<page>137r</page>

<image><http://gallica.bnf.fr/ark:/12148/btv1b10500001g/f279.image></image>

<div>

<id>p137r\_1</id>

<head>Casting <m>red copper</m></head>

<ab>Pure cauldron <m>red copper</m>, or <m>copper</m> of any other small works, is good to cast. To make it runny, add some <m>sal ammoniac</m> to it, and when you are about to cast, add a little bit of <m>fine tin</m>. One must cast the <m>copper</m> very hot into the mold, so that it is burning and very red, like <m>gold</m>, <m>silver</m>, <m>latten</m>, and <m>metal</m>. You will know that it is hot enough when it is clear and shining like a newly polished <m>steel mirror</m>, or like <m>melted silver</m>. Protect it from wind so that it doesn't cool down too soon. Cover your cast with tow in order to prevent it from cooling down. <m>Red copper</m> is cleaner than <m>latten</m>, which smokes a lot, which prevents the metal from running. I have moulded it as a noyau very neatly, and as thin as a piece of <m>paper</m>. It must be very hot, white and shining like melted <m>silver</m>, or a mirror. I have moulded it as a noyau with the same <m>sand</m> mentioned above.</ab>

<ab>

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It takes more time to melt <m>copper</m> and <m>latten</m> than any other metals, even <m>red copper</m>. It will run and will comes out well if you cast it very hot, and as thin as <m>water</m>.</ab>

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Remove your mold from the fire, and set it into embers, which should fill a pot or vessel.</ab>

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<id>p137r\_2</id>

<head><m>Huile tingente</m> to make metal runny</head>

<ab>Take some <m>mercury</m>, some real <m>sublimate of Venice</m>, and not <m>sublimate of arsenic</m>, <m>aes ustum</m> a poix, <m>sal ammoniac</m>, a poix. Ground everything separately, then blend them together in a <m>glass</m> bottle, and put it on warm ashes. You will see that everything melts like <m>wax</m>, and will have bright colors. Leave to set, add a small quantity of this mixture on every metal, it will run marvelously.</ab>

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<pro>Foundry workers</pro> who make large casts to mold statues, clean the dirt from these molds with <m>calamine</m>, and a lot of <m>sal ammoniac</m> in order to make moulds clear and neat. When they want to cast they add a lot of <m>tin</m>. Dampness and cold could spoil their works, that is the reason why even a small source of <m>water</m> in the hole can damage the whole thing.</ab>

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<id>p137r\_3</id>

<head>Clamps</head>

<ab>To make clamps use flat tongs made from wire, which is reheated and bent, and hammered on anvil. Since those clamps are thinner, they burn more easily, being used in reheated molds. So use new clamps.</ab>

<figure>

<id>fig\_p137r\_1</id>

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<link><https://drive.google.com/open?id=0B9-oNrvWdlO5aG5XMHdYTTYzbzA></link>

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