona, relates, that when king Alfonso conquered the city of Toledo, he found it full of Jews, who shewed to that monarch two letters in Hebrew and Arabic, sent from the synagogue of Jerusalem to that of Toledo, giving them an account of Jesus Christ, and asking their opinion whether they should put him to death; also the answer of the Toledo Jews, dissuading them from it. These letters were ordered to be translated from Hebrew into Arabic by Galifre king of Toledo, and into Latin and Spanish by king Alfonso, and were preserved in the archives of Toledo till 1494. They were translated by Julian, archpriest of St. Just, and were afterwards in several hands. The answer of the Spanish Jews is dated Toledo 14th of the month Nisan, æra of Cæsar 18, and of Augustus Octavianus 71. I know nothing further concerning the authenticity of this letter, says the bishop of Pamplona, than that it was found in the archives of Toledo, and in the same style and language in which I have given it. *Historia de los Reyes de Castilla y Leon por Don fr. Prudencio de Sandoval obispo de Pamplona. En Pamplona 1615.*

L E T T E R IX.

Description of the baths and mineral waters of Trillo.

NO country abounds so much as Spain with hot baths and most excellent mineral waters, and they are now beginning to investigate their qualities. Those of Trillo have of late particularly engaged the attention of government, and we have been more accurately informed of their virtues and properties. The village of Trillo, in New Castile, is seventeen leagues from Madrid, by the new road lately made to that place, situated on the north banks of the Tagus, two leagues south of the city of Sigüenza. The village of La Puerta is about a league to the eastward, and the town of Gualda much about the same distance to the westward. The country is hilly, and affords little corn or fruit, some few vineyards, and plenty of game. The Tagus abounds in fish, such as trout, eels, and barbel; has a stone bridge of one arch over it, of a solid structure, and considerable antiquity, being there when the first investigations were made about this place in 1558^(a). A little river runs

(a) Particular mention is made of Trillo by Ambrosio Morales. *Antiquedades de las Ciudades de Espana.* Alcala de Henares, 1575.

from Cifuentes, which enters the Tagus at Trillo, and was once famous for its curious water mills, for sawing of timber brought down by the stream, which was the chief branch of industry of the inhabitants; but in the year 1710, on the 30th of December, they were visited by 1400 of the English army then serving in Spain, in favour of the archduke of Austria, who having staid there seven days, raised considerable contributions, and were succeeded by 8000 Portuguese their allies, under the Count de Atalaya, who ravaged the country, and pillaged the place: of the three saw mills, only one was left standing, which has since become useless. The inhabitants dwindled in numbers, and the few that remained, from a state of affluence and ease, experienced the extremity of poverty and distress; though in a situation, where the climate is remarkably temperate, the air pure, provisions plentiful, their mutton singularly excellent, and a fine spring of soft water runs near the village.

The baths are up the river on the opposite side of the Tagus, about the distance of a mile, with an agreeable road to them, made from the foot of the bridge, with an avenue of trees, through a pleasant district, well shaded with wood, where the warbling of nightingales, and the musical notes of various other song birds, delight the invalid, and welcome his approach to these salutary baths. Inns are now building for the reception of company,

pany, and every effort is made for the convenience of the infirm. The waters have been analyzed with exactness, a deputation having been appointed by command of the king, to conduct every thing with the utmost formality, under the direction of Don Miguel Maria de Nava, Dean of the council and chamber of Castile, assisted by Dr. Casimir Ortega, F. R. S. and royal professor of Botany at Madrid, who has published the proceedings of this assembly held at Trillo; and from his elegant treatise I have selected the following information (a).

These baths are situated at a small distance from the banks of the river, in a meadow, at the brow of a hill, which by its situation to the eastward, affords a refreshing shade the greater part of the morning. The baths are divided in the following manner.

Los Quatro Banos, called the king's bath, divided into four separate baths, all equally commodious, and handsome, with their proper appertenances,

(a) *Tratado de las Aguas Termales de Trillo* escrito de orden del Rey por el Dr. Casimiro Ortega, Madrid, 1778.---The ingenious and learned Dr. Ortega was in England a few years ago, and is well known to several gentlemen in this country. Besides the waters of Trillo, those of Ribas, at a small distance from the mountain of Nuestra Señora de Nuria, near the Pyrenees of Catalonia, are greatly resorted to in the spring, and autumn, for gravelly complaints, as is also the fountain of Paterna, in the Alpujarra mountains of Granada, called "*Aguas agrias*," "Acidulous waters."

The Countess's Bath, so named after the lady of the Count de Cifuentes, who is lord of the place, is close to the river, but judiciously built and remarkably solid, to resist every impulse of the stream, and equally decorated with every convenience and advantage.

The bath of the *Piscina* is about four hundred paces from the king's bath, and has acquired this appellation from being chiefly made use of, by the poor, who are most subject to cutaneous complaints, for which purpose this bath is remarkably efficacious. A dwelling-house is now building for the use of the bathers, with every distribution of apartments and convenience, requisite for a place of this nature: also, for a greater embellishment of the baths, they have planted round them that beautiful and odoriferous tree sent thither from the royal botanic garden at Madrid, by the name of *robinia pseudo acacia*. In Spanish *falso aromo*. (The false acacia.)

Dr. Ortega, after referring us to Macquer, and other eminent chemists, who all agree, that the analysis of waters, is the most difficult operation of chemistry, as it tends to discover that union, which nature by slow and secret steps, forms in water, and other substances, in its most occult and abstruse motions; proceeds to his analysis of the waters of Trillo, after some strictures and criticisms on the writings of Dr. Limon Montero, on the mineral waters of Spain, published at the close of the

the last century, intituled "Espejo Cristalino de todas las Aguas Minerales de Espana." And after denying them any nitrous, aluminous, or sulphureous qualities, as asserted by Dr. Limon, he closes his analysis with the following corollary :

" That these waters participate of five substances, two volatile, and three fixed ; viz. a phlogistic vapour, extremely anodyne, penetrating, and friendly to the nervous system ; of a moderate quantity of gas, calcareous earth, common salt, and selenetic salt ; and that to each pound of water of sixteen ounces, one may calculate twenty-five grains and an half, of fixed principle. This computation was made on a considerable evaporation of water, of about a quintal (a), which was judged to be the best method, as less liable to error, than those experiments with small quantities. It was also considered, that of the twenty-five grains and an half, of fixed principle, corresponding to each pound of mineral water, near fourteen grains are common salt, about three of selenetic salt, and about eight and an half, of absorbent earth ; which for greater exactness we shall express in this manner ;

13 $\frac{397}{1000}$ grains common salt.

2 $\frac{985}{1000}$ grains selenetic salt.

8 $\frac{397}{1000}$ grains absorbent earth.

(a) A Spanish quintal 97 pound English.

The same proportions, with a very trifling deviation, were also found by Don Manuel Joachim Enriquez de Paiva, royal demonstrator of the chemical laboratory at Coimbra in Portugal.

Dr. Ortega observes, that the lightness of this water is so great, as even to enter into competition with that of distilled water, the purest we know of; therefore its effects will be the more easily accounted for: that the heat of the water, does not equal that of the blood, in a person in good health, and comes near to that tepid degree, prescribed by the physicians in artificial baths.

The bath of the princess is the most efficacious, or at least abounds most with phlogiston, and of course is better suited to those disorders where the efficacy of this principle is desired. The king's bath, and that of the countess have scarcely any phlogistic vapour, which variety makes them still more pleasing to the bathers, and applicable to different complaints; while the Piscina bath abounds chiefly with phlogiston, and is admirably suited to the disorders of the poor, as already observed: finally the two principles of gas, and of phlogiston, are of so volatile a nature in these waters, that a remarkable difference is observed betwixt the well, and the bath, by those who drink them immediately from the
spring,

spring, or at a distance; which shews how much it evaporates by carriage; for which reason it should not be filled in earthen pitchers, but only in bottles or flasks, well corked, and carefully sealed. This is the substance of a public oration pronounced by Dr. Ortega, before a numerous assembly at Trillo, and afterwards published by authority of the council at Castile, in virtue of their decree for that purpose, bearing date the 11th of April 1778, to which are added a few trifling cases, with that of the dean of the council, Don Miguel Maria de Nava, at the head of them, who found great benefit from these waters, and presided at this pompous assembly, attended by the Count de Cifuentes, a grandee of Spain, and many other noblemen and gentlemen of rank, as well as several eminent physicians, surgeons, and apothecaries, who all concur in the praises of Trillo, and set their names to the facts there related.

I shall only select one case, inserted by Dr. Ortega, and taken by him verbatim from Dr. Mendoza, physician at Cifuentes, written at Trillo so early as the 18th of July, 1714, adorned with a copper-plate, representing the virgin Mary as protectress of the waters, being one of the first cures, which brought them into repute.

“ A friar of the congregation of St. Philip De Neri,
“ was troubled with ulcers in his legs, the remains of a
“ malignant erysipelas, and an abscess in the bone of
“ the right clavicle, which having been opened by the
“ person who attended him, terminated after a long and
“ painful process, in a fistula. An ill-conditioned ab-
“ scess of a great size, was discovered at the same time,
“ situated on the last right rib, which was deemed very
“ dangerous to open. He had also a tumour seated in
“ the right axilla, another on the left hand, and others
“ on the shoulders, a pain in the side, a hectic fever,
“ shortness of breath, painful respiration, and a fallow
“ complexion, with constant faintings and vapours,
“ which flew to the head, and often occasioned a syn-
“ cope. Having suffered thus, for two years, and all
“ the remedies having failed, which are called human,
“ he came to Trillo, drank the waters, used the baths,
“ and voided a great deal of sand. The ulcers being
“ healed, though for some time the hectic did not sub-
“ side, he returned the following season to repeat the
“ use of the waters and baths; and was perfectly cured,
“ so as to go home without a fistula, tumours, or pain
“ in the side; his respiration recovered, with a healthy
“ and florid complexion; and finally with so much na-
“ tural vigour, that even the issues which he had been
“ advised to have made, could not be kept open, not-
“ withstanding

“ withstanding every endeavour for that purpose. The
 “ witnesses of this case were Dr. Aquenza, Dr. Porras,
 “ and the king’s first surgeon Monsieur Legendre.”

I now close this narrative with a list of such plants as
 Dr. Ortega tells us he found in the environs of Trillo (a).

A CER Monspessulanum	Montpelier maple
Achillea ageratum	Sweet maudlin milfoil
* Achillea millefolium	Milfoil yarrow
* Adiantum capillus veneris	True maiden hair
* Agrimonia eupatorium	Common agrimony
* Agrostemma githago	Corn cockle
Allium descendens	- - - - Garlic
Allium victorales	Broad leaved garlic
Allium paniculatum	- - - - -
Alfina fegetalis	Corn chick weed
Althæa cannabina	Hemp leaved marsh mallow
* Althæa officinalis	Common marsh mallow
Alyssum saxatile	Yellow mountain madwort
Anagallis monelli	Blue flowered Pimpernel
Androsace maxima	Androsace with the largest empalement
Anemone hepatica	Single hepatica
* Anthyllis vulneraria	Double headed ladies finger
Antirrhinum bellidifolium	Daisie leaved snap dragon

(a) Those marked with an asterisk are likewise natives of this country, the English names of which are adopted from “ A Botanical arrangement of all the vegetables naturally growing in Great-Britain, with descriptions of their genera and species, according to the system of the celebrated Linnæus, &c.” By William Withering, M. D. Birmingham, 1776.

Antirrhinum junceum	<i>Rush leaved snap dragon</i>
* Antirrhinum majus	<i>Snap dragon toad flax</i>
Antirrhinum faxatile	<i>Snap dragon</i>
Aphyllanthes Monspelliensis	- - - - -
Apium petroselinum	<i>Common parsley</i>
* Aquilegia vulgaris	<i>Common columbine</i>
* Arbutus uva ursi	<i>Perennial leaved strawberry tree</i>
Aristológia longa	<i>Long birthwort</i>
Aristológia pistolochia	<i>Scallop leaved birthwort</i>
Asclepias nigra	<i>Black swallow wort</i>
* Asparagus fativa officinalis	<i>Cultivated sparagus</i>
Asparagus silvestris	<i>Wild sparagus</i>
* Asperugo procumbens	<i>Goosegrafs madwort</i>
* Asperula cynanchica	<i>Squinancy woodroof</i>
* Asplenium ceterach	<i>Common spleenwort</i>
* Asplenium rutamuraria	<i>White spleenwort</i>
* Asplenium trichomanes	<i>Green spleenwort</i>
Atractyllis cancellata	- - - * <i>Distaff thistle</i>
* Bellis perennis	<i>Common daisy</i>
Berberis dumetorum	- - - - <i>Barberry</i>
Biscutella didyma	<i>Buckler mustard with a double orbicular pod</i>
* Borrago officinalis	<i>Common borragé</i>
* Bryonia alba	<i>White briony</i>
Buplevrum frutiscens	<i>Shrubby thorough wax</i>
Buplevrum rigidum	- - - - <i>Hare's ear</i>
* Buplevrum rotundi folium	<i>Round leaved thorough wax</i>
* Buplevrum tenuissimum	<i>Fine leaved thorough wax</i>
* Buxus sempervirens	<i>Tree box</i>
	* <i>Campanula</i>

* Campanula rapunculus	Rampion bell flower
Campanula stricta	Bell flower with a stalk branching at the bottom
Catananche coerulea	Blue candy lion's foot
Caucalis grandiflora	Bastard parsley
* Centaurea calcitrapa	Starry knapweed
* Centaurea cyanus	Blue bottle knapweed
* Centaurea nigra	Black knapweed
Cheiranthus tristis	Stock gilly flower
* Chenopodium murale	Sow bane bite
* Chlora perfoliata	Yellow centaury
* Chrysanthemum leucanthemum	Daisy goldins
* Cichorium intybus	Wild endive
* Conium maculatum	Spotted hemlock
Cistus albidus	- - - - Cistus
Cistus incanus	Honey leaved cistus
Cistus fumana	- - - - -
* Cistus marifolius	Hoary cistus
Cistus populifolius	Poplar leaved cistus
Cistus umbellatus	- - - - -
Clematis viorna	Virgin's bower
Cleonia Lusitancia	- - - - -
Colutea arborefcens	Common bladder sena
* Convallaria polygonatum	Odoriferous bellwort
Convolvulus terrestris	Bindweed
Coris Monspelliensis	Montpelier coris. We have no English name for this plant.
Coronilla coronata	Jointed bodied coluthea
Coronilla juncea	- - - - Coluthea
Cotyledon Hispanica	- - - - -

Croton tinctorium	- - - - -
Cynoglossum cherifolium	- - - - -
* Cynoglossum officinale	<i>Stinking hound's tongue</i>
Cytifus argenteus	<i>Low silvery cytifus</i>
* Daphne Thymelæa	<i>Spurge laurel, or mezereon</i>
* Daucus carota filvestris	<i>Wild carrot</i>
Daucus visnaga	- - - - -
Dictamnus albus	<i>White fraxinella</i>
Digitalis obscura	- - - <i>Foxglove</i>
* Dipfacus filvestris	<i>Clothiers teazle</i>
Echinops sphaerocephalus	<i>Greater globe thistle</i>
* Echium vulgare	<i>Common vipergrass</i>
Ephedra destachia	<i>Shrubby horsetail</i>
* Epilobium hirsutum	<i>Hairy willow herb</i>
* Equisetum fluviatile	<i>River horsetail</i>
* Equisetum palustre	<i>Marsh horsetail</i>
Erigeron tuberosum	- - - - -
* Erysimum Barbarea	<i>Rocket wormseed</i>
* Euphorbia characius	<i>Red spurge</i>
Ficus carica	<i>Figtree</i>
* Fraxinus excelsior	<i>Common ash</i>
Fumaria enneaphylla	<i>Nineleaved fumitory</i>
* Fumaria officinalis	<i>Common fumitory</i>
* Gallium uliginosum	<i>Marsh goosegrass</i>
* Gallium aparine	<i>Cleaver's goosegrass</i>
* Gentiana centaurium	<i>Centaury gentian</i>
* Geranium cicutarium	<i>Hemlock leaved cranesbill</i>
	* Geranium

* <i>Geranium sanguineum</i>	<i>Bloody cranesbill</i>
<i>Geum montanum</i>	<i>Mountain avens</i>
* <i>Geum urbanum</i>	<i>Avens bennet</i>
<i>Globularia spinosa</i>	- - - - -
* <i>Glechoma hederacea</i>	<i>Groundivy gill</i>
<i>Glycyrrhiza glabra</i>	<i>Smooth liquorice</i>
* <i>Gnaphalium luteo album</i>	<i>Jersey cudweed</i>
* <i>Hedera helix</i>	<i>Common ivy</i>
<i>Hedysarum humile</i>	- - - - -
<i>Heliotropium vulgare</i>	<i>Common turnsol</i>
* <i>Herniaria hirsuta</i>	<i>Rough rupture wort</i>
<i>Hieracium multicaule</i>	- - - <i>Hawkweed</i>
<i>Hieracium murorum</i>	<i>Golden hawkweed</i>
* <i>Hieracium pilosella</i>	<i>Mouse ear hawkweed</i>
* <i>Hippocrenis comosa</i>	<i>Tufted horse shoe</i>
<i>Hyssopus officinalis</i>	<i>Common hyssop</i>
* <i>Humulus lupulus</i>	<i>Brewer's hop</i>
<i>Illecebrum paronychia</i>	<i>Spanish knot grass</i>
<i>Inula montana</i>	<i>Mountain elecampane</i>
<i>Inula oculus christi</i>	- - - - <i>Elecampane</i>
* <i>Iris pseudoacorus</i>	<i>Yellow flag</i>
<i>Jasminum fruticans</i>	<i>Shrubby yellow jessamine</i>
<i>Juglans regia</i>	<i>Wallnut</i>
* <i>Juncus acutus</i>	<i>Marine rush</i>
<i>Juniperus oxycedrus</i>	<i>Great Spanish juniper</i>
<i>Juniperus Phœnicia</i>	<i>Phœnician juniper</i>
* <i>Juniperus communis</i>	<i>Common juniper</i>

Lavandula

Lavandula spica	<i>Spike lavender</i>
* Lepidium latifolium	<i>Pepper ditander</i>
Lepidium nasturtium aquaticum	--- ditander
* Ligustrum vulgare	<i>Common privet</i>
Linum gallicum	--- flax
Linum narbonense	--- flax
Linum saffruticosum	<i>Shrubby flax</i>
Lithospermum fruticosum	<i>Shrubby gromwell</i>
Lonicera caprifolium	<i>White honeysuckle</i>
Lotus dorycinium	--- <i>Birdsfoot trefoil</i>
Lotus filiquosus	-----
Lotus tetragonolobus	-----
Lyfimachia ephemerum	--- <i>Loose strife</i>
* Lyfimachia vulgaris	<i>Yellow loose strife</i>
Malva sylvestris	<i>Common Mauis</i>
Malva tournefortiana	-----
Medicago polymorpha orbicularis	-----
* Mentha aquatica	<i>Water mint</i>
* Mercurialis annua	<i>French mercury</i>
Mercurialis tomentosa	<i>Woolly mercury</i>
Mespilus amelanchier	<i>Alpine vespillus</i>
Nigella arvensis	--- <i>Fennel flower</i>
* Oenanthe fistulosa	<i>Water dropwort</i>
Olea Europaea	<i>Olive</i>
Ononis mitissima	<i>Smooth restharrow</i>
Ononis natrix	<i>Yellow restharrow</i>
* Ononis spinosa	<i>Thorny restharrow</i>
Ononis tridentata	<i>Three thorned restharrow</i>

Ononis

Ononis viscosa	<i>Clammy restharrow</i>
* Ophrys spiralis	<i>Triple twaye blador</i>
* Origanum vulgare	<i>Wild marjoram</i>
* Orobanche major	<i>Great broom rape</i>
* Papaver rhæas	<i>Corn poppy</i>
* Parietaria officinalis	<i>Wall pellitory</i>
* Pedicularis sylvatica	<i>Common louse wort</i>
Phillyrea augustifolia	<i>Narrow leaved phillyrea</i>
Phlomis herba venti	<i>Herbaceous Jerusalem sage</i>
Phlomis lychnitis	- - - - -
Physalis alkekengi	<i>Winter cherry</i>
Pistacia terebinthus	<i>Common turpentine tree</i>
Plantago albicans	<i>White plantain</i>
* Plantago major	<i>Great plantain</i>
* Plantago maritima	<i>Sea plantain</i>
Plantago psyllium	<i>Branching plantain</i>
Plumbago Europæa	<i>Common leadwort</i>
Polygala Monspelliaca	<i>Montpelier milkwort</i>
* Polygonum convolvulus	<i>Binding snakeweed</i>
* Polygonum persicaria	<i>Spotted snakeweed</i>
* Populus alba	<i>Abele poplar</i>
Portulaca oleracca	- - - - <i>purslaine</i>
* Potentilla verna	<i>Spring cinquefoil</i>
* Poterium sanguisorba	<i>Burnet ironwort</i>
Prunella hyssopifolia	<i>Hyssop leaved selfheal</i>
Prunella laciniata	<i>Jagged selfheal</i>
* Prunella vulgaris	<i>Common selfheal</i>
Pforalea bituminosa	<i>Three-leaved Jupiter's beard</i>
Punica granatum	<i>Pomegranate</i>

Quercuo ilex	<i>Evergreen oak</i>
*Ranunculus acris	<i>Upright crowfoot</i>
Refeda luteola	<i>Dyer's yellow weed</i>
Refeda phyteuma	<i>Rampion yellow weed</i>
Rhamnus alaternus	<i>Alaternus</i>
Rhamnus catharticus	<i>Purging buckthorn</i>
Rhamnus pyrenaicus	- - - - <i>Buckthorn</i>
Rhus coriaria	<i>Myrtle-leaved shumach</i>
Rosmarinus officinalis	<i>Common rosemary</i>
Rubia tinctorum	<i>Dyer's madder</i>
*Rumex acutus	<i>Sharp pointed dock</i>
Ruta graveolens	<i>Broad leaved rue</i>
Ruta linifolia	<i>Narrow leaved rue</i>
*Salix rosmarini folia	<i>Rosemary willow</i>
*Salix helix	<i>Rose willow</i>
Salvia ceratophylla	- - - - -
Salvia officinalis	<i>Garden sage</i>
Salvia sclarea	<i>Clary sage</i>
Salvia viridis	<i>Green sage</i>
*Sambucus ebulus	<i>Dwarf elder</i>
*Sambucus nigra	<i>Common elder</i>
*Samolus valerandi	<i>Pempernel marshwort</i>
Scabiosa integrifolia	- - - - <i>Devil'sbit</i>
Scabiosa stellata	<i>Starry devil'sbit</i>
Scorzonera Hispanica	<i>Scorzonera</i>
*Scrophularia aquatica	<i>Water figwort</i>
Scrophularia canina	<i>Dog's figwort</i>
*Sedum album	<i>White stonecrop</i>
*Senecio vulgaris	<i>Common groundsel</i>

* Serapias

* Serapias longifolia	Long leaved helleborine
Sideritis hirsuta	Hairy trailing ironwort
Sideritis incana	- - - -
Sideritis scordivides	- - - -
* Silene nutans	Nottingham catchfly
* Solanum dulcamara	Woody nightshade
Solanum lycopersicon	Love apple
* Solidago virga aurea	Common golden rod
* Sonchus alpinus	Blue sowthistle
* Sparganium erectum	Great bur reed
Spartum scoparium	Common broom
* Spiræa filipendula	Dropwort meadowsweet
* Stachys alpina	Mountain clownheel
* Statice armeria	Seathrift
* Stipa capillata	Fine feathergrafs
* Stipa pennata	Downy feathergrafs
Symphytum tuberosum	Comfryl
Telephium imperati	True orpine
Teucrium capitatum	- - - - Germander
* Teucrium chamædryas	Wall germander
* Teucrium chamæpitys	Ground germander
Teucrium pseudo-chamæpitys	- - - - germander
* Teucrium scordium	Water germander
* Thalictrum flavum	Common meadow rue
Thymus alpinus	Mountain thyme
Thymus mastichina	Maslick thyme
Thymus zygis	- - - - thyme
Tordilium apulum	The least hartwort of Apulia
* Fragopogon porrifolium	Purple goatsbeard

○ Tribulus

Tribulus terrestris	<i>Calltrop with chick leaf and prickly fruit</i>
*Trifolium melilotus officinalis	<i>Melilot trefoil</i>
*Trifolium pratense	<i>Honeysuckle trefoil</i>
*Triglochin maritimum	<i>Spiked arrowgrafs</i>
*Triglochin palustre	<i>Marsh arrowgrafs</i>
*Tuffilogo farfara	<i>Coltsfoot butter bur</i>
*Ulmus campestris	<i>Common elm</i>
*Valeriana calcitrapa	<i>Valerian with leaves, like those of the star thistle</i>
*Veronica anagallis aquatica	<i>Pimpernel speedwell</i>
*Veronica beccabunga	<i>Brooklime speedwell</i>
*Veronica hederifolia	<i>Ivy leaved speedwell</i>
*Verbascum Thapsus	<i>Great mullein</i>
*Verbena officinalis	<i>Common vervain</i>
*Viburnum lantana	<i>Pliant meal tree</i>
*Vinca major	<i>Greater periwinkle</i>
*Viola odorata	<i>Sweet violet</i>

Besides the above spontaneous plants, the following are cultivated in gardens ;

Amygdalus perfica	<i>Peach tree</i>
Cratægus oxyacantha	<i>White hawthorn</i>
Prunus domestica	<i>Plumb prune</i>
Prunus cerasus	<i>Black cherry prune</i>
Pyrus communis	<i>Pear apple</i>
Pyrus cydonia	<i>Quince</i>
Vitis vinifera	<i>Vine</i>

☞ Since the environs of Trillo had induced Dr. Ortega to give a catalogue of plants in that neighbourhood, it insensibly engages me to add a few words respecting the study of botany in that kingdom, which hitherto had made so little figure as to draw down very pointed reflections from Linnæus, who says, “*Hispanicæ floræ nullæ nobis innotuerunt adeoque plantæ*

Carthamus tinctorius

Baslard saffron

Linum usitatissimum

Common Flax

plantæ istæ rarissimæ in locis Hispanice fertilissimis minus detectæ sunt. Dolendum est, quod in locis, Europæ cultioribus tanta existat nostro tempore barbaries botanices! paucissimas istas plantas, quæ nobis in Hispania & Portugalia constant, debemus curiosis classis iii. Tournefortio et paucis aliis." Linn. biblioth. botanica, part. vii. floristæ § viii. Hisp. pag. 96. which tended greatly to raise the emulation of the Spaniards; and while that celebrated botanist was taking measures to obtain a permission for one of his pupils to travel through Spain, he received a message from the Spanish ambassador at the court of Stockholm, which greatly surprised him, as it intimated the desire of his Catholic majesty to have a botanist recommended by Linnæus. This appears to have been owing to some English gentlemen then at Madrid, and among them Robert More, Esq; F. R. S. who dining with the prime minister Don Joseph de Caravajal, had been asked their opinion of Spain by that minister, who perceiving that the remark of Linnæus was not without foundation, and being informed that a Spanish flora would turn out as new as it was rich, determined that his country should soon be free from such a reproach; this was afterwards communicated to Linnæus by Mr. More in his tour through Sweden, and accounted for the application above-mentioned. Peter Læfving, the favorite scholar of Linnæus, was accordingly fixed upon for this expedition, and was received in Spain in the most gracious manner. His surprise was great to find many lovers of botany at Madrid, particularly Don Joseph Ortega, secretary to the physical academy, Don Juan Minuart, chief apothecary to the armies, Don Joseph Quer, first surgeon to the king, who had a splendid botanical garden, and a most elegant collection of plants, Don Christoval Velcz, apothecary of the college of physicians, who was possessed of a choice collection of botanical books, with a grand hortus ficcus, and had drawn up a flora Madritensis. Læfving was greatly caressed by these gentlemen, and in return paid a handsome compliment to each, by calling four new plants after their names. Linnæus has taken these names into all the subsequent editions of his *genera* and *species plantarum*, and into the last edition of his *systema naturæ*. Læfving staid about two years at Madrid, making occasional excursions, during which time he collected above 1300 distinct species of Spanish plants. By orders of the court he embarked at Cadiz, in the year 1754, for South America, where he unfortunately died, 22d Feb. 1756, and Linnæus published his letters. See *Iter Hispanicum*, Holmiæ, 1758; and a further account of Peter Læfving's life and botanical writings, in the 2d vol. of *Bössl's travels in Louisiana*, translated by J. R. Forster, F. A. S. London, 1771.

L E T T E R X.

*The royal seat and gardens of St. Ildefonso, with some account of
the city of Segovia.*

WHOSOEVER has seen the gardens of Aranjuez will not think it extraordinary that the sovereign of Spain should have another agreeable seat in the fertile dominions of his crown, but when a traveller has crossed the craggy and bleak mountains of Guadarrama, it will be a matter of singular surprize to behold one of the most dreary rocks embellished with an agreeable villa, where the mines of Mexico have been lavished to effect the alteration; such is the royal seat of St. Ildefonso; for in few parts of the world, the powers of art have been more strenuously exerted to correct the rugged state of nature, and convert a horrid rock into a sumptuous garden, decorated with beautiful fountains, throwing up water to a great height, like those of Versailles; while a variety of trees, brought from different parts of the world, furnish shady walks, in a spot unfavourable by nature to all kind of vegetation; shewing to what the art of man can attain, and fully evincing the efforts of Philip the Vth. who at
the

the expence of millions of dollars changed a barren and solitary mountain, into one of the most desirable spots in his kingdom ; yet not without those inconveniencies which all the power of art cannot conquer ; for on account of its lofty situation, the night air, even after the hottest summer's day, is so piercing, that it makes precaution necessary, to guard against its sudden and pernicious effects. In other respects nothing can be more reviving during the summer heats, than the shade of these gardens, invigorating the languid courtier, whose spirits are further revived by the coolness of the groves, added to the most limpid water that eyes can behold, in some places flying up into the air, to an immense height, in others rolling down in torrents, which, when caught by the rays of the sun, seem like so many sheets of liquid silver, of a most amazing brightness. As the cold air of this place keeps every thing back, the king finds a new spring after he has left Aranjuez, while his subjects are dying with heat at Madrid. The earliest fruits are but just ripe in August at St. Ildefonso, carnations and roses then adorn the parterres ; September is the season for strawberries, raspberries, currants, and barberries ; and snow lies on the mountains till the beginning of June. Many springs run down from the summit, and sides of the mountains, and are collected into a considerable basin at the upper end of the garden, to which they have given the name of *El Mar*,
 “ the

“ the sea ;” from whence they are distributed to all the different fountains and water works, the whole garden being on a slope, about two miles in circumference. Other springs with two brooks, form the little river Erefma, abounding in salmon trout, where the king often diverts himself with fishing, under the shade of thickets, beautifully variegated by the pencil of nature.

The dreary mountain at the top of these gardens, is a kind of rock composed of clay and fine sand, which by degrees crumbling and mixing with rotten leaves and roots, forms that light coat of earth, which just covers the rock, and gives nurture to the firs and other trees and shrubs. The foot of the mountain is of granite, and serves for building, sometimes for millstones, though rather too soft for this purpose, standing in need of frequent repairs. They get vegetative earth on the North side, about a hundred paces from the green rails of the flower garden, which being further cherished by manure, is laid a foot high on the rock, and by dint of cultivation and care, they are enabled to raise flowers and fruits, whose roots hardly touch the barren soil of the place.

Mr. Bowles informs us, That when the late queen mother lived at St. Ildefonso, the Infant, Don Lewis, her son, had an aviary in the gardens, filled with a great variety

variety of beautiful birds ; one place was allotted for woodcocks, where they lived for several years. In the middle of their cage a channel of spring water was introduced, which kept up a constant freshness of verdure ; a fir tree, stood in the centre, surrounded with shrubs, and they were daily supplied with fresh clods of turf, full of worms, which, though they hid themselves ever so much therein, the bird would instantly discover by the smell, and driving in his long bill bring them immediately out, then raising his head towards the sky, and extending the worm gently the length of his bill, would let it slide down softly, without any appearance of deglutition ; all which was performed with the utmost facility, as if totally unemployed, without ever missing its aim, and should the woodcock be killed at that moment, these nauseous worms would immediately contribute towards the forming a delicious repast at the most elegant tables.

The palace of St. Ildefonso has a noble collection of excellent pictures. In the gallery there are many fine statues bought at Rome, out of the collection of queen Christina of Sweden ; amongst which the groupe of Castor and Pollux sacrificing, and a fawn, are undoubtedly the most beautiful. The statues in the garden are chiefly of marble of Granada, some few of marble of Carrara : there is nothing else remarkable except the
fine

fine looking glaffes made in the king's glafs house at St. Ildefonso, which fupplies all the palaces ; they have here the largeft tables perhaps in the world for running plate glafs. The greateft being 145 inches by 85, and its weight 405 arrobes. The fmaller is 120 inches by 75, and weighs 380. This curious art was firft invented by the Sieur Abraham Thevart, who propofed it to the court of Verfailles in 1688, and is performed much like the cafting of fheet lead by the plumbers, by which means they are enabled to make glaffes of double the dimenfions of thofe, by the Venetian method of blowing, befides other improvements.

At a fmall diftance from the palace, at a place called the *Mata*, near the powder magazine, there is a vein of quartz, which appears above ground, running from South to North for about half a league, till it enters and lofes itfelf in the oppofite mountain. A piece of this quartz, of about fix pounds, being cut, feemed very curious, being half tranfparent, and almoft as fine as rock cryftal, having a kind of ftripe, four fingers broad, between two coats, of a darker quartz. On following this vein feveral pieces of the fame quartz appeared covered with rock cryftal of a milk colour, forming thofe veins called by miners, " noble veins." Mr. Bowles acknowledges he did not more particularly examine, or make any effay in this place ; and yet he tells

us, he conjectures, and infers that it is an unwrought mine of gold.

The environs of St. Ildefonso and particularly the foot of the mountain are covered with a remarkably fine sort of grass, to which they give the name of *cosquilla*, from its effect of tickling the hand when touched. The root is about eight inches long, cylindrical, and about the size of a pin, diminishing towards the point; in the middle of this root, which is smooth, the stem springs up, bearing small capsules at their points, inclosing the seed; in many places, and particularly at Segovia, they make use of it at Christmas for ornaments in the churches, to imitate verdure; also little brooms are made with it to sweep away dust; it likewise grows in abundance in the plain of Olmedo, and is seldom to be seen elsewhere.

It is only a few hours ride from St. Ildefonso to the city of Segovia. The naturalist will meet with many objects of curiosity in the environs of this city, observing its different species of marble, granite, limestone, clays, and three sorts of sand (a). Its famous Roman aqueduct remaining so perfect to this day, will prove the solidity of its materials, more effectually than

(a) Mr. Bowles enters into many details respecting the variety of sand, clays, &c. in the environs of Segovia, which, not being considered as universally interesting, are omitted.



long dissertations. Monsieur Seguiet's method of discovering the inscription on the *Maison Quarree* at Nimes, the invention of which is originally due to that celebrated antiquary, Monf. Peyrefc, might likewise serve to discover that, which was formerly on the aqueduct of Segovia, for the place of the inscription, marks, and holes of the letters, are yet very visible (a). This place is much dwindled at present from what it was formerly. The cathedral is handsome and has been lately repaired; the mint in this city only serves for copper: gold and silver are coined at Madrid and Seville. The alcazar or castle is curious and in a fine bold situation. The unfortunate Duke de Ripperda was confined here, they shew you the dark room, from whence he made his escape, and the broken lock on the door is still in the same situation.

(a) The little square in Segovia, from whence you have a principal view of the aqueduct, is called El Azoguejo de Segovia, as a diminutive of the Arabic word Zocq, which signifies a square or a market-place. This place is mentioned in Don Quixote, and ignorant translators, because the Spanish word *azogue* also signifies quicksilver, call this place the Quicksilver House of Segovia. Delpino, in his Spanish dictionary tells us, without any authority, that a market is so called, because the people in it are continually moving like quicksilver.

L E T T E R XI.

Departure from Madrid for the city of Burgos.

ON leaving Madrid, to go into Old Castile, the first grand objects which strike the eye of a naturalist, are the mountains of Guadarrama, that divide the two Castiles; you leave the famous Escorial on the left, and following the new road, ascend these lofty mountains, whose tops, and particularly where the marble lion stands, are chiefly covered with fern, which is common here, though scarce in other parts of this country. From the highest part of the road, there is an extensive prospect of Old Castile, which is more elevated than New Castile, and forms a spacious plain not unlike a great sea. An easy descent leads to the *Hermita del Christo del Caloco*, where grey and blue marble is dug out of the adjacent mountain, and is found almost close to the road. The mountain terminates at Villacastin, but the grand plain only commences at Labajos, where they sow the peas called *Garbanzos* in a fine blackish soil, but they are not equally tender and large every year, no more than at Salamanca or Zamora; for though the land is good for