

A P R O C E S S U P O N L E A D .

A TRUE LABOUR WITH COMMON LEAD.

*This Process has been worked in Hungaria during several years by COUNT GABRIEL of DIETRICHSTEIN. I have a good Opinion of this process upon LEAD, 1. For reasons given by GLAUBER in his Folia works. 2. The late MR. FREDERIC LA FOUNTAIN, when he lived at Chelsea and had established the Salt Petre works there at his own expense, worked this Process from the Beginning to the End, and as I was at that time and since, until his death, very intimate with him and his family, as a Brother Philosopher, he did not conceal it from me, and I have seen him work at it at various times from the Beginning to the End.*

*Mn. La Fountain's father in the City of Hannover was intimately acquainted with COUNT DIETRICH, and knew and had seen him work at it in Hungaria. When Mn. La Fountain has accomplished this work, at Chelsea, about the year 1778, he sent his Fixt Lead-ashes to a Refiner in the City, of whom he had a good opinion, requesting him to copel those ashes as soon as possible, that they must contain both SILVER and GOLD.*

*The Refiner kept them under various pretexts and Evasions, as having no time, having been out of Town & for a whole year, and said at last to Mn. La Fountain, as Proposed I examined your ashes lately but they contained nothing, therefore I threw them away amongst my Rubbish.*

*Mn. La Fountain shook his head in vain, and suspected the Refiner, but as he soon after, was forced to abandon his Salt-petre Manufactory, for want of assistance, having sunk 9000 Pounds in the work, he was obliged to quit the Premises, and had no opportunity, Garden nor Laboratory to Recommence it again.*

*These Reasons have given me a good opinion of the Process. THE COUNT DIETRICHSTEIN has given it to DR. BECHER, who has published it in His CONCORDANTEA CHYMICA in the German Language p. 603, in my correct Edition in Quanto of 1726. But DR. BECHER has kept back several Circumstances essentially necessary which are set down in this Process,*

as MR. LA FOUNTAIN had it from his father in HANNOVER who was very intimate with the Count, whilst he resided in HUNGARIA.

## THE PROCESS ON LEAD .

You must have a good Funnace, (with a Projecting GAP), that has a good draught to carry off the poisonous Mercurial fumes of the Lead, during the Calcination, which must be done in an Iron Pan. Safely arranged, melt 30 lb. of good Sheet Lead in your Pan, and Project gradually 10 lb. of Native SULPHUR upon your LEAD, not above a  $\frac{1}{4}$  lb. at once, and stir the LEAD in Fusion gently but continually; the SULPHUR must be in a coarse POWDER; keep projecting gradually stirring, until the 10 lb. of SULPHUR have all been burnt upon the melted LEAD and until the LEAD is faintly calcined, and be cautious not to receive any of the venomous fumes.



Then let it cool of itself, and poun the calcined LEAD in a Clean IRON Mortar, and pass this powder through a fine Hair Sieve.

(p. 648 of the Edition 1755.)

Then you must Prepare the Following GRADATING AND FIXING LIXIVIUM.

## THE LIXIVIUM .

Take 10 lb. of Fiery Stone Lime, fresh from the Kiln, 10 lb. of good strong Pot Ash, put these 2 in a cask, standing on its bottom, the upper bottom taken out, and a lid to cover it; poun 12 or 14 Gallons of Stale URINE upon it, collected from Healthy Men, and not from Women, much less from men infected with any venereal Disorder, and stir the mixture with a long Oak Stick, until the Ingredients are nearly dissolved.

Now you must have an Iron Kettle, made of Cast Iron, sufficiently large, cemented and set in a Funnace, as we Fix a Washing Copper.

Poun your Solution out of the cask into your Kettle, and let it

boil gently, and as it gradually evaporates, fill it up, until all the URINE thick sediment is in the Kettle, and then continue boiling gently, avoiding large bubbling or violent boiling, stirring gently with an Oak stick every 2 hours until your Lixivium is become as black as ink. Then put into the Kettle the following ingredients: 8 lb. of good Sea SALT or Fossil SALT, 8 lb. calcined TARTAR, calcined 12 or 14 hours in a Wind Furnace, and 8 lb. of good VITRIOL of MARS i. e. Copperas.

Powder each ingredient previously, then put it into the Kettle, add 2 or 3 Gallons of Stale URINE, and boil again gently as before, until you feel by stirring, that your powders are dissolved, then Test your Lixivium as follows:

After the Lixivium has settled for an hour, without boiling, take some of the clear out of the kettle with a bason or mug, and put a goose quill into the liquor, which must be as black as ink, the Quill must have the feather on it, now if your Lixivium burns the feather immediately from the quill, your Lees are good, if not, you must simmer and evaporate and concentrate further, until your Lees burn the feather from the quill in a moment. Your Lees cannot be too fiery, but may be too weak.

As soon as you have this token, let the FIRE in the Furnace die away and let the Lees cool gradually.

The next morning take your Lees out with a bason or mug, and pour it, the upper part only which is perfectly clear, into a new oak cask, standing on one end, the upper bottom taken out, and cover it with a lid, to keep rain or dust out. The lower part, of your Lees you must filter THROUGH a Linnen Bag, and let it run through its own thick sediment 5 or 6 times, until your Lees are clean and transparent, although Black, and reject the sediment, and let the Iron Kettle be washed clean and dried for next Year.

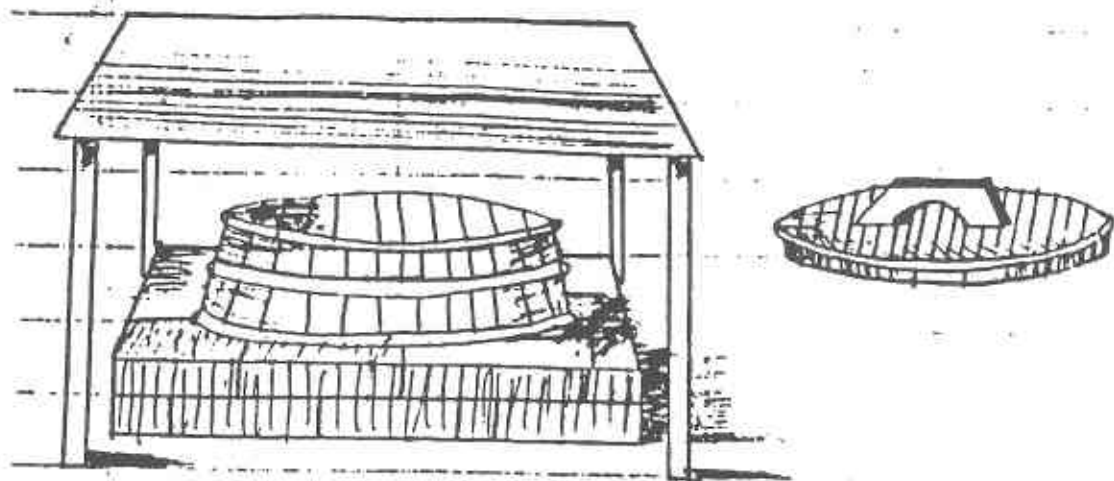
Now you must have at hand a Tub made of Oak Wine-staves, which tub must be narrow at the top, but widen at the bottom, on about 24 inches diameter below, where it is widest and 18 or 20 inches diameter at the top. This digesting Tub must be about 10 or 12 inches high, perfectly tight.

A good Oak lid or cover with a Bonder, which lid must fit loosely easily over the tub, but it must be perfectly tight and well joined,

so as to keep every drop of Rain Out, but not THE AIR. The Tub must be strong in the stuff, and have 2 or 3 Iron Hoops, so must the cover have a good Hoop.

The Tub must be placed in the open air in a Garden in a brick wall raised 2 courses above the ground. A small shed must be erected over the Tub, resting on 4 posts, with a wooden covering, to keep the rain from the Tub, but open all round for the Air and the Sun, Moon and Stars.

*In this Manner:*



(I see no necessity for the Tub being narrow at the top except it is for the sake of driving the Iron Hoops tight). Thus arranged the Lees and Lead Ashes prepared in Time, the Work of Digestion, Maturation and Fixation begins when the Sun has entered the Sign of ARIES, and does continue until the Sun enters LIBRA, that is 6 Months.

As the success depends here in the Operations of Nature, a due attention must be paid to this Digestion. The Sun having entered ARIES put your calcined and sifted Lead Ashes in the Tub, placed about a foot High from the ground, pour your clean filtered Lees upon the

ashes, so as to over top the ashes about 6 inches, stir it all round to cause a complete mixture; you must have a clean Oak stick for this purpose. Now let it stand in the open air, to attract the Heavenly Generating Influences from the Light and the Radical Humidity from the Moon and Stars at Night; which invisible powers the Fixt Alkali in the Lees, as a Universal Magnet, will most powerfully and perpetually Attract.

Observe now, that when it rains the Tub must be shut with its cover, when the Sun Shines, it remains shut also, and let the Sun Shine on the cover, which is a Natural Digestion.

At Night when it is clear and Serene, the Tub must be open, so that the Moon and the Stars act into the Lees. Let the Moon shine into the open Tub every Serene and Clean Night.

In this Manner you continue and do not move the Tub, but once a week, as the Lees evaporate during the Digestion in the Sunshine (whilst the tub is covered) you must fill it up again, and keep the Lees constantly at the same height of nearly 6 inches above the ashes. If you should fall short of Lees, you may fill up with Stale URINE, which I have often done (says the Count).

After you have digested in this Manner during 6 Months, Spring and Summer, and when the Sun has entered LIBRA you work is accomplished and you may then reap the Emolument of your Labour. Note also! What I have observed, when the Season is fine when fruit is abundant with an abundant Plentiful Harvest, your work will prosper in the same manner, because ONE AND THE SAME PRINCIPLE Nourishes and Supports all Things, as SENDIVOGIUS has observed! When you have a raw, cold or too wet Season, you will with the Gardener and Farmer have an Inferiour Crop.

The Sun having entered Libna, pour your clean Lees gently and carefully out of the Tub from the Ashes, leaving the thick or Drabby with the Sediment.

Pour these Lees into a small New Oak Cask or Tub and keep these by themselves, to be used next year the first Time. These Lees are infinitely superior to those that have never been used yet, as these are well impregnated with the Astral and Solar Influences and abound in Spiritual, Incorporneal GOLD and SILVER, which you are to notice. Pour the remainder of the Lees and Sediment all together into a clean Linne.

filtering Bag, sewed to a small Hoop and suspended, and filter the clean Lees from the Sediment in the Bag, until they run through clean, which pour to the first, to be kept for your next Years Operation.

The Alkali remaining with the sediment in the filtering Bag, as being a Hindrance to Copelling, must now be washed from the Ashes, by pouring clean Rain WATER through it 10, 12 or more times, until the WATER runs through the sediment tasteless. This done let the ashes dry partly in the Bag, and then finish the complete drying of them in a large glazed bason in a sand heat, stirring them now and then, until they are perfectly dry, the FIRE cannot hurt any thing here.

These Ashes must be Copelled with Lead, and there remains a good quantity of Goldish SILVER on the Test.

The Product is as follows:

A 100 lb. weight of Lead generally yields after 6 Months digestion 60 ounces of Goldish SILVER, which must be milled, cut in small shreds and dissolved in AQUA REGIA, and you find 50 ounces of fine GOLD then in of 24 Carat. If you chuse to continue the same operation, with the same ashes and the same Lees, NEXT SPRING AND SUMMER, filling up as necessity requires, and then after 18 Months digestion, taking the Tub indoors during the Winter, covering it with a thick blanket and straw, but do not suffer the sediment to become dry, and if you cope on Test then youredulcorated and dried Ashes, you will find a 120 or 130 Ounces of GOLDISH SILVER, which do contain at least a 100 Ounce of fine GOLD, proof in all Trials. (Tin ashes yield more GOLD, but less SILVER.) I collected the URINE from young Hail Country Men. To prepare my Lixivium for a 100 weight of Lead, I have used 25 lb. weight of the best Hungarian Pot Ash, (or CALX VIVA and potash EQUAL PARTS to make 25 lbs. Sea Salt is equally good.) Rock SALT, calcined TARTAR, VITRIOL of MARS, or VENUS EQUAL PARTS 12½ lbs.

In the room of the VITRIOL, I have sometimes used a fine deep Red Cnude Calaminaris in fine POWDER and found the same great effect, because CALAMINARIS is a Gradating Tinging Mineral EARTH. The CALX VIVA is not absolutely necessary, yet it has a Great Fixing Power, and is a fiery ingredient, which improves your Magnet, but I could not always get it fresh from the Kiln.

Signed (G. Von Dietrichstein).

(: This is the Process as MR. LA FOUNTAINE had it from his father at HANNOVER, in King George the 2nd Reign, and the old Gentleman had it from COUNT DIETRICHSTEIN. MR. LA FOUNTAINE in HANNOVER was at that time an Eminent Painter, I have seen some of his Works, which certainly were most capital performances, and although a Great Amateun' of Alchemy, yet his extensive business not only in GERMANY, but also in HUNGARIA and BOHEMIA did not permit him to attend to Chemical Labours, neventheless his son MR. FREDERIC LA FOUNTAIN (LA FOUNTAINE) has told me more than once, that his father had actually made THE MERCURIES OF ALL THE METALS and had in his Possession THE ANIMATED SOPHIC MERCURY OF PHILALETHA, but through want of time, involved with the world at the Counts of HANNOVER, PROAG and PRESBURG connected with the nobility, he could not finish the GREAT WORK, neventheless left 10,000 Pounds Sterling to his only Son, my Friend, who died since my return from the Voyage round the world in extreme indigence, aged 84 years. (His father lived to 90)

(S. Bacstrom)

(Observe VITRIOL of VENUS surpasses VITRIOL of MARS in colouring or Tinging quality in SULPHUR, but VITRIOL of MARS surpasses the VITRIOL of VENUS in Fixing Quality: In Fixt SALT vide BASILIUS and PARACELSUS. S.B.)

It would be good to take of each. EQUAL PARTS.

(If reasoning from Astronomical Truth will do here, then JUPITER receives the Solar Influences neanen and more copiously than SATURN).