<page>118v</page>

<image>http://gallica.bnf.fr/ark:/12148/btv1b10500001g/f242.item</image>

<div>  
<id>p118v\_1</id>

<head>Casting in <tl>frames</tl></head>

<ab>The same sand that was used in the reheated <fr>noyaulx</fr>, composed, as is said, of <m>plaster</m>, <m>brick</m> &amp; <m><fr>alum de plume</fr></m> , is excellent for casting in <tl>frames</tl>, and I have experienced it thus: I crushed the pieces which had come out of <tl>molds <fr>en noyau</fr></tl> in a <tl>mortar</tl>, dragging the <tl>pestle</tl>, because this sand is very <fr>doulx</fr>. I did not pass it through the <tl>sieve</tl>, because the <m><fr>alum de plume</fr></m> mixed throughout, which binds it, would not pass; but I ground finely upon <tl><m>marble</m></tl> what seemed to me too coarse. And having prepared it thus, I moistened it with <m>sal ammoniac water</m>, made of <m>sal ammoniac</m>, <ms>as much as the size of two <pa>walnuts</pa></ms>, in a <tl>bottle of <m>common water</m></tl>, the same size as a <tl>bottle in which one boils <m>tisane</m></tl>, or in a <tl>good pot of <m>water</m></tl> so that you find <del><fr>d</fr></del> the <m>water moderately salty</m>. I mixed throughout <del><m>water</m> of</del> <ms>half a <m>glass</m> </ms> of <m>sal ammoniac</m>, <del>two othe</del> two <del><fr>au t</fr></del> <tl><ms><m>silver</m> spoonfuls</ms></tl> of <m><fr>eau-de-vie</fr></m>. <del><fr>J’a</fr></del> Having thus moistened the sand in such a way that it took hold well, nevertheless coming apart easily, I sprinkled my medal with <m>pulverized charcoal</m> with a <tl>file</tl>, to rid it of <m>oil</m>, and all other <m>grease</m>, that are necessary to avoid, for they <del>make</del> would hinder a good release. I blew on my medal &amp; molded it, <add>and the female part of the <tl>frame</tl> once filled</add>, I marked &amp; made a line on the reverse <del>of the</del> &amp; edge of the medal, &amp; on the nearby sand as well. In order that the second <tl>frame</tl> <del><fr>s’em</fr></del> take the imprint thereupon to denote the place for making the cast, <del>once filled</del> <del>the female part of the box mold once filled</del> I uncovered the outline of the medal and pounced the whole side with <m>pulverized charcoal</m>, and then filled the male part with sand. <del>Once mad</del> I separated the <tl>frame</tl> and did not hit the corners of the <del><fr>d</fr></del> medal to make it release, because that knocks the sand &amp; makes it <del><fr>esp</fr></del> crumble. Rather I struck the back of the <tl>frame</tl>, retaining the obverse of the medal on the bottom, and it molded very neatly. If it had not stripped thus, I would have waited to remove it until the <tl>frames</tl> had been dried out over fire. I lit <del>the</del> a row of charcoals between two little <tl>trivets of <m>iron</m></tl> in the form that you see, and put the back <del>the</del> &amp; reverse of the <tl>frames</tl> thereupon, &amp; the imprint on top, because in this way, they dry out gently. And if, by chance, they should crack from being too moistened, it is on the back,which <del><fr>pr</fr></del> takes the harshest fire, &amp; the imprint remains safe &amp; <corr>whole</corr>.</ab>

<ab><margin>left-top</margin>  
For the best, one needs to reheat the sand used in the <fr>noyau</fr> before using it in the <tl>frames</tl>, until it no longer contracts.</ab><ab>

<margin>left-bottom</margin><figure>

<id>fig\_p118v\_1</id>

<link><https://drive.google.com/open?id=0B9-oNrvWdlO5Rm5qaUJCNWVFWlk></link>

</figure></ab><cont/>

</div>

<div>

<margin>left-top</margin>

<head>Excellent sand</head>

<ab>Take a little of the same sand, the finest that you can, to cover the medal with. <figure/></ab>

<ab>  
<margin>left-middle</margin>  
For medals &amp; flat things, the true heat of <m>lead</m> &amp; <m>tin</m> is when it is melted gently.</ab>

<ab>  
<margin>left-middle</margin>  
Note that I filled the <tl>frame</tl> before pressing it, and did not hit it at all, but rather pressed it only with the strength of my <tl><bp>hands</bp></tl>, because hitting it makes it go awry. Secure your <tl>frame</tl> that it does not shift at all, &amp; if you put some moistened sand under it, it will only hold in place more firmly.</ab>

<ab>  
<margin>left-bottom</margin>  
Make the gate so that it is not too thick, so as not to overcharge the medal, but wide enough near the medal that it embraces a third part. Do not forget the vents.</ab>

<ab>  
<margin>left-bottom</margin>  
To dry <tl>frames</tl> is to rid them of humidity, so that they no longer smoke, once nevertheless having been very hot.</ab>

<ab>  
<margin>left-bottom</margin>  
<df><fr>Recuire</fr></df> is to redden the frame, which is done for <m>gold</m> and for <m>silver</m>.</ab>

</div>