

PHILOSOPHICAL TRANSACTIONS.

March 25.

For the Month of *March*, 1678.

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An Account of the Culture, or Planting and Ordering of Saffron; by the Honourable Charles Howard, Esquire.

Saffron-heads planted in a black rich Sandy Mold, or in a mixt Sandy Land, between white and red, yields the greater store of *Saffron*.

A Clay or Stiff-ground, be it never so rich, produceth little *Saffron*; though increase of Heads or Roots, if the Winter prove mild and dry: but the extremity of cold and moisture will rot them. So that the finest light Sandy Mold, of an indifferent fatness is esteemed most profitable.

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Plough

Plough the Ground in the beginning of *April*, and lay it very smooth and level.

About three weeks or a month after, spread upon every Acre twenty Loads of rotten Dung, and plough it in.

At *Midsummer* plough it again, and plant the *Saffron-heads* in rows, every way, three Inches distant one from another, and three Inches deep.

The most expedite way of planting, is to make a Trench the whole length of the Field, three Inches deep with a Spit-shovel.

The Spit-shovel is to be made of a thin streight Iron ten Inches long, and five Inches broad, with a Socket in the side of it to put a staff or handle. Lay the *Saffron-heads* three Inches distant in the Trench, and with the Shovel spit up three inches of Earth upon them.

Observe this order in planting of whole Fields, where-by the Heads will lie every way three inches square one from another. Only Paths or shallow Trenches are to be left two or three yards asunder, which serve every year to lay the Weeds to rot, that are to be weeded and pared off the ground.

As soon as the Heads begin to shoot or speer within the ground (which is usually a fortnight before *Michaelmas*) hove or pare the ground all over very thin: and rake lightly all the Weeds and Grass very clean, lest it choak the Flowers, which will soon after appear; and are then to be gather'd, and the *Saffron* to be picked and dried for use.

The Ground must be very carefully fenced from Sheep or Cattel, which by treading break the *Saffron-grafs*, and make the chives come up small.

In *May* the *Saffron-grafs* will be quite withered away, after which, the Weeds and Grass the ground produceth may be cut or mowed off from time to time to feed Cattel till about *Michaelmas*, at which time the Heads will begin to speer within the ground.

Then hove, pare and rake the Ground clean, as before, for a second crop. The like directions are to be observed the next year for a third crop.

The *Midfomer* following dig up all the *Saffron* heads, and plant them again in another new Ground (dunged and ordered as aforesaid) wherein no *Saffron* hath been planted, at least not within seven years.

The Flowers are to be gathered as soon as they come up, before they are full blown, whether wet or dry.

Pick out the chives clean from the shells or flowers, and sprinkle them two or three fingers thick, very equally, on a double *Saffron*-paper. Lay this on the Hair-cloth of the *Saffron*-Kiln, and cover it with two or more *Saffron*-papers, a piece of Woolen-cloth or thick Bays, and a Cushion of Canvas or Sack-cloth filled with Barley-straw, whereon lay the Kiln-board.

Put into the Kiln clean, throughly kindled Char-coal, Oven-coals, or the like, keeping it so hot that you can hardly endure your fingers between the Paper and the Hair-cloth.

After an hour or more turn in the edges of the cake with a Knife, and loosen it from the paper. If it stick fast, wet the outside of the paper with a feather dip'd in Beer, and then dry the papers. Turn the cake, that both sides may be of a colour.

If it stick again to the paper loosen it, and then dry it with a very gentle heat, with the addition of a quarter of 100 *l.* weight laid upon the Kiln-board.

The *Saffron*-cake being sufficiently dry'd is fit for use, and will last good many years, being wrapt up and kept close.

The best *Saffron* is, that which consists of the thickest and shortest chives, of a high-red and shining colour, both without and within alike.

Saffron is oftentimes burnt, and in knots, spotted and mixed with the yellows that are within the shells.

It's usually observ'd, that one Acre doth yield, at the least, 12 pounds of good *Saffron* one year with another, and some years 20 pounds.

Good *Saffron* is seldom or never sold at so low a rate as 30 shillings *per* pound, frequently at three pounds *per* pound, and upward. Wherefore one Acre bearing 12 pounds at 40 shillings the pound, cometh to 24 pounds *per annum*.

The gathering and picking of one pound of *Saffron* is worth one shilling, which cometh to twelve shillings *per* Acre.

The Fire and care of drying may come to 3 shillings more, at 6 pence the pound; which is in all 15 shillings.

The Grass that is mowed and cut off the ground for the use of Cattel, will be very near worth as much as will countervail the picking and drying the *Saffron*; the Soil being enrich'd not only by the Dung, but the *Saffron* it self, as appears by the rich crops the ground yields for several years after without any other manuring or improvement.

Sixteen Quarters of *Saffron*-heads are sufficient to plant one Acre. A Quarter of these Heads is usually sold in the place for 10 shillings, which comes to 8 pounds *per* Acre.

Twenty Loads of rotten Dung laid on the ground, may be worth 40 shillings at 12 pence a Load for the Dung, and as much for carriage into the Field.

For thrice ploughing the ground 20 shillings.

For planting the Heads about 4 pounds. Which in the whole makes 14 pounds, the charges of planting an Acre, which will bear three crops.

So that all things reasonably computed it appears, that an Acre of *Saffron* will be worth, notwithstanding all casualties, one year with another, over and above the 14 pounds charges, for the first years planting (at the least) 20 pounds *per annum*. Besides the great increase of the *Saffron*-heads, which will be as three for one.

The Kiln.

It consists of an Oaken-Frame, lathed on every side, twelve inches square in the bottom, two foot high, and two foot square at the top; upon which is nailed a Hair-cloth, and strained hard by wedges drove into the sides; a square Board and a Weight to press it down, weighing about a quarter of a hundred.

The insides of the Kiln cover'd all over with the strongest Potters-clay, very well wrought with a little Sand, a little above two inches thick.

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The bottom must be lined with Clay four or five inches thick, which is the Hearth to lay the fire on: level where-with is to be made a little hole to put the Fire. The outside may be plaister'd all over with Lime and Hair.

A Relation of the Tinn-Mines, and working of Tinn in the County of Cornwall; by Dr. Christopher Merret.

THE Stones from which *Tinn* is wrought are sometimes found a foot or two below the surface of the Earth, but most usually betwixt two walls of Rocks (which are commonly of an Iron-colour, of little or no affinity with the *Tinn*) in a Vein or Load (as the Miners call it) betwixt 4 and 18 Inches broad, or thereabout.

Some say, the Load runs North and South: but in truth it runs East and West, and all other ways with very great variety.

Sometimes there is a rich and fat Metal; sometimes hungry and starved; sometimes nothing but a drossie substance, not purely Earth, nor Stone, nor Metal; but a little resembling the rejected Cynders of a Smiths Forge: appearing sometimes of a more flourishing colour tending to Carnation; and sometimes more umbratle: and where this is found, the Miners judge the Metal to be ripe.

The Pits are 40, 50, and sometimes 60 Fathoms deep, and more.

The Load being very rich and good, above that is ten fathoms from the grass, or thereabouts. And below that, there's a strange cavity or empty place, wherein is nothing but Air for many fathoms deep, as the Miners have tried with long Poles and Pikes. This cavity lies between hard Stony walls, distant one from another about six or nine Inches. The Labourers tell stories of Sprights or small People, as they call them: and that when the Damp ariseth from the subterranean Vaults, they hear strange noises, horrid knockings, and fearful hammerings. These Damps render many lame, and kill others outright, without any visible hurt upon them.