<page>023r</page>

<image>http://gallica.bnf.fr/ark:/12148/btv1b10500001g/f51.image</image>

<div>

<id>p023r\_1</id>

<ab>Such a petard is made which weighs three <ms>quintals</ms>, carries a cannonball flat on the side on which it must exit &amp; round on the inside of the cannon, as if it were a cannon ball cut in half. It is two pans long. It is charged with xxv <ms>lb</ms> of powder for <del>at</del> it needs to be full up to the mouth &amp; it needs to break. It does not have a different thickness at the breech than at the mouth &amp; is all of one piece. Its substance needs to be better than that of pieces, &amp; for 4 <ms>quintals</ms> of fine <m>copper</m> there ought to be only one quintal of <m>metal</m> in order that it holds the blast, &amp;, breaking with more force, has a greater effect. It is for putting against a door with a <tl>large <m>iron</m> cross</tl> in front of the ball, and <del><fr>s</fr></del> once loaded, it needs to be covered with a well-sewn rough <m>canvas</m> which should be smeared all over with <m>turpentine</m>. It needs to have four handles, made while it is founded, for thus it is easier to place. The <m>iron</m> cross is joined to the mouth with the <m>canvas</m> with which it is covered. <del>To place it, it</del> The handles must be kept at the edge of its muzzle, as you see. To place it, one needs three or four <m>iron</m> <tl>pegs</tl> one <fr><ms>pan</ms></fr> long <add>&amp; as thick as a <ms><bp>finger</bp></ms></add> which should have their point like a <del><tl>wimble</tl></del> <add><tl>gimlet</tl>, &amp; the entire leg as a screw, like an auger</add>, &amp; a ring on the other end to turn them with a short <tl>stick</tl> which has play within the <tl>ring</tl>. And the <tl>pegs</tl> are placed in the door <del>but</del> not straight <del>but</del> for they would not have any strength, but at angle as if <add>you</add> wanted to fix them towards the middle of the <m>petard</m>, and to do this, the hole of the handles needs to be quite large. In that way, the firing <m>petard</m> pushes the <tl>pegs</tl> along &amp; across the door &amp; makes more of a breach. Once it is placed, you need to have <m>buckram</m> sausage @<comment>c\_023r\_01</comment> made in this manner: take eight or nine <fr><ms>canes</ms></fr> of <fr><m>buckram</m></fr> selvedge or more if the ditch is larger, and let the strip be four or five <ms><bp>fingers</bp></ms> wide. Have it well sewn in such a way that it is like a gut through which <del><fr>l</fr></del> a <tl>stick</tl> as thick as a <ms><bp>finger</bp></ms> can pass. Fill it completely with good</ab>

<cont/>

<ab>

<margin>left-middle</margin>

This one is for putting below an undermined tower with the muzzle pointing up. One makes two large <m>iron</m> <tl>rings</tl> &amp; with a <tl>bar</tl> or two, four men carry it. They are also used for putting in breaches but here one needs only half a charge, namely x <ms>lb</ms>, &amp; to fill it with <m>pebbles</m> &amp; <m>cart pebbles</m></ab>.

<figure>

<id>fig\_p023r\_1</id>

<margin>left-middle</margin>

<link><https://drive.google.com/open?id=0B9-oNrvWdlO5RzRNM284T3Q0eTQ></link>

</figure>

<ab>

<margin>left-middle</margin>

One needs to cover it entirely with <m>canvas</m> <m>waxed</m> &amp; rubbed with <m>turpentine</m> &amp; <m>combustible things</m>. This cover is made in order to secure the ball, such that it does not fall and in order that when the fire takes to the cover, the <m>primer powder</m> does not fail. Precisely at the fuse, you will need to put in a good quantity of <m>primer powder</m>. Some put a cross of <m>iron</m> on the ball which protrudes from the mouth of the <m>mortar</m> by two <fr><ms>pans</ms></fr>. Others only put the ball.</ab>

</div>