<page>021r</page>

<image>http://gallica.bnf.fr/ark:/12148/btv1b10500001g/f47.image</image>

<div>

<id>p021r\_1</id>

<head><pro>Cannoneer</pro></head>

<ab>As for small cannons that are not loaded with a linstock, one loads them with <m>powder</m> all the way up to the touch hole, which is placed at a point on the cannon that indicates the appropriate measure.</ab>

<ab>To point a cannon, that is to say to fix the target, one needs to set the sights, in other words, take aim, from the sides rather than the top, that is to say the top of the cannon. By taking aim from the top, you can find the line of fire that leads to your target, but you will not find out if the cannon leans more to one side or the other. Then take your sights first from one side and then from the other and adjust your cannon to point at your intended target. Then set your sights from the top of the breech, which will be quickly done. Next, use your discretion to lower the cannon a little if you are within firing range, because the force of the <m>powder</m> blast usually raises the barrel. If you are outside of the range in which the cannon can fire in a direct line, you should consider that the weight of the cannonball will lower the barrel.</ab></div>

<div>

<id>p021r\_2</id>

<head>Shooting a cannon at night</head>

<ab>Some keep their cannons loaded <del>and</del>in the daylight hours. Then, so that the <pro>cannoneer</pro> can shoot into the breach where the besieged are perhaps reparing <x>the breach</x>, the assailants raise a false alarm so that the besieged throw torches or <m>artificial fire</m> into the moats or around the breach, light by which the <pro>cannoneer</pro> can take aim. Sometimes by using the reflection off <tl>mirrors</tl> or <tl>jars</tl> full of <m>water</m>, the assailants can redirect the light onto the breach. The method that you know, using a sundial and <m>lead</m> line, is also very good. Others use strong <m>iron</m> pegs to fix two or three planks onto a platform of <m>wood</m> made to carry a battery of cannon, and leave some notches empty where the cannon wheels can pass perfectly. And with this method you will always put the cannon in such a position so that it doesn't tilt to the right or the left. And so that it isn't too high or low when you fire the following day, you place a marker that is well fixed in the ground, that just touches the bottom edge of the canon after it has been aimed and adjusted for firing.</ab>

<ab><margin>left-bottom</margin>If the platform, the wheels or wedge parts break or come loose, this invention holds no advantage.</ab>

<cont/>

</div>