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THE

VERMIN DESTROYER,

BEING

A COMPLETE AND NECESSARY FAMILY BOOK:

SHOWING A SURE AND READY WAY OF DESTROYING

Adders, Birds of all kinds, Hogs, Caterpillars, Flies, Fleas, Foxes, Polecats, Rabbits, Hares,

Frogs, Gnats, Lice, Mice, Moths, Otters, Serpents, Snails, Snakes, Spiders, Toads,

Wasp, Weasels, Worts, Or Moles on any part of the body, Worms in houses, gardens or Fruit trees, A new mode of catching all kinds of birds and wild fowl, fish of all kinds, Moles and Locusts.

ALSO SOME VALUABLE MEDICAL RECEIPTS FOR THE

Rheumatism, Palsy, Gout, Pleurisy, Cholic,

Ulcers, Spitting of Blood Dropsy, Consumption, Scurvy,

Itch and Piles, And every stage of the Flux cured.

To which are added many curious secrets in Nature and Art.

BY DR. JAMES JOHNSTON.

The above have been proved for more than twenty years never to fail.

PHILADELPHIA:
PRINTED FOR THE PUBLISHER.
Price 25 cents.
EASTERN DISTRICT OF PENNSYLVANIA, to wit:

BE IT REMEMBERED, that on the 6th day of March, in the forty-fifth year of the independence of the United States of America, A. D. 1821, JAMES SHARON, of the said district, hath deposited in this office the title of a book, the right whereof he claims as author and proprietor in the words following, to wit:

THE VERMIN DESTROYER, being a complete and necessary family book; showing a sure and ready way of destroying Adders, Birds of all kinds, Bugs, Caterpillars, Pisants, Flies, Fleas, Foxes, Polecats, Rabbits, Hares, Frogs, Gnats, Lice, Mice, Moths, Otters, Serpents, Snails, Snakes, Spiders, Toads, Wasps, Weasels, Worts or Moles on any part of the body. Worms in houses, gardens, or fruit trees. A new mode of catching all kinds of Birds and wild Fowl; Fish of all kinds, Moles and Locusts. Also some valuable medical Receipts for the Rheumatism, Palsy, Gout, Pleurisy, Cholic, Ulcers, Spitting of blood, Dropsy, Consumption, Scurvy, Itch and Piles, and every stage of the Flux cured. To which are added many curious secrets in Nature and Art. By Dr. James Johnston. The above have been proved for more than twenty years, never to fail.

In conformity to the act of the congress of the United States, intituled, "An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned." And also to the act, entitled, "An act supplementary to an act, entitled, "An act for the encouragement of learning, by securing the copies of maps, charts and books, to the authors and proprietors of such copies during the times therein mentioned," and extending the benefits thereof to the arts of designing, engraving, and etching historical and other prints."

DAVID CALDWELL,
Clerk of the Eastern District of Pennsylvania.
THE VERMIN DESTROYER.

Bugs—to prevent breeding.

Bugs are not only become troublesome at London, but are got into some countries; and whereas people think they are bred of hogs, hair, wood, wool, cloth, and fur, these things breed only lice, moths, and worms; but bugs proceed from old feather beds; whereon has long laid sick and sweaty people, which produces putrified smells and vapours; so does close press beds that have not the advantage of the pure air; as also close rooms, where the air wants free egress and regress, from these causes bugs proceed; and also consumptions, weakness of the back, and such like diseases that people little think of. And if you observe, you shall never find these creatures in shops, or where no beds are, or have been put. One way therefore to prevent them, is to wash your rooms, and keep them very clean, and keep your windows open in the day time, that the air may come in, and in a morning lay open your bed clothes that the air may come in, and the sun suck up the moisture contracted in the night time; this is a great preservative against all vermin, as also of your health.

How to destroy House Bugs.

Take gunpowder beat small, and lay some about the crevices of your bedstead, and fire it with a match about your bedsteads, and keep the smoke in; this do for an hour or more, and let the room be kept close for some hours after. Or take sprigs of fern, and lay upon the boards, kills them.

Bugs. Take a handful of wormwood and white
helebore; boil them in urine till it is half wasted, and wash the joints of your bedsteads with it.

**Bugs.** Take a quantity of unslack'd lime, put it into a quart of water, and let it stand 3 or 4 days, then pour off the water, and add a quantity of common salt, the stronger both of lime and salt the better; wash the sides of the wall and bedstead with this liquor two or three times a week, it kills bugs and fleas.

**Bugs.** Burn brimstone under the joints of the bedstead and creases where they lie, and they'll come out presently, that you may kill them; do this two or three times a week, and keep your room close.

**Bugs.** Take soap that lies after your washing, and boil onions in it; then wash your room and bedstead with it.

**Bugs.** Take strong vinegar, and mix salt with it; then sprinkle your room. This prevents bugs and fleas, and is very wholesome in houses, or at sea; so is rue, wormwood and rosemary wholesome to smell to, or vinegar sprinkled alone.

**Bugs.** Take three ounces of guinea pepper: burn it on a chafindish of coals in your chamber; shut your doors and windows, but take great care to go out yourself. This do twice a-month in hot weather, and it will kill all sorts of vermin in the bed.

**Bugs.** Take wormwood and mustard seed, bruise and boil them in water, a quarter of an hour, then add salt to the water, and wash your floor and bedstead therewith; it will destroy them and all other vermin.

**Bugs.** Take the rind of green walnuts, bruised and steeped in water three or four days; then
wash the room and bedstead with it twice a week.

_Bugs._ Hang a bear’s skin in your room, and they will be gone. Or get a trap about a yard and a half long, or more, if your bed is broad, and about half a yard in depth; put it at the head of your bed to the bottom of the pillow, and in the morning they will creep into it; take it into your yard, knock it, and they will drop out, so you may kill them. They are made of wickers, by basket makers.

_Bugs._ Take wormwood dried, and put it in bags pricked full of holes, and lay between your bed and sacking mats or boards, and some under the bolster, and under your bed on the floor, and on the bed tester; this prevents the breeding of either bugs or fleas.

To conclude, let your rooms be kept clean, set open the windows when you rise, and lay your bed clothes open four or five hours, and it is the only way to prevent both bugs and fleas.

_Lice._

_Lice._ Take butter unsalted, and boil it up with pepper to a salve; then cut off the hair, and anoint the head, and put on a cap.

_Lice._ Take staves-acre powdered, and mix it among the hair, then tie it with a cap, and it kills them. Or oil and staves acre.

_Lice._ Take aramanths (apothecaries sell it), boil it in lye, and wash the head: or take olibanum and as much swine’s grease, boil them together, and anoint children’s heads, it kills lice.

_Nits and Lice in the head._

Take of bees wax an ounce, three ounces of olive oil, three drams of staves acre; of these make a salve, and anoint: it kills both nits and lice.
Lice. Take red orpiment and saltpetre, each a dram, louse herb two drams, mix them together with oil and vinegar, so anoint the head. Byrus.

To kill Lice on Trees.
Through drought many trees and bushes become lousy, as sweetbriar, gooseberries, &c. therefore frequently wash them, or dashing them with water may prove the best remedy.

For Crab Lice.
Wash with the decoction of penny royal; Or, boil majoram in water, and wash with it; or the juice of stinking gladon.

For lice in the Eyelids.
Rub your eyelids with salt water, or brimstone and water, or with vinegar of squils, alum and aloes.

Fleas.
Take lavender and wormwood, and boil them in vinegar well, and sprinkle your blankets with it; or savory laid in your chambers kills them.

Fleas. Take unslacked lime and strew in your chambers: penny royal wrapt up in a cloth and laid in your bed, drives fleas away; lay fresh once a week.

Fleas. Mustard seed boiled in water, and the room sprinkled with it. Arsmart (the hot sort) strewed in a chamber kills all the fleas.

Fleas. Soap lees and onions boiled together and sprinkled in the room, kills both them and bugs.

Fleas. Marsh fleabane spread in your room, or burnt, drives away fleas and gnats. Culpepper says, that elder leaves gathered with dew on them, and laid in a chamber, gathers all the fleas there-to, which you may kill or throw out of the window.
Fleas. Rub a small piece of board over with hogs grease, and all the fleas will gather to it in the middle of the room.

To kill Fleas and Wall Lice.
Take the decoction of thistle and arsmart or coloquintida, bramble, or colewort leaves, and sprinkle about the house, drives them away, or anoint a stick with the grease of a hedge-hog, and lay it in the room, and the fleas will gather and stick to it.

RATS AND MICE.
Take ratsbane, powder it, and mix it with fresh butter, or make it into a paste with barley or wheatmeal and honey, and lay on trenchards or boards where they come: they will eat it, and it makes them drink till they burst. It is a strong poison, therefore be very careful in using it, and wash your hands after it. Or unslacked lime and oatmeal mixed, and laid on boards where they come, kills them.

Rats or Mice.
Take oatmeal and powder’d glass only, or mix them with fresh butter, and lay where they come. Or filings of iron mixed with oatmeal, or with dough or oatmeal flour, and lay where they do come.

Rats and Mice.
Black hellebore and the seed of wild cucumber mixed with such food as they eat, kills them — Or mix powdered hellebore with wheat or barley-meal only, made into a stiff paste with honey, and laid where they come, they eat it, it is present death; but great care must be taken, lest any thing they eat should be poisoned.
Rats and Mice.

Take honey or mead, and make a stiff paste with wheat or barley-meal; then mix the filings of iron or steel with it, and throw it where they come, they will eat it, and it kills them.

Chips of cork fried in suet, and laid where they come, kills them.

Field Rats and Mice.

In the dog days the fields are generally bare: then find out their holes or nests, which are little and round, like an auger-hole, and put hemlock seed thereinto, or hellebore mixed with barley; they eat it greedily, so it kills them.

Bats or Rear Mice to drive away.

The smoke of ivy burned does it.

MOLES.

Take a head or two of garlick, onion, or leek, and put it into their holes, and they will run out as if amazed, and so you may with a spear of dog take them.

Moles.

Beat hellebore, white or black, and with wheat flour, the white of an egg, milk and sweet wine or metheglin, make it into paste, and put small pellets as big as a small nut into their holes, and they eat it with pleasure, and it kills them.

Moles. Take the bark of dogs cole, powder it, and mix it with wheat flour, or barley meal, or rye flour, and with milk and wine make a paste, put some of these pellets into their holes, and they will eat it, and it kills them.

Moles. Take marking stone and wild cucumber juice, and pour it into their holes. Some set traps at the mouth of their holes.
To drive Moles away.

In places you would not dig nor break much, the fuming their holes with brimstone, garlick, or other unsavoury things, drives them away, and if you put a dead mole into a common haunt, it will make them absolutely forsake it.

Moles—to take when you plow.

Take with you a large vessel full of water, and when you see any new mole holes cast up, being opened with the plough, pour therein pitchers or large cans of water, and that will make them in a little time come out, and thus you may destroy them in plowed land or pasture; in common land make trenches in spring time to catch them.

Moles. Some say that in gendering time, if you lead or draw a bitch mole in a string along the ground, the buck will trace her, and so you may catch them in a pot set in the ground.

Moles. The best instrument to destroy them is made thus: take a small board of about three inches and a half broad, and five inches long; on the one side thereof raise two small round hoops or arches, and at each end, like unto the two ends of a carrier's wagon, or a tilt boat, large enough that a mole may pass through them: in the middle of the board make a hole so big that a goose quill may pass through, then is that part finished; then have in readiness a short stick about two inches and a half long, about the bigness that the end thereof may just enter the hole in the middle of the board; also you must cut a hazle or other stick, about a yard, or a yard and half long, that being stuck into the ground may spring up like unto the spring they usually set for fowls; then make a link of horse hair very strong that
will easily slip, and fasten it to the end of the stick that springs; also have in readiness four small hooked sticks; then go to the furrow or passage of the mole, and after you have opened it, fit in the little board with the bended hoops downwards, that the mole when she passes that way, may go directly through the two semicircular hoops. Before you fix the board down, put the hair spring through the hole in the middle of the board, and place it round, that it may answer to the two end hoops, and with the small sticks, and gently put it in the hole to stop the knot of the hair spring: place it in earth in the passage, and by thrusting in the four hooked sticks, fasten it, and cover it with earth, and then when the mole passes either the one way or the other, by displacing or removing the small stick that hangs perpendicularly downwards, the knot passes through the hole, and the spring takes the mole about the neck. Though the description seem tedious, yet this is very plain, and easily performed; these vermin being so very prejudicial, even worse to ground than swine.

Weasels.

Take sal armoniac, and beat it, and with wheat flour and honey make it into a paste, with the white of an egg, and lay it in pellets where they come, and they eat it, and it kills them!

Weasels to fright away Mice.

Put bells about his neck, and let him run about your house, and he’ll frighten away all the mice. ’Tis their nature to destroy mice, therefore some people love to have them about their houses.

That Weasels may not suck the eggs.

Lay rue about the hens that lay, and they will not come near them.
Weasels.

The smell of a burnt cat frights them away, as all insects will be frightened away with their own kinds being burnt.

Caterpillars.

Caterpillars destroy the leaves of trees, and devour cabbages and other tillage, and are generally the effects of great droughts. To prevent their numerous increase on trees, gather them off in winter, taking the prickets away that cleave to the branches, and burn them.

Or, anoint the tree bottom round about with tar, then get many pismires and put them in a bag, hang them so that they may touch the body of the tree; the pismires cannot get down for the tar, so for want of food will devour the caterpillars.

Caterpillars. When they are upon coleworts or cabbages, take some salt water and water them with it, and it will kill them.

Caterpillars. Our gardeners shake them off the plants in a morning betimes; for whilst they are touched with the cold of the night, they easily drop down.

Caterpillars of many sorts, the Wolf, the Black Fly, the Calendar Worm, &c.

The most hurtful is the wolf and calendar worm, that lurk in the heart of flower buds, shutting them up that they cannot open, which they sconsume; the trees that blow early, look as if signed by lightening; those that blow late are not so subject to this evil.

Caterpillars. Take three ounces of wormood, one ounce of assa foetida, steep and break them.
and boil with four pails of water in the air, because they are stinking smells, and when boiled, strain out the ingredients through a linen cloth, and use it when cold at pleasure, before the bud be opened, and they will do no harm to the tree; you may also add other ingredients, as tobacco stalks, wild vines, colloquintida, or the like, and expect very good issue.

**Green bugs that hurt green plants and Rose Trees.**

To kill green bugs in gardens, sprinkle the places where they fix with strong vinegar, mixed with the juice of henbane; or some water the plants haunted by them with the cold decoction of mustard and laurel seed in water; some quash them with their fingers, which is a good way; or fleabane boiled in water and sprinkled, kills them.

**Vine Fretters in Gardens, &c.**

Stick a rod half a foot high in the ground, with mugs or cups turned over the top of it, and you will find that they will creep under there for shelter, so you may easily kill them.

**An universal remedy against all animals offensive to flowers.**

**Democritus** says, put 8 or 9 crabs in an earthen pot with water, and let them stand 8 days in the open air, then take of this water, and water your plants in their infancy; repeat the same once in eight days, and you will find it effectual against all sorts of vermin.

**To gather Frogs and kill them.**

Take a sheep, ox or goat’s gaul and bruise it by the water side, and the frogs will gather to it.
To prevent Frogs croaking.
Set a lanthorn and candle upon the side of the water or river that waters your garden, it is done. Toads will not come near sage if rue is planted about it.

Snakes and Adders, to drive from the garden.
Wormwood planted in divers places, they will not come near it.

Snakes and Adders.
Smoke the places with hartshorn, or lily roots, burning in a fire pan, and they will fly from the place.

Snakes and Adders. The roots of centaury laid about your ground, will make them depart; or, lay deer suet about the place, and they will be gone.

For the Bite or Sting of a Snake or Adder.
Take the juice of ash tree leaves squeezed into good white wine or beer, and drink it, and wash with it, then cover the place stung with ash tree leaves, and it cures you, says Agrippa.

Snakes, Adders, Blue Worms, &c.
In April or May, lay fresh dung in places where they come, and they will resort to it. In July or August turn up the dunghill, and you will both find their eggs and many of them, which destroy; do this two or three times in a summer.

Pismires, Flies, Earwigs, and Spiders, that hurt Orange Trees, Carnations, &c.
These are very troublesome vermin in a garden, especially where carnations are preserved; for they are so fond of these flowers, that if care is not taken to prevent them, they will entirely destroy them, by eating off the sweet part at the bottom of the leaves.
To prevent which, most people have stands erected, which have a basin of earth or lead round each supporter, which is constantly kept filled with water. Others hang the hollow claws of crabs, lobsters, &c. upon sticks in divers parts of the garden, into which these vermin get; and by often searching them you will destroy them without much trouble, which will be of great service to your wall fruit; for these are great destroyers thereof. *Miller's gardener's dictionary.*

**Pismires, Earwigs, and other Vermin that hurt Gardens.**

In gardens are July-flowers, which are subject to harm, both by rain and the sun, and much watering, and from earwigs and pismires. The rain spots them; the sun withers them by drying the ground too much: strong water spoils them, especially at the last of their blowing: pismires gnaw the flowers, and make holes in the leaves, earwigs devour the flowers, at least the leaves, that they fall out of the shell; to preserve them, let the sun be upon them but one hour in the day, and they will last long.

**Pismires, and other Vermin about Orange trees, and July flowers.**

Put here and there a glass, with water and honey in it, wherein they will drown themselves; six or seven will go a great way.

When July-flowers are in flower, give moderate watering, no more than the shorts require, for the plant does not want watering, since the shorts only want to grow, but when the first flower is gone, you may give them more water again, and place them in the sun, in their old place, that the seeds may grow ripe.
Pismires. The smoke of the root of wild cucumber drives them away.

Pismires. Muscle shells burnt with storax, and beat to powder, strew the garden where they are, and they will come out of their holes—then kill them.

Pismires. Encompass the stem five fingers in breadth, with a roll of wool newly plucked from a sheep's belly.

Pismires. Hang a glass bottle in the tree, with a little honey in it, or other sweet liquor, and it will draw the ants into it, which stop and wash, and place it there again; also often watering the walks or paths kills them.

Pismires. In winter dig the hills, and take out the core, that it may be lower than the surface of the earth, that when you lay your turf down, it may lie lower than the other ground; it prevents ants returning, and the rain and frost coming, kills the rest.

Plants to preserve from Pismires.
Take the dregs of oil, and mix it with lupins, and anoint the bottom of the plants therewith.

To keep your Sugar box or Spice from Pismires.
Cover your box with white wool.

Pismires to drive away.
Take brimstone and powder it, and let it stand till it hath coloured the water, then sprinkle the water on the banks.

Earth and Field Mice, Snails, and other Vermin that hurt Tulips.
To preserve tulips from vermin, cover them with wooden frames 4 inches high, and do them over so close with iron wires, that none of these vermin can get through to hurt them.
Snails. Set tiles, bricks, or boards hollow against the wall, pales, &c. and they will creep under them for shelter, about Michaelmas they get to such places for security the whole winter, except you prevent it by destroying them in December, which is the easiest, best, and surest way to destroy them.

Snails; the gardener’s way.

Besides what is wrote above, they seek them by break of day, or after rain, when they come out of the earth to feed, and are easily killed.—You ought to keep out of gardens dogs and cats.

To kill Flies.

Take white hellebore, and steep it in milk or sweet wine, and sprinkle the room they come to, and they will die.

Flies. Take origanum and alum, and beat them, and mix them with milk, and sprinkle them about the room, kills them.

To gather Flies together.

Beat coriander seed, and put it in a deep earthen pot, and all the flies will gather to it.

Flies. Treacle and water put into an earthen dish pretty thick with treacle or honey, they will light in it and stick. Or, dregs of sugar and water mixed, they will come to it and be drowned.

That Flies may not trouble Cattle.

Boil bay berries in oil, and anoint them with it, and they will never sit on cattle; or, wet the hair of horses with the juice of the leaves of gourds at Midsummer, and they will not molest them. If cattle are anointed with the juice of arsenic, flies will not come near them, though it is the heat of summer.
Flies, Spiders, Scorpions, &c. to drive out.

Burn a hoop's feathers in the room, and make a smoke, then these insects that smell the smell will be gone, and come no more.

To drive away flies, and all other sorts of Insects.

All insects are driven away generally by means either of hindering the breeding of them, and so they destroy locusts eggs: or, we hinder their coming by shutting all windows close; some things drive them away and kill them: namely, fire and cold: also any sharp, sour, or extreme bitter, as vinegar, or decoction of bays, wild cucumbers: white hellebore, colloquintida or lupins will do it; some things do it by the scent, as brimstone, vitriol flowers, and the leaves of elder, both corianders, horns and hoofs; some things offend them many ways, as rue and verdigrease. The ancients used two things against them; pitch and lees of oil; pitch defends from the air, and oil from living creatures; storax, I observe by its scent or smoke, will drive away almost all insects.

To prevent Moths eating clothes.

Take beaten pepper, lay it among your clothes, airing them well first, and it will prevent them.

Moths. Take the branches of bay tree and lay among cloth or woollen, it preserves from moths, worms, or corruption; so does moist hemp.

Pieces of Russia leather put in boxes, prevents moths and all other vermin.

Moths to destroy.

About August they appear, and that mostly in the night, and if you set a candle in an apple tree lighted in the night, they will fly about it and
burn themselves, and you will find abundance of them dead in the morning.

**Earwigs, Wasps, Gnats, Hornets, and Flies**

Earwigs are very numerous, and injurious to fruit, and the way to destroy them is, by placing hoofs, horns, crabs or lobsters claws on branches of trees into which they will resort; early in the morning take them gently off and shake them into a tub of water, or on the ground, and tread on them. Or, cut a melon or apple, lay it to the ear, cut a hole in it, and lay on that side, and it will come into the apple.

**Wasps and Hornets.**

Wasps and hornets are destructive, to bees and fruits, &c. In spring or summer, before they are increased, destroy the old ones, for a few increases to a multitude.

**Wasps, Gnats, and Earwigs.**

Scald them, if in the thatch of a hollow tree, and smoke them with any stinking combustible matter.

**To destroy Wasps.**

Put pieces of lighted brimstone rags into the wasps holes, where the nest lies, and presently fling a spade full of earth over the holes.

**Wasps stinging.**

Apply a copper half-penny, and hold it for a little space, and it will ease the pain and prevent swelling.

**Gnats and Flies.** Shut your windows close in summer towards the evening, and smoke your rooms with brimstone, and burn straw in them, or they will fly into the flame, or be choaked. Or the smoke of burnt fern drives away gnats, serpents, and other venomous creatures. Or loose strife does the same.
Gnats and Flies. Ash leaves hung up in a room, attracts them, that they are less troublesome; also balls made of new horse dung and laid in a room will do the same; by this means you may overwhelm them with a basin, and keep them there.

Worms.

Water wherein the leaves and seed of hemp is sodden, sprinkled on the earth, brings them out.

Worms. Sea water sprinkled on the ground, kills them. Or salt and water made into brine, and sprinkled on the ground. Some say, soot strewed on the ground kills them. Others commend chalk and lime strewed on the ground.

Take a quantity of green walnut husks, and rub them on a brick or tile, holding them at the bottom of a pail of water till the water is become bitter, which sprinkle on the ground brings the worms out in a quarter of an hour.

Worms in gardens, &c.

Water your bed with the brine of salt meat, and it kills them: or water your garden with a strong lixivium made of ashes; or lay ashes or lime about any plant, and neither snails nor worms will come near it: as the moisture weakens, you may renew it. Some smoke their holes with ox or cow dung: or the mother of oil sprinkled on their holes, kills them.

Worms. Seethe the leaves and seeds of hemp in water, and sprinkle it on the earth, brings forth worms. Or take a poker, with two prongs is best, and stick it in the ground, and shake it well, brings out worms: morning and evening is the best time.

Worms in Apple-trees.

Lay a sea onion about the trees, to preserve
them from worms: if they come naturally, bull’s gall, or hog’s dung mingled with man’s urine, and poured to the roots, destroys them: but if they are hard to destroy, the bark must be dugged into with a brass pin, or such like tool, and tended till the point takes upon the worms, and drive them from the place: but where there is a place ulcerated, stop it with ox-dung. An apple tree plant, the root being anointed with bull’s gall, they and their fruit will be free from worms — Mizaldus.

Worms to prevent eating chests of drawers, or Wood.

Rub them with linseed-oil, or, rub them with wormwood, rue, or other bitter herbs, preserves them, and all wooden household stuff that is rubbed with the lees of linseed-oil and polished, will look pleasant.

Polecats.

If you can conveniently have a channel about your pigeon house, and that will preserve them and all other fowl, for no beast of prey will take the water.

Polecats. Some make a dead fall to take them, which is made of a square piece of wood, weighing 40 or 50 lb.: they bore a hole in the middle of the upper side, and set a crooked hook fast in it, also they set four forked stakes fast in the ground, and there lay two sticks across, on which sticks lay a long staff to hold the dead fall up to the crook, and under this crook they put a short stick, fasten a line to it, and this line must reach down to the bridge below; and this bridge you must make about 5 or 6 inches broad. Then set on both sides of this fall, boards or pales, or hedge it with close rods, and make it ten or twelve inches high; let the passage be no wider than the fall is broad.
Badgers.

Badgers are pernicious creatures, and destroy young lambs, pigs and poultry.

Some take them in a steel trap, or a spring, as foxes are taken.

Some make a pitfall about five foot deep, and four long, make it narrow at the top and bottom, and wider in the middle; then cover it with some small sticks and leaves so that he may fall in when he comes on it; sometimes a fox is taken thus.

Others hunt the badger to his hole in a moon-light night, and dig him out.

Hedgehogs always make their cave or cabin contrary to the wind.

Foxes.

Foxes are great destroyers of lambs, poultry, geese, &c. to destroy which, take a sheeps paunch, and tie it to a long stick, then rub your shoes well upon it, that he may not scent your sweaty feet; draw this paunch after you as a trail, a mile or more, and bring it near some thick headed tree: leave your paunch, and get into the tree with a gun, and as it begins to be dark, you will see him come after the scent of the trail, where you may shoot him: draw the trail if you can to windward of the tree.

To take a Fox in a steel-trap.

The best way is to set your trap in the plain part of a large field, out of the way of all paths, yet not near a hedge, or any shelter: then open the trap, set it on the ground, and cut out just the form thereof, in a turf, and take out so much earth, as to make room to stay it, then cover it again very neatly with the turf you cut out: and as the joint of the turf will not close exactly, get some mould of a new cast up mole hill, and put
it close round the turf, sticking some grass in it as if it there grew: make it curious and neat, that it might even deceive yourself: ten or twelve yards from the trap, three several ways, scatter some of the mole-hill mould very thin on a place 15 or 16 inches square, then on these places, and where the trap is placed, lay three or four small bits of cheese, and then with a sheeps's paunch draw a trail a mile or two long to each of these three places, and from thence to the trap, that the fox may come to one of these places first, for then he will approach the trap more boldly: and thus you will never fail of him: be sure let your trap be left loose, that he may draw it to some hedge or covert, or he will bite off his leg and be gone.

A spring trap for a Fox or Badger.

Bend down a stick in the wood, or set a pole in the ground where he uses to come, much like that set up for a woodcock, which hangs them up. To explain it better: tie a string to some pole set fast in the ground, and to this string make fast a small short stick made thin on the upper side, with a notch at the lower end of it: then set another stick fast in the ground, with a nich under it: then bend down the pole, and let both the nicks or notches join as slight as may be: then open the noose of the string, and place it in his path or walk, and if you lay pieces of cheese, flesh, or such like, it will entice him that way.

Fox.

Anoint the soles of your shoes with swine's fat a little broiled, and coming from the wood, drop here and there a piece of roasted swine's liver dipped in honey, drawing after you a dead cat, and he will follow you so that you may shoot him.
A hook to take a Fox, tied to a tree or Gibbet.

This hook is made of large wire, and turns on a swivel like the collar of a greyhound; it is frequently used in catching wolves, but oftener to the fox. They hang it from the ground so high that he must leap to catch it; and bait it with flesh, liver, cheese, &c. and if you run a trail with a sheep's paunch, as before directed, it will draw him the more easily to the bait.

To take an Otter.

Otters are great destroyers of fish, and will travel in a night ten or twelve miles; they lie under the roots of trees near the water; some take them with snares, others with spears, and some with hunting dogs.

To kill them, lay near their haunts an eel slit on the back, with some few corns of ratsbane put in the slit, then sew it up again; place the eel from the navel upwards out of the water, and he will eat it so far, but seldom farther, and it certainly kills him.

Birds are no annoyance to the farmer, or gardens, for they destroy more caterpillars, slugs, snails and other vermin, that do ten times more mischief than they do.

Fish.

Your baits must smell well, such are anniseeds, juice of panaca and cummin; 2dly, taste well, as hog's blood and wheat bread; 3dly, be intoxicating, as aqua vitae, lees of wine, &c. and lastly, make them senseless, as marigold flowers, which astonishes them, so doth all yellow flowers, and lime clithimal, nox vomica, and nothing better than coclus indicæ.

Eels.

Take sea stonewort an ounce, sea onions one
ounce, mix together, and throw where eels come.

_Crab-Fish._

Slit a small willow stick, then put a frog in it, and they will come to your hand. Or, cut frogs in pieces, then lay them in a basket and they will come into it.

_To take Pikes._

Take what quantity of blown bladders you will, and tie a line to the mouth of them, longer or shorter, as the water is in depth; bait your hook artificially, and the pike will take it, and make you sport; the same may be done by tying your line to the leg of a duck or goose.

_Fish._

Boil barley in water till it burst, with liquorice, a little mummy and honey; then beat them together to a paste, and throw little pellets, when it is almost dry, where fish are, and it will bring them together. Or fresh horse-dung thrown into the water does it.

_To take a Pike as he lies sleeping and sunning himself in fair weather, with a loop or net._

March and August are the best time. Take a long pole or rod that is light and straight, on the small end fasten a running loop of twisted horse-hair and silk, or made of wire of a large compass, which gently draw on him, and when it is five or six inches over his gills, hoist him up; if it is a small pike, draw it not so far on, make no noise in walking or speaking; if he lies so that you can't conveniently noose him, touch his tail with the rod, and he will turn as you please; also with a hand net, putting it gently under water, guide it just under him, and lift it softly till you just touch him, and then do it as quick as you can.
Fish. Take the blood of a black goat, mixed with wheat flour and lees of wine, make it into a paste, and throw it into the water a little before you fish.

To catch Fish.

Take coccus indicus, and some wheat flour, and with sweet wine, milk or mead, make a stiff paste, then make pellets, and throw them where fish are, and you may take them with your hands.—Or take assafoetida, flour, milk, and honey, make it into a paste, and bait your hook with it.

To take Stock-Fish.

Take green moss from the roots, boil it in oil, and make it into baits.

Fish.

Take hawtort and unslacked lime beat small, throw it into the water when calm; and it will make them drunk, so that you may take them with your hands.

Fish. Take elder leaves, savory, and thyme, of each a like quantity, then take ox or sheep’s suet, and lees of wine; beat them in a mortar, and throw little pieces into the water an hour before you fish.

Fish. Take coccus indicus, old cheese, cummin seed, and wheat flour: make a paste with brandy, and throw pieces in as big as a pea, and they that eat it you may take.

To take Fish with your hand.

Get nettles and cinquefoil, stamp them together with house-leek juice: then take them in your hand and stir in the water, and fish will come to you. Or take coccus indicus, soft cheese, honey, and crumbs of white bread: make it into paste, and throw it into the water.
Fish. Get sheep suet and garlick, mix it with wheat or barley flour, and with wine make it into a paste; throw it into the water, and you may take fish with your hands. Some take elder-leaves, wild marjoram, and thyme, all dried, and mix sheep's blood with them: then dry them in an oven, and throw lumps into the water.

Fish. Get unslacked lime, and mingle it with birthwort beat small, and cast into the water, the fish will greedily eat it, and turn on their backs, but they are not the worse for eating. Or with the juice of dragon-wort anoint your hands, and they will come to it. Or oil of camomile put to your bait does it.

Fish. Get a quarter of an ounce of oriental berries, cummin seed, and *aqua vitae*, each a sixth part of an ounce, cheese an ounce, wheat meal three ounces, make little pellets and throw where the fish are.

**BIRD LIME.**

Stuff prepared after different ways: the common method is to peel a good quantity of holly bark about Midsummer, fill a vessel with it, put spring water to it; boil till the gray and white bark arise from the green, which will require twelve hours boiling: then take it off the fire, drain the water well from it, separate the barks, lay the green bark on the ground in some cool cellar, covered with any green rank weeds, such as *dock thistles, hemlock*, &c. to a good thickness: let it lie so fourteen days, by which time it will be a perfect mucilage; then pound it well in a stone mortar till it becomes a tough paste, and that none of the bark be discernible: next after wash it well in some running stream, as long as you per-
ceive the least motes in it; then put it into an earthen pot to ferment, scum it four or five days, as often as any thing rises, and when no more comes, change it into a fresh earthen vessel, and preserve it for use in this manner. Take what quantity you think fit, put it in an earthen pipkin, add a third part of capons or goose grease to it, well clarified, or oil of walnuts, which is better, incorporate them on a gentle fire, and stir it continually till it is cold, and thus it is finished.

To prevent frost: take a quarter of as much oil of *Pretoleum* as you do goose grease, and no cold will congeal it.

*How to use Bird-Lime.*

When your lime is cold, take your rods and warm them a little over the fire; then take your lime and wind about the top of your rods, then draw your rods asunder one from another, and close them again, continually plying and working them together, till by smearing one upon another, you have equally bestowed on each rod a sufficient proportion of lime.

If you lime any strings, do it when the lime is hot and at the thinnest, besmeearing the strings on all sides by folding them together, and unfolding them again.

If you lime straws, it must be done likewise when the lime is very hot, doing a great quantity together, as many as you can well grasp in your hand, tossing and working them before the fire till they are all besmeared, every straw having its due proportion of lime; having so done, put them up in cases of leather till you have occasion to use them.
The best way of making Water Bird-lime.

Buy what quantity you think fit of the strongest birdlime you can procure, and wash it as long in clear spring water till you find it very pliable, and the hardness thereof removed, then beat out the water extraordinary well, till you cannot perceive a drop to appear, then dry it well: after this, put it into an earthen pot, and mingle therewith capon's grease unsalted, so much as will make it run, then add thereto two spoonfuls of strong vinegar, a spoonful of the best sallad oil, and a small quantity of Venice turpentine; this is the allowance of these ingredients, which must be added to every pound of strong bird-lime as aforesaid.

Having thus mingled them, boil all gently over a small fire, stirring it continually, then take it from the fire, let it cool; when at any time you have occasion to use it, warm it, and then anoint your twigs or straws, or any other small things, and no water will take away the strength thereof.

Of taking small Birds, which use Hedges and Bushes with Lime-twigs.

The great lime bush is best for this use, which you must take after this manner; cut down the main branch or bough of any bushy tree, whose branch and twigs are long, thick, smooth, and straight, without either pricks or knots, of which the willow or birch tree are the best; when you have picked it and trimmed it from all superfluity, making the twigs neat and clean, then take the best birdlime, well mixed and wrought together with goose grease, or capons grease, which being warmed, lime every twig therewith within four fingers of the bottom.
The body from whence these branches have their rise must be untouched with lime.

Be sure you do not daub your twigs with too much lime, for that will give distaste to the birds, yet let none want its proportion, or have any part left bare which ought to be touched; for as too much will deter them from coming, so too little will not hold them when they are there. Having so done, place your bush in some quickset or dead hedge near unto towns ends, backyards, old houses, or the like; for these are the resort of small birds in the spring time; in the summer and harvest in groves, bushes, or white thorn trees, quickset hedges near cornfields, fruit trees, flax, and hemp lands: and in the winter about houses, hovels, barns, stacks, or other places where stand ricks of corn, or scattered chaff, &c.

As near as you can to any of these haunts, plant your lime bush, and plant yourself also at a convenient distance undiscovered, imitating with your mouth several notes of birds, which you must learn by frequent practice, walking the fields for that purpose very often, observing the variety of several birds sounds, especially such as they call one another by.

Some have been so expert herein, that they could imitate the notes of twenty several sorts of birds at least, by which they have caught ten birds to another's one that was ignorant therein.

If you cannot attain it by your industry, you must buy then a bird call, of which there are several sorts, and easy to be framed; some of wood, some of horn, some of cane, and the like.

Having learnt first how to use this call, you
shall sit and call the birds unto you, and as many of them light on your bush, step not out unto them till you see them sufficiently entangled; neither is it requisite to run for every single bird, but let them alone till more come, for the fluttering is as good as a stale to entice them more.

You may take these small birds only with lime twigs without the bush.

Some boys have taken two or three hundred small twigs about the bigness of rushes, and about three inches long, and have gone with them into a field where there were hemp cocks; upon the top of half a score lying all round together, they have stuck their twigs, and then have gone and beat that field or the next to it, where they saw any birds, and commonly in such fields there are infinite numbers of linnets and green birds, which are great lovers of hemp seed.

And they flying in such vast flocks, they have caught at one fall for them upon the cocks eight dozen at a time.

But to return, there is a pretty way of taking birds with lime-twigs, by placing them near a stale or two made of living bats, placing them aloft that they may be visible to the birds thereabouts, who will no sooner be perceived, but every bird will come and gaze, wondering at the strangeness of the sight, and having no other convenient lighting place but where the lime twigs are you may take what number you list of them. But the owl is a far better stale than the bat, being bigger and more easily to be perceived, besides he is never seen abroad but he is followed and persecuted by all the birds that are near.

If you have not a living bat or owl, their skins
will serve as well, stuffed, and will last you twenty years; there are some who have used an owl cut in wood, and naturally painted, with wonderful success.

A Secret to hinder Pigeons from quitting a Pigeon House.

Take the head and feet of a gelt goat, and boil them together till the flesh separates from the bone; take this flesh and boil it again in the same liquor, till the whole is consumed; bruise into this decoction, which is very thick, some potters earth, out of which you are to take all the stones, vetch, dung, hemp, food, and corn; the whole must be kneaded together, and reduced to a paste or dough, which form into small loaves about the thickness of two fists, and dry them in the sun or oven, and take care it do not burn; when they are baked, lay them in several parts of the pigeon-house, and as soon as they set there the pigeons will amuse themselves with pecking them, and finding some taste therein, which pleases them they will keep so close to it, that they will not afterwards leave it but with regret. Others take a handful of salt which they candy, and afterwards put into the pigeon-house.

Birds. Get white orpiment, barley, wheat, or any other grain that birds love, boil them together, and throw where birds come, and you may catch them presently, yet not the worse to eat.

Birds, to keep from Fruit.

Hang a bundle of garlick on a branch of a tree, or lay it on your corn stalks, and they will not touch your fruit. Some smear their tree branches with juice of garlick.

To catch Birds.

Get such seed as fowls love, mix it with grated
onion, or juice of onion and it makes them drunk.

Wild Geese, to take.

Take a tame duck or goose, with a string by the leg, where wild geese or ducks come, and strew in that place such seed or grain soaked in lees of wine; where also white hellebore is boiled, you may take forty at a time; it will quickly make them drunk: let not the tied goose or duck come to the seed.

To catch Birds.

Take any corn and steep it in wine lees and juice of hemlock, and cast it to the birds, and it makes them drunk presently.

How to teach Birds to speak; or whistle tunes.

Keep them in dark places, and play any tune to them for half a year, or till the time that young birds taken out of the nest begin to sing, and they will learn, if cocks, any tune you please, and exceed a flageolet, especially a linnet, bullfinch, robin, or goldfinch, &c. And to teach jays, magpies, starlings, parrots, &c. Keep them dark, and hungry, and talk often the same thing to them, by candle-light, or in the night-time.

To scare Crows, Ravens, Jackdaws, Pigeons, &c.

Crows dead and hung up, much affrights them; but among cherry trees, and other fruit trees, draw a line from tree to tree, and here and there fasten a black feather, and this will do.

Bat Fowling, the manner of it.

Observe where birds roost in great numbers, as they generally do in hedges, or trees, then go in a dark night, one with a pole, and beat the contrary side, and two or three be with you, carrying long boughs; and you may easily strike them down; if among shrubs as in a wood, let one on each side
beat at a pretty distance. Some use nets, made like a racket at the end of poles, with which they are easily knocked down.

To take Sea-pyes, Crows and other Birds.

Get a minnow, tie a thread to its tail, and two small sticks of osier across at the end of the thread, then lime your twigs with bird lime, and lay them by the river on some rush, water leaf grass, or the like: then when she sees it, she catches it up, and the lime twigs take her wings, and she drops presently.

Partridge, to take.

Get sweet wine, and with wheat flour, make a paste, lay it in pellets where they come, and they will be soon foxed, so you may take them with your hand. But if you put a little *coccus indicus* to it powdered, it is the better.

To take Wild Ducks, Geese, Herons, Sea Gulls, &c.

Drive a stake into the ground two or three foot long, just by the water-side, then take a strong horse-hair with a large hook fastened to it, and bait it with fish, or frog, or guts, &c. and let your line or lines lie in the river and they will swallow it, and so hang that you may take them. Some lay in the same manner snares made of horse-hair, and often catch them by the feet as they swim about.

Birds that are Lousy.

Anoint them with linseed-oil cures them.

Of ordering and improving Stocks of Bees.

The bee though a small creature, and by many numbered amongst insects, is extremely advantageous to his nourisher, in returning abundance for the little he receives, and not so only, but affords demonstrative rules to men, both of policy
and frugality; insomuch that the ancients nourished and preserved them as much for pleasure as profit; calling them the birds of the muses; and Virgil, with wonderful eloquence, describes their order, government, manner of waring, building, obedience to their king, &c.—But not to enlarge thereon, I shall proceed to the improving part, viz. To store yourself, there are three manner of ways; either by buying them, taking wild swarms, or making them by art. If you buy your bees, observe they be lively, little, smooth, and shining; rejecting the rough and unseemly ones: and above all, let the King, or master-bee, be long, shining, and cheerful, not too great, or too small for upon his success, depend the welfare of the whole swarm. Observe, likewise, that the swarm be whole and great, which you may know by looking into the hive, or observing great numbers clustering about the door; if these two observations fail, finding them all at rest, blow in among them, and by the greatness or smallness of the answering sound, you will perceive them to be more or less. If you transport them far, the change of the air many times incommodes them; to remedy which you must set them in pleasant gardens, or scatter sweet smelling herbs about their hives. The best way to carry them is upon a man's shoulder in sheets upon a pole; one hive behind, and the other before, in the night time when they are at rest, being very cautious of jogging them, for fear of mashing their combs; and the best time to remove them is in the month of April; being sure you carry them not from a pleasant place to one that is otherwise, for if you do, they will soon leave you. When you have brought them to the place you intended,
if it be day-time, you must neither open nor place them till night, to the end that after the quiet rest of the night, they may go cheerfully to work the next morning; and be sure you observe them narrowly for two or three days after, whether they go out or not, for if they do, 'tis a shrewd sign they intend to leave you.

To store yourself with wild bees, take these following directions: that is, such as breed in clefts of oaks, or other trees, in fields, forests, or wildernesses, or in rocks, or ruins of castles, or churches. To find them out, set a little box, with a small hole in it, near the water side, whither you perceive the bees to resort, and when many have entered for the sugar or honey put therein, stop up the hole, and having let one out, follow him as far as you can see him, then let out another, following him likewise, and so a third, till by their flying directly to the place of their abode, you may find them out; and to know whether they are far or nigh, set sugared water, and when they come to sip, sprinkle some red, green, or other colour upon them, and by their often or seldom coming, you may guess the distance or nearness of their nests; as also by the sudden resort of great numbers, so soon as one or two have found out the sweets, for they suddenly give notice to their fellows. Having found them, if in the body of a tree, and you cannot come at them, smoak them out and settle them by ringing of any brass vessel; and having sweetened your hive with herbs, shake them into it, or rather cut down the bough and cover it with a sheet, setting your hive afterwards near it, that the bees of their own accord, may go into it; or if you cannot smoak them out, saw the tree, or use other means as may oblige them to forsake their dwelling.
In the placing of your bees, observe it be so that in the winter and spring, the faces of the hives may stand to the rising sun; and so order it that neither in winter nor summer, they be too hot or too cold; observing above all things, that the air be wholesome, as also the herbs, plants, and flowers growing about them. The herbs, &c. that bees most delight, are these, thyme, cassia, rosemary, savory, smallage, violets, sage, lavender, myrrh, wild marjoram, wild thyme, balm, sweet marjoram, saffron, bean flowers, mustard seed, mellilot, poppies, roses and the like. And those they hate, are for the most part, yew trees, wormwood, wild cucumbers, elms, cornel, spurge, laurel, and all bitter herbs and flowers. They thrive better in the vallies than on hills, and love to be near clear water springs. The best honey is extracted from thyme, the second from wild thyme, and the third from rosemary. You may place their hives in three ranks, and stand a yard one above another; suffer them to be quiet and undisturbed, keeping all hurtful creatures from them; as the toad, red-breast, woodpeckers, moth, hornet, lizard, swallow, sparrow, spider, serpent, and stork; all which are utter enemies to the bees. All winter they rest, and live upon part of what they got in the summer; or if you have taken the honey almost bare, you must feed them by putting in sticks very gingerly, dipped in honey, or sugar and water boiled; as also figs, raisins, currants, or the like. About the sun’s entering the sign Aries, they come abroad and labour diligently, framing their combs, the which when they have done, they begin to breed, and afterwards fill them with honey; their wax, being extracted from gummy trees and the honey
honey from flowers. The honey harvests, as many term them, are in some countries, three times a year, viz. the latter end of May, the end of July, and beginning of September; though to take the combs but twice a year, viz. May and August, is best. If the hive by reason of a young brood be overcharged, which you may perceive by the bees clustering about the mouth of it, and the great noise within, having new hives in readiness, watch the coming forth of the young fry for several days, from eight till twelve in the morning, lest taking wing, they seek a new habitation; or if they delay to come forth, you may drive out the whole stock with galbanum, at which time having two kings, they will settle in two companies, and so you may hive them. Or if a stock be decayed, you may put two hives together, by killing the king or master-bee of the one hive. If at any time two hives swarm together and fight, cast dust upon the hives, or sprinkle them with the juice of pleasant herbs, or honey and water boiled, and the fray will be parted.

If the master-bee of any hive be too apt to lead the swarm abroad, and by that means endanger losing them, to prevent this roving, clip his wings, and then, not daring to trust them, he will stay at home.

The signs to know when your combs are full of honey, are when the bees drive out the drones; when there is an extraordinary noise and rejoicing within, and when they play about the mouth of the hive, neglecting to perform their tasks; for in no-wise take the honey before the combs are full, lest displeasing the bees they leave you.

Many are of opinion, that the mouth of the hive
being rubbed with calves-dung, or onion-bles and marjoram, the bees will never leave it. And thus much shall suffice for the ordering and improving of bees, from whose labour rises great profit to most kingdoms.

**PHYSICAL RECEIPTS.**

*Rheumatism, Palsy, and Gout.*

The oil of mustard-seed used outwardly, is said to be very good in these disorders; taken inwardly it has the same virtues as the seed itself. Some say a spoonful taken at a time is good to drive the gout out of the stomach.

**Pleurisy and Cholic.**

Linseed Oil fresh drawn, loosens the belly, appeases coughing, promotes expectoration, and is reckoned a specific in the pleurisy, if two, three, or four ounces are taken at a dose, and repeated at every fourth or sixth hour till the patient finds himself relieved.—Given in the same manner it eases the cholic, and cures obstinate costiveness.

**To kill Worms.**

Oil of wormwood rubbed on the stomach and navel, discusses wind and kills worms: it is also a great strengthener of the stomach.

**Against Ulcers and the Itch.**

Simple balsam of sulphur is an excellent remedy against all ulcers external and internal. The dose is twenty drops or more. Outwardly it is good against the itch, scabs, and other defedations of the skin, rendering it soft and smooth.

**To expel Wind.**

Elecuyary of bay berries warms the stomach, expels wind, and is good for the flatulent cholic. The dose is from a scruple to a dram.

**Spitting of Blood.**

Take conserve of roses two ounces; of *Loca-
telli's balsam dissolved with the yolk of an egg, an ounce; mix them. This is pectoral, and is good in catarrhs, coughs, spitting of blood, and consumptions. The dose is the size of a walnut twice in a day: or half dram in a fit of coughing.

Against the piles.

Take of the lenitive electuary, two ounces, of flowers of brimstone half an ounce; mix them. The dose is half an ounce.

Against the dropsy.

Take of gamboge in powder, an ounce and a half of cream of tartar in powder, an ounce; of ginger in powder, half an ounce; of syrup of sugar enough to make an electuary. The dose is half a dram early in the morning.

A safe and easy Purge.

Take of julap in powder, two ounces; of ginger in powder, three drams; of syrup of oranges enough to make an electuary. When purging is required, this will operate safely and easily. The dose is from half a dram to two scruples, to be taken early in the morning.

An Electuary against the Rheumatism.

Take of conserve of orange-peel, two ounces; of cinnabar of antimony levigated an ounce and a half; of gum guaiac in powder an ounce; of winter's bark in powder three drams; of syrup of orange peel a sufficient quantity; mix them. The dose is a dram morning and evening.

This is not designed against an acute rheumatism, but those tedious and wandering pains which fly from one part to another without a fever.

For Consumptions

Take of spermaceti fifteen grains; of gum ammoniac ten grains; of volatile salt of hartshorn se-
ven grains; of syrup of sugar enough to make a bolus.

This is to be given in disorders of the breast, particularly, difficulty of breathing, and consumptions; and may be given with success in the pleurisy and inflammation of the lungs.

**Scurvy in the Gums.**

Take gum-lac an ounce; myrrh half an ounce: powder them, and then with oil of tartar per deliquium make them into a soft paste, which being dried by a slow fire, add spirit of scurvy grass a pint and a half. Digest in a water bath for four days, and strain off the tincture. This rubbed on the gums cures the scurvy, and fastens loose teeth.

**A cure for the Dysentery.**

Take and eat three cloves of the best tame garden garlick, night and morning. After first taking a purge of Calomel and Jalep, with which I have often cured the dysentery or flux, in three days' time, which is the most excellent application that has ever yet been discovered. [This receipt is worth one hundred dollars, if worth one cent.]

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**CURIOSITIES IN ART AND NATURE.**

**A Receipt For Black Ink.**

To six quarts of rain or river water, (but rain water is the best) put one pound and a half of fresh blue galls of Aleppo, for those of Smyrna are not strong enough, bruised pretty small; eight ounces of copperas, clean rocky and green; also eight ounces of clean, bright, and clear gum arabic, and two ounces of rock alum; let these stand together in a large stone bottle, or clean stone-pot, with a narrow mouth to keep it free from dust; shake, roll or stir it well once every day, and you will have excellent ink in about a month's time; and the older it grows the better it will be for use.

*Ingredients for a quart.*

One quart of water, 4 ounces of galls, 2 ounces of copperas, and 2 ounces of gum, mixed and stirred as above.

N. B. If you soak the green peeling of walnuts, at the time of
the year when pretty ripe, and oak saw-dust, or small chips of it, in rain water, and stirred pretty often for a fortnight, and then strained, and the water used with the same ingredients as above, the ink will still be stronger and better.

_How to make Red Ink._

Take three pints of stale beer (rather than vinegar) and four ounces of ground Brazil wood; simmer them together for an hour and then strain it through a flannel; then bottle it up, well stopped, for use.

Or you may dissolve half an ounce of gum Senegal, or Arabic, in half a pint of water; then put a penny-worth of vermillion into a small gallipot, and pour some of the gumwater to it, and stir it well, and mix it together with a hair pencil, to a proper consistency; but it will not incorporate presently, but by the next day it will; then having a clean pen, dip it into the ink, having first well stirred it with a pencil, and then you may use it; it is a fine and curious red, though not so free as the other. And after the same manner you may make any other coloured ink, as blue, green, purple, &c. having divers gallipots for that use. In like manner you may mix the shell-gold, for curious occasions, pouring two or three drops, according to direction, into the shell, and mix it well with a clean hair pencil, and with it put a little into a clean pen, &c. The small shells may be bought at some fan sellers, or fan painters, at two or three for two-pence; or the large ones, which are the best, at the colour-shops at sixpence a piece.

_To keep Ink from Freezing or Moulding._

In hard frosty weather ink will be apt to freeze; if once it does, it will be good for nothing; for it takes away all its blackness and beauty. To prevent which (if you have not the conveniency of keeping it warm, or from the cold) put a few drops of brandy, or other spirits into it, and it will not freeze. And to hinder its moulding, put a little salt therein.

_Wheat to make equal to Coffee._

Take English wheat, use it in all points as coffee, and it will be as wholesome.

_Secret Writing._

If you dip your pen in the juice of a lemon or of an onion, or in your own urine, or in spirits of vitriol, and write on clean paper whatever you intend, it shall not be discerned till you hold it to the fire, and then it will appear legible. And if with any of the above-mentioned, you write on your skin, as on your arm, or back of your hand, &c. it shall not be seen till you burn a piece of paper, and with the ashes rub on the place, and then it will appear very plain.

Another way is, when you write a letter, that you intend it shall not be discovered, but to those you think fit, first to write your thoughts on one side of the letter with black ink, as usual, (but it ought to be on thin paper) and then on the contrary side, go over the said matter that you would have secret, with a clean pen dipped in milk; and that writing shall not be read without holding it to
the fire, as mentioned above, and then it will appear legible in a blueish colour.

Another method is to have two pieces of paper of equal size, and the uppermost cut in chequered holes or squares big enough to contain any word of six or seven syllables, and in those squares write your mind in regular sense: and then take off the said chequered paper, and fill up the vacancies with words of any kind, which will render it perfect nonsense, and not capable of being read to any purpose of intelligence; and transmit and send the said uppermost, or chequered paper, or another exactly of the same form, to your correspondent; whereby he shall by laying it nicely on your said letter, read, your intended sense without being perplexed with the words of amusement, intermixed, which makes it altogether unintelligible.

Or again, you may write to your friend in proper sense in common ink, and let the lines be at so commodious a distance, that what you intend to secret may be written between them with water wherein galls have been steeped a little time (but not long enough to tincture the water,) and when dry, nothing of the writing between the said lines can be seen; but when it is to be read you must with a fine hair-pencil, dipped in copperas water, go between the said lines, and so you make it legible. Note. This way will give no ground of suspicion because the letter seemeth to carry a necessary sense in those lines that are set at such a proper distance.

Things necessary to be known.

A ream of paper, 20 quires.
A quire of paper, 24 or 25 sheets.
A bale of paper, 10 reams.
A Roll of parchment, 5 dozen or 60 skins.
A dicker of hides, 10 skins.
A last of hides, 20 dickers.
A load of timber, unhewed, 40 feet.
A chaldron of coals, 36 bushels.
A hogshead of wine, 63 gallons.
Ditto of beer, 54 gallons.
A barrel of beer, 36 gallons.
Ditto of ale, 32 gallons.
A gross, 144, or 12 dozen.
A weigh of cheese, 256 pounds.
Days in a year, 365, weeks, 52, and hours, 870.
Pence in a pound, 240.
An acre of land, 163 square poles, or perches.
A last of corn, or rape-seed, 10 quarters.
A tun of wine, 252 gallons.
A pack of wool, 364 pounds.
A stone, horseman's weight, 14 pounds.
A truss of hay, 56 pounds.
A load of ditto, 39 trusses.

END.
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