<page>108v</page>

<image>http://gallica.bnf.fr/ark:/12148/btv1b10500001g/f222.image</image>

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<ab>that way one tempers it &amp; reducing it into small balls, <x>one</x> purges it of <m>impurities</m> <x>by</x> then putting it on to cook cleanly in a vessel of earth<x>enware</x> in a furnace like those in which pots <x>are made</x> and one leaves it there to the point at which pots would be fired. After one tempers it more with <m>essence of sal ammoniac</m> &amp; boiling it very strongly and emptying the murky <m>water</m> &amp; putting it in a separate vessel straight after put back the same <m>water</m> over it &amp; one boils &amp; one puts back the murky <m>water</m> again with the other. And one does this therefore until that which is there has passed away. In this way one purges &amp; purifies &amp; makes it a very fine &amp; malleable <x>matter</x>. After one has taken away the <m>water</m> by tilting <x>it</x> or with a <m>sponge</m>, one takes the residue and dries it. Then moistening it with the aforementioned <m>water</m> the way one did with the other <m>sand</m>, one uses it in a frame or if it shrinks <x>this</x> is a sign that it is not fired enough &amp; needs to be fired more. This one is proper for molding all <m>metal</m> and especially <m>gold</m> &amp; <m>silver</m> and the more it is used the better it is. One should put <m>alum</m> which you have cast of <m>lead</m> or <m>tin</m> separately because it makes <m>gold</m> sour if you cast it there.</ab>

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<head><x><m>Stone alum</m></x></head>

<ab><m>Stone alum</m> must be reheated in a pot covered with a <m>tile</m> over a good <m>charcoal</m> fire so that the impurities which might be in it <x>are</x> burned with that which does not burn. This is done either in the <pro>goldsmith</pro> forge surrounded by bricks or in a little oven vented to the fusion fire such that the pot stays red for a quarter of an hour. This is more to purify it than for anything else. It becomes reddish on top &amp; the inside remains white &amp; dries best this way.<figure>#</figure></ab>

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<margin>left-middle</margin>  
<figure>#</figure> Once your <m>stone alum</m> is cooled down, crush it in a mortar, then grind it more finely on <m>marble</m>. And this makes it into very fine wooly dust that gives binding to <m>sand</m> without burning like all other things. <x>This is</x> a beautiful invention. Crush it on the mortar to being careful to keep the grindings together because the dust flying can get down your collar or on your face which can have very grave consequences. Put a little each time in the mortar to avoid the dust flying. It is best to grind therefore with the pestle trained on the mortar rather than on the <m>marble</m> where it spreads &amp; on the mortar it gathers <x>the dust</x> from all sides and renders it very fine &amp; sweet to the touch.</ab>

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<id>p108v\_a2</id>  
<head><x><m>Clay</m></x></head>

<ab><m>Clay</m> used to surround molds, should be very fat &amp; malleable, and should not be used for anything else except to make the contour of the molds. Therefore one should only chose that which is very fat and beat it very well &amp; soak it moderately with <m>water</m> &amp; have it in a pit or <m>earthenware</m> pot and make good holes with a stick with which one replenishes it with <m>water</m> to keep it always fresh &amp; soft and ready to use when needed.</ab>

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