<page>115v</page>

<image>http://gallica.bnf.fr/ark:/12148/btv1b10500001g/f236.image</image>

<div>  
<id>p115v\_1</id>  
<head><m>Tin</m> casting</head>

<ab>If the <m>herbage</m> or <m>flower</m> you want to cast is delicate and fine, <m>tin</m> must exceed <m>lead</m> in your mixture; on the contrary, if it the flower or herbage is thick, you must add into your mixture more <m>lead</m> than <m>tin</m>. For a fine thing<m>,</m> put to the <m>tin</m> not quite the fourth part of <m>lead</m>. Your mold must not be too hot, so you can hold it with your hand when you cast. Your alloyed <m>tin</m> must be very hot and almost red for casting, and that way it will enter all the small parts of the mold. Otherwise, your tin will cool down before reaching the thin parts of your <m>herbage</m>. Do not forget to mix a little <m>bismuth</m> in your mixture; that way, your tin will run better and be firmer.</ab>

<ab>  
<margin>left-top</margin>  
With your <m>lead</m> allied with <m>tin</m>, or <m>tin</m> allied with <m>lead</m>, you can add a very little quantity of <m>bismuth</m> and it will look silvery. But do not put too much, because if hardens the matter and makes it sour, and if your work on fine things -- like legs and similar things -- it will not cast properly.</ab>

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<div>  
<id>p115v\_2</id>  
<head>Giving ventilation to your mold</head>

<ab>If your herbage is very fine, in addition to vents, you can pass a thread through the <m>clay</m> contour instead of casting with a needle, and ensure that it also passes through the herbage. As the thread burns like the herbage, the hole will remain, which will give air and wind to help clean.</ab>

<ab>  
<margin>left-middle</margin>  
Do not remove your annealed molds out of the <m>fire</m> before they have cooled down by themselves. Also make sure that your very hot molds do not come into contact with wind or coldness otherwise they would burst. Do not reheat your molds before they are drained and firm again, otherwise they would cast before the vent holes are made and the clamps are fixed.</ab>

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<div>  
<id>p115v\_3</id>  
<head>Annealing core molds</head>

<ab>After your molds have their cast vents and clamps, fix the clamps as above mentioned. Then make a round, made of <m>bricks</m>, at the edge of your forge, or in a clean place. Fill this round with big, half-lighted pieces of <m>charcoal</m>. Put your molds on the round, and leave it during half an hour, that way it will gently heat up and not all at once. Finally, when <m>coals</m> start being white, add big half-lighted big pieces of <m>charcoal</m> and blow with your small bellows until hot. Do as such, slowly, until the molds redden inside and out. If you want to cast a herbage or an animal which are difficult to strip, and you need to burn what is in the mold, look into the cast and see if it is molds are quite red and inflamed inside; this will be a sign that they are properly annealed. If it is not so, increase the heat and keep at it until it becomes thus. If there is nothing inside the mold to be burnt, this heat is good for <m>tin</m> casting. The molds for <m>tin</m> casting are much better annealed in a reverberatory furnace.</ab>

<x>image</x>

<ab>  
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<figure>

<id>fig\_p115v\_1</id>

<link><https://drive.google.com/open?id=0B9-oNrvWdlO5dHVja3NnV0dmMlk></link>

</figure>  
Do not heat too much at first otherwise your molds could break</ab>

<ab>  
<margin>left-bottom</margin>  
You know that your molds are annealed enough if the hole in the cast is red, on the contrary if the hole is black the molds are not annealed enough.</ab>

<ab>  
<margin>left-bottom</margin>  
If you want to cast <m>silver</m>, do not anneal twice, and if something stays in the mold and that must be burnt because no good <x>…</x></ab>

<cont/>

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