THOUGHTS UPON JUGEL'S *"PARTICULAR PROCESS"* AT PAGE 202

The old way of making Butyrum ♁ ii was by mixing 1 part ♁ ii & 2 parts ♆ & distilling it over. According to the Process at p. 201, the running ☿ is left behind in a very pure state. It is important to know whether any of the ☿ is left behind, in or absorbed by the ♁ .

The modern way of making butyrum ♁ ii is by combining chlorine gas & ♁ . Combustion takes place & a bi-chloride ♁ ii results. See Ure's Dict. p. 173. At one place in this p. he says 1 part ♁ ii & 2 parts ♆ . At another place in this same p. he says 3 parts ♆ & 1 part of metallic ♁ are the equivalent proportions for making butyrum ♁ ii. Which is right?

What is said of the Process at p. 201 of this M.S. seems to indicate that no ☿ is left behind. If so, we could shorten Jugel's Process materially, in that case, the efficacy of it must chiefly depend upon the Hydrochloric ☩ . We must note that at p. 201, the butyrum is made of ♏♁♂ , & yet it is said not to be animated tho' at p. 202, directions are given to animate it with a subtle crocus ♂. There seems to be an inconsistence here. D. I. Wallichius seems to indicate that what is left in the first scoriae in the "yellow drops" is an ♁ ii coming from the ♁ ii sublimed in the neck of the ♋ . If so, this must be an ♁ or ☿ ♁ ii with which the animation is made, & yet in default of this ♁♁ ii, she substitutes the crocus ♂ is, as if the animation depended upon that alone.

Jugel, in his particular Process, at p. 203 says that this "blood red sublimate settling in the neck of the ♋ which contains the ♎ of ♁ , & is called ♁♁ ii. & etc. (Note- this double symbol means Butyrum anti.)

I think therefore there is some mistake in copying from D. I. Wallichius, & that the "or" is that mistake. It means that the Crocus ♂ is to be added to the ♀ or ☉ ♁ ii. Wherefore, if we were to make the ☉, ♀, or ☿ ♁ ii by any other process it would answer the same purpose. Any how the ☉ ♁ must be got somehow if not from the ♃ settling in the neck of the ♁.

Now, we can buy at the Chemists a Terchloride ♁ ii ready made. Fowle's Chemistry, p. 308, shows how this terchloride is made & says that the result is the same as when it is made by distilling metallic ♁ in ♃ with 2 1/2 times its weight of ☿. According to Wallichius & Jugel, the ☉ ♁ ii is ⏜med into the neck of the ♁ in the form of ♃ ♁ ii.

We may reasonably conclude that in the modern way of making the terchloride, the ☉ or ☿ ♁ ii is eliminated & neglected.

Wherefore, if we wish to avail ourselves of the modern Terchloride ♁ for Tugel's Particular Process, we must make the ☉ ♁ by some other means & add it to the Terchloride, & then pour that upon the Crocus ♂s.

We must bear in mind that at p. 207 of this M.S. I. I. Becher is quoted as saying that "the ☿ must be made per ▽, otherwise it does not volatilise the metals."

I have examined the various processes for making ⊖ or ☉ of ♁ of Basil Valentine & his Commentator, Kerkringius & some others, & it appears to me that they are all so troublesome & tedious to make, & moreover that the ☿ or terchloride ♁ ii would not be made with ▽, that it would be much safer to carry out the Process of Tugel, as at pp. 202 to 204 of this M.S., exactly as he has put it.

At the bottom of p. 5 of the French M.S. is a Process for making ☉ of ♁ which should be compared with that of Tugel. It varies in some

particulars. Tugel says nil about the proportion of ♄ & ☿ . The French M.S. gives it as 2 lbs. of ♄ to 1 lb. of ♆ , & also enters more into the details of the Process. It will be best to translate this from the French M.S., with omissions of unnecessary parts, so as to compare it with Tugel.

Take of the very best ♄ , cleaned ot its impurities, two lbs. powder it so fine that it passes thro' a silk sieve.

Next one lb. of your ☿ called by the Philosophers, dry ▽ . Powder this also & pass it thro' a silk sieve.

Mix the whole together, but take great care not to breathe the dust which is very dangerous. Put it into a glass cucurbite of which let two thirds remain empty, Lute exactly its receiver to it, & put it into a cast iron sand-pot, with two fingers breadth of ∴ much washed, dry & clean. Cover the cucurbite entirely with this same ∴ . Put the head on the top of it & lute all the joints. Let the lutes dry completely. Precipitate nothing in this work, & especially your △ , which must be managed with wisdom & predence by gradation.

There will first pass over a little phlegm, then a fuming spirit which is a Mercurial Spirit, very philosophical & secret.

Next, a thick & glutinous ♁ of a beautiful redness. In the neck of the ⚹ or cucurbite you will find a very red ♒ .

At last, make a great △ by gradation, so that the cucurbite may become red all over, & that for the space of four ♋ . Then let the △ die out of itself, & that the cucurbite has become quite cold.

Take out the ♁ which has mounted into the neck. Reduce it to a very fine ♄ & put it in a new cucurbite. Pour on it all the liquor which has distilled into the receiver. Close the cucurbite on the instant with

a well fitting head & lute it exactly. Let the lute be well dried before you begin. Then place the cucurbite upon  rightly i.e., to say with the head at the top, & give  of digestion continually  & during ten s. Then distill again in a  bath with the same regimen of & precautions as at the first time. In the first place, the spirit will pass over, next, an  red as blood which will swim upon its spirit. Let it get cold as before, & reiterate again twice as at the first, again to draw the  out of the neck of the  , again to reduce it to  & put it in a new , again to pour on it all the liquor which has passed into the receiver, again to digest it during ten & in a bath of . At the end of this time let it get cold & distill it in a bath of , the cucurbite being entirely covered with it, & by the same degrees of as at first. At the fourth & last distillation, the spirit will pass over more fiery, & the red will be of a glorious splendour.

The furnace & the being quite cooled, take off the lute very cleanly, & with a separating glass separate the white spirit from the red which floats on it. You must not delay in making this separation, because this spirit devours its successively, which is why it has been called the winged dragon. Note that each time you remove the lute from the recipient of the to recohobate the liquor in a new cucurbite, you must have a head all ready at hand, & which adjusts itself on the instant to the mouth of your receiver which you lute to it in the interval of your cohobation. The same precautions must be to have a head proportioned to the cucurbite each time for the digestion, & in all the course of this work not to fail in the preliminary precautions which it absolutely requires. One negligent omission is capable of causing you to lose the whole.

Preserve your Spirit & your ☌ each in their flask of double ○— with a stopper of the same well adjusted so that nothing can transpire, & that your flasks are at least a fourth part empty, or else this matter may cause the vessels to break.

As to the sand pot of your furnace, it must be proportioned to your cucurbite or ⧖ in such a sort that there may be two good fingers breadth of ∴ under the cucurbite, as much around & above it, observing all the precautions & attentions herein above recommended. In the operation there is no inconvenience to fear. I have had it done in my presence up to this point with all possible success, there being no danger at the second distillation, nor at the following that the cucurbite should break, but much at the first.

Note that all which is prescribed in this first operation must be religiously observed in the following ones with abbreviations to obviate repetitions.

Then the ☹ which remains in the cucurbite. Pound it very fine. Calcine it at an open △, till it becomes of a greyish white. Then, draw from it its ⊖ with a good distilled ⧺. Congeal, crystallise & dry the whole with a temperate heat. Clarify this ⊖ by means of many dissolutions, congealations, crystallisations & desiccations, reiterating, with rain ▽ distilled, & the whole at a gentle heat, till the ⊖ become crystalline, beautiful, soft & fusible like wax.

When we shall have operated well up to this point, we shall have between eight & ten ℥ of a fuming spirit, ℥ jß of ☌, & more than ℥ j of ⊖.

Put your above said ⊖ quite dry into a phial proportioned to its quantity. Pour over it ℥ ij of your red ☌ of ♃, & in a moment they will

re-unite, & become as black as pitch. Keep them two ♁ & ♀ in a gentle digestion in a bath of 🝗 , & they will pass through all the colours up to that of blood. Your phial must be well closed with its stopper most exactly luted.

On comparing this with the Process of Tugel at pp. 202 & 203, it is very clear that Tugel has only revealed a part of the process, purposely concealing it by way of blind to the uninitiated. He might well say 'mind you be well acquainted with chemical labours, or you will do nothing'. Failure would be certain, to attempt it with the small information he has given.

We have here given the Process from the French M.S. as starting from the same point as Tugel, viz. powdered ♁ & 🜹 . Both mention the ♁ ♁ ii found in the neck of the 🝭 as being absolutely necessary.

Tugel then gives a Process for dissolving ♀ Sulphas, or ♂ sulphas in 🜆 or Hydrochloric 🜊 , distilling the solvent off & which leaves a delicate blood red dry Crocus which is to be added to the product of the powdered ♁ & 🜹 & distilled & cohobated repeatedly till it comes over as red as blood. It then, according to Tugel becomes a gradating ∴ or ☿ animatus which is a Particular for gradating ☽ cornua during 6 weeks gentle digestion into pure ☉ .

The French M.S. gives a Process for dissolving the ♀ sulphas much more elaborate than this of Tugel's, & it is placed before the preparation of ♁ & 🜹 . I did not translate this first part here, because this Process in the French M.S. is not for a Particular, but for the Magnum Opus given by Basil Valentine & also by Mynsicht, which is too elaborate for a beginner, & too risky, for it would require several ℥ s. of ☉ at a cost of perhaps £ 25, & a beginner would be sure to fail in some part of the process, & lose it all.

It may be said that Tugel fails to give sufficient details of the first part of the Process, & therefore is likely to fail in giving sufficient details of the second part. Upon reading both parts over most carefully, it does not appear to me to apply equally, tho' he omits to say how long it is to be digested. We can supply this omission by analogy from other Processes. It must be borne in mind that Tugels is only a Particular & perhaps does not require such a careful preparation of the ♀ sulph. or ♂ sulph.

On the whole I think I shall venture to try it with the first part according to the French M.S. & the 2nd. part according to Tugel.