


#  HISTOM 

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WORCESTER:
PUBLISHED BY HE\&Y゙ミY is UO., No. 2 American Ilouse flack.


FOUA HORNED GOST.

## HISTORY OF ANIMALS.

## OAMEL.

This useful beast is a native of A sia and Africa, and is generally of a lightish brown color. His height at the shoulders is from five to six feet, and his length is from six to eight feet. He has long, slender legs, and two hunches on his back. The hair is soft, woolly, and unequal, being longer about the head, throat, and haunches, than other parts of the body. The tough and spongy feet of these animals are peculiarly adapted to hot climates, for in the most fatiguing journeys they are never foum to crack. The sand, indeed, beems to be their chief element, for no sooner do they leave it and touch the mud, than they can

scarcely keep upon their feet; and their continual stumbling in such places is very dangerous to the rider. They can travel over the sandy desert without drinking, for several days together; and they can smell water at the distance of more than a mile; and after long abstinence will hasten towards it, long before their drivers can perceive where it is, Their patience under hunger is also very great, as they will go for many days with only a small quantity of food. They will lie down
to rest on the sand, without showing the slightest discontont.

A large Camel is able to carry a load of a thousand or twelve hundred pounds-weight. When about to be loaded, these animals, at the command of their drivers, bend their knees, put their bellies down to the earth, and remnin in that posture till they are loaded and ordened to rise.

In eastern countries, but particularly in Arabia, there is no mode of travelling so cheap, convenient, and expeditious, as that by Camels. The merchants and other passengerx, to prevent the insults and robberies of the Arabs, unite together with their Camels, sometimes to the number of ten thousand, and form what is called a caravan. The Camels are not hurried; they only walk about thirty miles a day; and at night are unloaded and allowed to pasture at froedom, though they seddom find anything to eat. The Arabians consider the Camel as a gift sent from heaven; a sacred animal, without whose assistance they could neither subsist, traffic, or travel. They drink the milk of the Camel, eat its flesh, and make garments of its hair. In possession of their Camels the Arabians have

nothing to fear from other persens ; they avoid their enemies by hastily proceeding into the desert at any rate, if necessary, of more than a hundred miles in a day. All the armies in the world would perish in the'pursait of a troop of Arabs.

The pace of the Camel being a high trot, M . Demon says, that when he first mounted one of the beasts, he was greatly alarmed lest this swing-
ing motion should throw him over his head. Me, however, being once fixed on the saddle, found that he had only to give way to the motion of the animal, and that it was impossible to be more pleasantly seated for a long journey, especially as it did not require much guiding. "It was entertaining enough," he says, "to see us mounting our beasts: as coon as the rider is seated on his saddle, the Camel rises very briakly, first on his hind, then on his fore legs ; thus throwing the rider first forward and then backward; and it is not till the fourth motion that the animal is entirely erect and the rider finds himself firm in his seat."

Camel's hair is an important article of trade, as it serves for making tente, carpets, the small painting brushes, etc., and strong lewher is made of his skin.

## GOAT.

The Goat is an animal found, either in the wild or domestic state, in most parts of the world. In

some parts it is a very useful animat, yielding milk, meat, and clothing. It is playful and capricious ; it delights in mountainous regions, and springs fearlessly from cliff to cliff with surprising dexterity. It feeds on motntain herbs, leaves, buds, and the bark of trees. In gardens it is mischievous. The flesh of the Goat is wholesome food, and that of the kid, a dainty. Her milk is sweet, nourisling, and in a measure medicinal, and
is much used in Wales, and some other places, with good effect, by consumptive people.


The Long-Eared, or Syrian Goat, is remarkable for the length of its ears, which are sometimes more than a foot long, and broad in proportion. The shepherds sometimes find it necessary to cut off a piece of one of the ears, to enable the ani1* larger than the common Goat, and has long, silky hair, of a reddish or fox-color.


The Rock Goat, or Tbex, is found on the Car-


They are diffused over almost all parts of the earth, except what lies within the polar circles. The common parent of them is supposed to be the Wild Boar ; this animal is smaller than most of the varieties of the common hog, and his color is uniformly of a dark grey; his ears are short and black, his hnir long, and about the neek and shoulders rather bushy. His snout is longer than that of the common hog; and he is armed with two tusks in each jaw; those in the upper jaw turn backwards, and then upwards; those in the lower jaw tura upwards and then backwards, and are sometimes eight or ten inches long; and frequently
give mortal wounds to the enemies that attack him; they serve him nlso for tearing up roots, which are no small part of his chosen food. The Wild Boar, in his full strength, will tum out of his way for no single enemy, not even for man. He is hunted by being pursued by heavy dogn, till wearied down, and is then slain by the spears of the hunters. His flesh is estecmed as agreeable food.

It is said of the Swine, that it is the-only beast that will drink fermented liquors, and get drunk. Gay, in his Fable of the Gardener and the Hog, Eays :
"Tho thog, by ehance, one morning roumed, Where with new Ale the vessels foamed; He munches now the steaming grains, Now with full swill the liquor dirnins; Intoxicating fumes arise; He reels, he rolls his winking cyos."


ROE.
The Roe is nmong the smallest of the deer kind; but little more than three feet long, and hardly two and a half feet high. It is a very good looking ani-
mal, very swift, and very graceful in its motions. Their hair is gengrally loug; each hair ash-colored towards the root, but towards the end barred with black, and the end itself yellow. The hairs on the face are black, tipped with ash-color; the lreast, belly, and lens are yellowish white, the rump clear white. They do not go in herds, but live in fimilies, the mule, fomale, and their young ones ;-and their attachment to each other appears to be strong. When the young are able to provide for themselves, they are driven off to other families. When they range in their native wilderness, their flesh is pleasant, especially when they are about eighteen months old. When kept in parks, it is rather insipid, for they refuse to be domesticated. The Roe, when hunted, runs in circles, repeatedly coming into the same track, and then leaps aside from it into some thicket, and lies still, while the hounds pass by and miss him. They shed their horns in autumn, and renew them in winter; the first year they have no antlers. They are found in various parts of Europe and Asia, and in some parts of America. Formerly they were found in Wales, and in the North of England, but of late
have disappeared from the island, except in Scotland.


## SHEEP.

This animal is found in all parts of the world. It is of different species in different climes and countries, and of different varieties in the same country. It appears from Scripture that they
were a domestic animal from the creation; even Abel was a keeper of sheep. They were kept in large flocks in ancient times in Judea, and in the neighbioring countries.

Among the different sorts, we may reckon the common Sheep, the Guinea or African Sheep, and the Cretan or Wallachian Sheep. Among the varieties, the broad-tailed Sheep; its tail sometimes a foot broad, and so long, that the shepherds have occasion to put under it a little board with wheels to keep it from the ground; it is found in Persia, Syria, and in the north of Africa. The many horned Sheep have from three to eight horns, their wool long, and resernbling hair ; found in Ireland, and other cold, northern regions. The fat-rumped Sheep, the male light brown, mixed with white; the fermale, black and white, their wool long and thick ; instesd of a tail they have a large protubernnce of fab, covering the rump, which is esteemed a dainty, and eaten with the lean of mutton. The Guinea Sheep is large, strong, and swift, with coarse wool, short horns, and pendulous ears. The Cretan or Wallachian Sheep has curious spiral horns, growing upright
and winding, much in the form of a corkscrew; they have long shaggy wool. The Spanish or Merino Sheep are remarkable for the fineness of their wool, the thickness of their fleeces, and for retaining their wool longer than the common Sheep.

## CONY.

The animal called in Scripture the Cony, is very probably what is sometimes called the Ashkoko. The length of this animal is seventeen inches; he has no tail ; his color is grey, mixed with reddish brown; his belly is white. Scattered over his body are strong, shining hairs, somewhat more than two inches in length, rising above his fur; his ears are round, his toes fleshy and soft, projeeting beyond the nails, which are rather flat than round and sharp. They are found in Ethiopia, and also about Mount Lebanon. They live in families or flocks, in natural holes or caverns among the rocks. Numbers of them are seen sitting together, upon rocks at the mouths of caverns;


Lere they sun themselves and enjoy the fresh nit. In moving they steal along with their belly near the ground; they proceed a fear steps, stop and proceed again. They are timid and gentle, and are easily tamed.


## THE JAOKAL

Is one of the commonest wild animals in the enst. There is seareely any one less known in Europe, or more confusedly described by naturalists. It inhabits the warmer parts of the old continent, and seems to occupy the place of the wolf, which is not there so common. In size he is
about equal to the common fox, but he differs from that equally troublesome animal in the form of the pupils of his eyes, which correspond with those of the dog and of the wolf; in the comparative shortness of his legs and muzzle ; in his less tufted and bushy tail, and in the pecullar marking of his coat. The coloring of his back and sides consiots of a mixture of grey and black, which is abruptly and strikingly distinguished from the Beep and uniform tawny of his shoulders, haunches, and legs; his head is nearly of the same mixed shade of the upper surface of his body, as is also the greater part of his tail, which latter, however, becomes black towards its extremity; his neck and throat are whitish, and the under surface of his body is distinguished by a paler hue.

## NATURAL HISTORY

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WITH BEAUTIFUL ENGHAYINGS.


WORCESTER:
PUBLISHED BY HERVET\& Cu., No. 2 Ameriean House Mock.


## HOOPOE

THis is a bird of passage, found in different parts, from the north of Europe to the south of Africa. It rarely continues long in any place, even in mild climates. It feeds on insects, especially such as are found in manure and filth on the ground. It builds its nests in hollow trees and ruins, and lays six or seven eggs for a brood. The smell of its nest is very offensive, but it makes amends for this, in part, by its beautiful plumage. The breast and

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 HISTOKY OF BLRDS.barred with black and white, and on its hend it has a tuft, or crest, of a double row of feathers, from an inch and a half to two inches in length, which it can erect and spread at pleasure; these feathers are tipt with black. Its beak is long, slender, and a little hooked. Its name, Hoopoe, is said to be given it on account of its note. The Turks called it by a name siguifying the Messenger Bird; and the Swedes considered its appearance ominous of war.

## swan.

The Swan is an aquatie bird of which there are several species, as the wild, the tamo, and the black Swan. The wild Swan inhatits celd northern regions; it is found in the foresta and about the lakes in Lapland, where in summer it rears its young, and comes not into the warmer climates, unless compelled by soverity

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of cold. It is smaller than the tame Swan; it is of an ash color down the back, and on the tip of its wings; the rest of its plumage is white. Its eyes are bare and yellow, its legs dusky. In New Holland the black Swan, raro bird as it is in Europe, is very common.

The tame Swan, much celebrated by the ancient poets, is in Great Britain the largest bird they have. Its plumage the first year is ash color ; after they enter upon the second year it is white. Its flesh in modern times has been but little esteemed, though in times more early it was considered as a very important part of a great feast. Its legs are short, and on land its gait is not very graceful ; but on its more congenial element, on the pool, or on the stream, no other bird can vie with it in elegance and majesty. The curve of its neek, the fulness of its breast, and the ense and gracefulness of its motions as it sails forward, or wheels round upon the smooth surface of the lake, are such as to excite admiration.

The Swan enlivens the artificial pools of the man of fortune. It is a bird of penceable deportment, but fierce when irritated; its strength is such, that it will sometimes throw down and trample upon a youth of fourteen or
fifteen years of age, and break a man's leg with a stroke of its wing. No bird but the eagle dares to attack it, and he sometimes loses his life in the conflict. It builds its nest of withered grass near the water's edge, and lays seven or eight eggs, and its time of incubation is nearly two months. While the wild Swan has a lond, shrill voice, which may be heard at a great distance, the tame is silent, except that it sometimes hisses. It is supposed to live a hundred years, when nothing peculiar happens to shorten its life.


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## THE CRANE.

This is a tall, slonder bird, with a long neck and long legs. The top of the head is covered with black bristles, and the back of it is bald and red. The plumage in general is ashcolored, and there are two large tufts of feath-
ers springing from the pinion of each wing. These feathers used at one time to be set in gold, and worn as ormaments in caps.

These birds usually fly or sit in flocks of fifty or sixty together; and while a part feed, the rest stand like sentinels upon duty. They subsist for the most part upou vegetables, and are known in every country of Earope except England. They are birds of passage, and, in the inland parts of the continent, are seen crossing the country in flocks of fifty or a hundred. In these migrations they will occasionally stop to regale themselves upon a field of corn.
In these journeys, it is astonishing to conceive the heights to which they ascend. Their note is the loudest of all birds, and is often heard in the clonds, when the bird itself is entirely unseen. But though unseen themselves, they have the most distinet vision of every object below. They govern and direct their fight by their cries, and exhort each other to
proceed or descend, when a fit opportanity offers for depredation.

In general, the Crane is a peaceful bird, both in its own society and with respect to those of the forest. 'It is easily tamed, and is said to have a particular affection for man. It is common in America.

## pARTRIDGE.

The Partridge is about six inches in height, from the ground to the top of its head, and about ten inches in length, from the tip of its beak to the end of its tail. It has a fine small head, a remarkably plump body, and a short tail. Its feathers, though not elegant, aro pleasing to the eye, consisting chielly of a mixture of light and dark brown. Partridges feed on grain, leaves, snails, ants, and ant-eggs. Partridges have great affection for their young.

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Both the parents lead them out to feed, they show them the proper places to procure food, and assist them to get it by scratching up the ground with their feet. If a dog approach them, the female Partridge will fly direetly over its head, drop upon the ground, and appear as though she were lame, to draw the
attention of the dog to herself, and thus give her young ones time to get away. It will afterwards fly up again, and keep drawing the dog to a greater distance, while its young make good their retreat: she then returns swiftly to them, and calls them to her, which they immediately obey, and follow wherever she leads her course.

Partridges fly in companies; the young nevor leave the old ones till spring, at which season they are seen flying by two and two. Great numbers of Partridges are killed by sportsmen, for the purpose of being served up at table, as thoy are considered delicious eating.

## GREAT HORNED OWL.

There are several kinds of Owls, but the Great Horned. Owl is nearly the largest. It is called by this name becanse it has two long

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horns, each composed of six feathers, growing out of its head. The feathers of its body are of different colors, the most prevalent of which is a tanny red. It has a method of keeping its feathers very loose, which makes it appear

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a much larger bird than it really is. Its wings are long, tail short, legs thick, of a red briekdust color, and the claws are hooked. Its face is almost flat, and its eyes are sumk in, and so peculiarly formed as to render it capable of seeing much better at dusk than at daylight. Its beak is hooked, and much resembles a human nose.

It inhabits the opening of rocks, the cavities of old towers, or the hollows of decayed trees.

It feeds on small birds and mice, which littlo quadrupeds it frequently swallows whole. The voice of the Owl is unpleasant; the Soreech Owl, in particular, shrieks horridly.

A pleasing instance is related of tho attachment of these birds to their young. A gentleman resided soveral years on a farm in Sudermania, near a steep mountain, on the top of which two Horned Owls had their nest. One day in the month of July, a young Owl had quitted its nest, was seized by the servants, and
shut up in a large hen-coop, and on the next morning a dead young partridge was found before the door of the coop. This provision was brought by the parent birds, and the same attention was continued for fourteen nights. They then were watched from a window, but so sharpsighted were they, that while any person was looking at the window they would not approach, but the moment they discovered the window was not watched, they again deposited provision before the coop. In the month of August the parent Owls discontinued their attention; but at that period all birds of prey leave their young to their own exertions.


SDARROW HAWK.

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## THE SPARROW HAWK

Is rather larger than a good sized pigeon It is a spinited and well-shaped bird. It has a short, hooked beak, of a bluish color, but black at the tip. Its eyes are round and bright, the crown of its head is dark brown, its wings and the upper part of its body are brown spotted, the lower part of its body is a lighter brown. Thy wings when closed reach to the middle of the tail, which is rather long. It lins strong thighs, slender yellow legs, with long toes, and black claws.

The Hawk is remarkably sharpsighted, and flies with swiftness. For its size it is very bold, and will often conquer birds larger than itself, but it usually feeds on smaller birds and mice.

## QUAIL.

The Quail is about half the size of the Partridge, being not more than six or seven inches

in length. Its feathers are chiefly a mixture of rusty brown and pale yellow, spotted with black. It has lines of yellow feathers on each side of the head and on the wings.

Quails are birds of passage, and have sometimes been observed to fly in amaxing numbers, like large elouds, particularly in the countries bordering on the Mediterranean Sea.

When on the ground, they are easily taken by spreading a net, and using a Quail-pipe, which makes a noise like the words, whit, whit, whit!

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The flesh of the Quail is eaten by mankind, but it is not considered quite so fine in flavor ns that of the Partridge.
These birds instinctively know the precise time for migration, as proved by the singular fact, that some young Quails which were kept in eages, and had never enjoyed their liberty, were observed regularly in the months of September and April to be restless and flutter about; and this uneasiness constantly began an hour before sunset, and lasted for thirty days each time.

## CORMORANT.

The Cormorant is somewhat more than three feet in length, and four feet in the expansion of its wings, and weighs about seven pounds. The back and coverts of the wings are deep green, edged with black, and glossed with blue ; the quill and tail feathers dusky, the breast and
belly black. It frequents the highest parts of stupendous rocks, hanging over the sea; it is extremely voracious, has a sudden digestion, its smell is rank and disagrecable; it takes its prey from the sea, darting upon it with great swiftness ; it takes the fish crosswise, carries it into the air, throws it up, seizes it by the head and swallows it, though larger than its neek. In England it was formerly tamed, and trained to fish, with a ring round its neck to prevent its swallowing its prey; it is used in China for the same purpose.

## OSPREY.

The Sea-Eagle, or Osprey, is found in Ireland. in some parts of Great Britain, and in some other parts of the world. It feeds principally on fish. It seizes them when they are near the surface of the water, by darting suddenly upon them, and piercing them with its talons, which are long, and so hooked as to form a semicirole. In

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 HISTORY OF BIRDS.this way it will draw salmon from the water; and on the coast of Greenland it sometimes

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draws out young seals. It sometimes feeds on water fowls, and sometimes on land animals. The natiral historian, Barlow, saw one of them seize and bear away a cat; but the captive animal made such resistance, that both came to the ground, when Barlow, much gratified with the opportunity, seized the Eagle. The body is of light rusty color, and the extent of the wings from tip to tip is sometimes from eight to ten feet.

## SWALLOW.

Swallows feed on flies, worms, and insects, of which they devour innumerable quantities. Their form enables them to dart about very quiekly in all directions, and they continue their flight for a long time. They build their knobby nests at the sides of houses or on chimneys, and form these habitations very commonly of mud mixed with small straws and hair, so as to be sufficiently strong to bear a whole family, and to defy the pelting storm. It is stated that they procure the

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mud to make their nests by dipping themselves in the water, and then rolling their bodies in the dust. Their nests are smooth inside, and usually lined with grass, wool, feathers, or moss.

The greater part of these birds leave our country in the antumn, and return again at the beginning of summer, though some have been found in a torpid state during the winter.

## ABOUT

## PLANTS. <br> WITII MANY EXGRAVINGB.

WORCESTER:
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THE BOTQUET.


Botany, or the study of plants, is a very interesting study, particularly for young persons. We therefore present to our young friends in the following pages a number of elegant and correct engravings of plants, most of which are not common in this country, though the names are familiar to all. We also give short descriptions of each, which, although they contain some hard words, with some study will be understood.


## FRANKINOENSE.

This was an aromatic and odoriferous gum, which issued from a tree, called by the ancients

## $\triangle B O U T$ PLANTS.

Thurifera. There are two kinds of incense the male and the female ; the former, which is the best, is round, white, fat, and very inflammable; the latter is soft, more gummy, and less agrecable in smell than the other. Frankincense formed one of the ingredients in the sacred perfume, described Ex. $30: 34$; and was imported into Judea from Sheba.

It formed one part of the priest's duty, under the Mosaic economy, to burn incense in the holy apartment of the temple, on the morning and evening of each day ; and on the great day of atonement, at the moment of entering into the holy of holies, the high-priest was required to throw some incense on the fire in his censer, that the cloud ocoasioned by its burning might cover the mercy-seat, lest, perhaps, his curiosity being excited, he might be

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induced to inspect with too profane a curiosity that symbol of the Divine Presence.


CAMPHOR.
This tree, or plant, is a species of the Lamee, and is found in the East Indies ; but the leaves do not exhibit the three strong parallel nerves of the Cinnamon and the Cassia. The whole tree has the strong odor of Camphor, and this

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substance is obtained by the distillation of the roots and small branches. The article is often employed as medicine, as a cordial and stimulant. The eamphor of Sumatra is found concreted in the clefts of the bark of the eamphor trees. It is also found in China and Japan, but the former is more highly valued. The eamphor of China and Japan is more frequently imported into this country than that of Sumatra.



## OINNAMON.

Cinnamon is brought chiefly from the island of Ceylon, in India, and has now been many years in use in Europe and America, as a pleasant spice. It is the bark of a species of laurel, remarkable, with some other species possessing similar properties, for its coriaceous

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leaf, marked with three strong nerves. It was originally found wild only, and in small quantities, at one part of the island ; but when the Dutch obtained a settlement there, they cultivated it in large gardons or tracts. The extent of these plantations will be perceived, when it is stated that four hundred thousand pounds were obtained from them amnually, and upwards of five thousand persons were employed in the cinnamon business. The Dutch long had the monopoly of the article, and resorted to severe and even cruel measures to prevent the trade getting into other hands.

The cinnamon tree often grows to the height of twenty or thirty feet, and sends out large, spreading branches. The pleaves are first pendent and of a delicate rose color, afterwards they turn yellow, and then green. The flowers
are borne in panicles, are small and white, partaking of the peculiar flavor of the tree. The fruit yields an oil, of which a kind of candle is made, which are used by the court in the kingdom of Candy.

When the tree is three years old, it affords a shoot fit to yield bark; but eight years of growth are needful before it can be freely cut. At ten or twelve years of age the tree is strongest, and the plants which grow in dry and rocky spots produce the most pungent and aromatic bark. The shoots are cut when about an inch thick; they are barked, abd the epidermis scraped off. The bark is chied in the sun, when it curls, and the smaller is rolled within the larger. Cassia, in its botanical character, is little different from einnamon. In quality, it is much inferior, though often sold for it,

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It is commonly known under the name of Bastard Cinnamon.


The sweet-scented cand grows in Egypt, in Judea, and in several parts of Syria, but
the best kind is found in Arabia and India. It was probably among the number of those plants that the Queen of Sheba presented to Solomon. So powerful is its fragrance, that the air is said to be filled with a strong aromatic smell, even while it is growing; and when dried and reduced to powder, it forms an ingredient in the richest perfumes.

## FLAX.

The use of flax is so ancient, that there is no account of its introduction. It has been cultivated from remote antiquity, throughout a great part of Europe, Asia, and the north of Africa, for various purposes. Its native country is not certainly known ; but it is found wild in Persia. The mummies of Egypt are en

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veloped with linen; and great quantities are made still on the banks of the Nile. The ancient Seandinavians and other barbarous people were clothed with it. The use of linen passed from Egypt into Greece, and thence into Italy. The root of this plant is annual; the stem is slender, and about twenty or twenty-

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four inches in height. The leaves are alternate, entire, and linear ; the flowers are blue, and consist of five petals, succeeded by capsules of ten cells, with seed. The sceds are mucilaginous and emollient; and an infusion of them is often used as a drink in inflammatory diseases. They also yield an oil, known in commerce as linseed oil. Lime water and linseed oil form a good applieation for burns. A. light soil is most suitable for it, but it is raised on clayey ground.

## PIG TREE.

This tree is supposed to be a native of Asia, but is now cultivated in the south of Europe. Within a few years it has been cultivated in the southern States, and in the northern is com-

mon as a green-house or room shrub. Of this genus is the famous Banian tree, F. indica, with a summit three or four hundred feet in diameter. The canopy is supported by natural pillars which the horizontal branches send out at intervals, which growing downwards, reach the ground, in which they take root, presenting the remarkable appearance of a single tree with several trunks, sometimes as many as fifty or sixty.

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## IHE PLANTAIN

Is fifteen or twenty feet high, with a soft, herbaceous stem, and leaves often more than six feet long, and nearly two feet broad. The spike of flowers, which rises from the centre of the leaves, is near four feet long. The fruit which succeeds is eight or nine inches long, and above an inch in diameter, a little incurved, with three angles; the pulp of a sweet and luscious flavor. The spikes, of fruit are often so large as to weigh forty pounds. Gerard says that "the Grecians and Christians which inhabit Syria, and the Iewes also, suppose it to be that tree of whose fruit Adam did taste; which others think it to be a ridiculous fable." Others have supposed it to be the grapes brought out


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of the promised Land by the spies of Moses. It is not considered a native of America, but is cultivated in every elimate where it will thrive.

## THE MIANDRATEE.

There are two sorts of Mandrakes ; - the female, which is black, having leaves not unlike lettuce, though smaller and narrower, which spread on the ground, and have a disagreeable smell. It bears berries something like services, pale, of a strong smell, having kernels within, like those of pears. It has two or three very large roots, twisted together, white within, black without, and covered with a thick rind. The other kind, or male mandrake, is called morion, or folly, because it suspends the use of the senses. It produces berries twice the size of

those of the female, of a good scent, and of a color approaching towards saffron. Its leaves are white, large, broad, and smooth, like the leaves of the beech tree. Its root resembles that of the female, but it is thicker and bigger. This plant stupefies those who use it; sometimes depriving them of understanding; and often causes such vertigos and lethargies, that if those who have taken it have not present assistance, they die in convulsions.

## THE LIGN ALOE

The aloe tree is a native of India, and grows to the height of about eight or ten feet, having at its head large bunches of leaves, thick and indented, broad at the bottom, but narrowing towards the point, and about four feet in length.


The blossom is red, intermixed with yellow, and double, similar to a pink: from this blossom proceeds the fruit, round like a large pea, white and red. But there is another description of tree, called the Syrian Aloe, which is a little shrub covered with prickles; of the wood of which, perfumers (having taken off the bark) make use to give firmness and consistency to their perfumes, which otherwise would be too thin and liquid. Cassiodorus observes, that this is of a very sweet smell, and that in his time they burned it before the altars, instead of frankincense.

## THE PALM TREE

Is an upright, tall, fruit-bearing, flourishing, and shadowy trec. It grows by the sweet

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springs of water, and continues long. It will not be pressed or bound downward, nor grow crooked, though heavy weights be laid on it. This tree is one of the most famous of all the forest, and is the usual emblem of constancy, fruitfulness, patience, and victory; which the

## 24 ABOUT PLANTS.

more it is oppressed, the more it flourishes ; the higher it grows, the stronger and broader it is in the top. One kind is the date tree. Our engraving represents the fruit of the date palm, growing, and nearly ripe. The finest and best palm trees were about Jericho, En-gedi, and along the banks of Jordan. Palm trees from the same root produce a great number of suckers, which form upwards a kind of forest by their spreading. It was under a little wood of palim trees of this kind, that the prophetess Deborah dwelt, between Ramah and Bethel. See Jud. 4:5,



