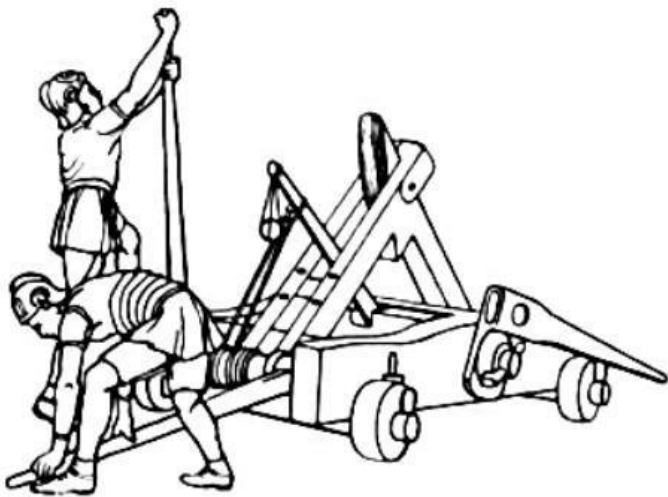


Reliable Romans: make a Roman-inspired catapult

Drawing below: Public Domain, <https://commons.wikimedia.org/w/index.php?curid=372928>



A catapult is a ballistic device used to launch a projectile a great distance without the aid of explosive devices. The Greek Dionysius the Elder of Syracuse, who was looking to develop a new type of weapon, invented the catapult about 400 BCE. It became a key weapon in warfare and remained so until the end of medieval times.

The Roman Army often used catapults in sieges – a siege is a military blockade of a settlement, city or fortress with the intent of conquering. The term comes from the word **sedere**, Latin for 'to sit' – a siege often

involved lots of sitting and waiting for the settlement, city or fortress to surrender.

A small catapult often used by the Romans was the **onager**, which derived its name from the kicking action of the machine as it threw stones in the air, similar to the hooves of the wild ass, the **onager**, a native of the eastern part of the Empire.

The **onager** consisted of a large frame placed on the ground to whose front end a vertical frame of solid timber was rigidly fixed. The projectile (large stone) was attached to a sling or put in the cup shaped tip of the arm. To fire it, the arm was forced (winched) down and then suddenly released, and the projectile would be hurled forward. The arm would then be caught by a padded beam or bed, when it could be winched back again to be reloaded. The projectiles (large stones) were sometimes covered with a combustible substance and set alight before firing!

What you need: five small lolly sticks, one wooden teaspoon, four small/medium elastic bands, felt tip pens or paint (optional), and 2-4 squares of tissue paper (approximately 5cm x 5cm).

To make a Roman-inspired catapult:



1. Stack four small lolly sticks on top of each other and secure in place with an elastic band at each end. Put to one side.
2. Put the wooden spoon directly on top of the last remaining lolly stick and secure the spoon to the lolly stick with an elastic band at the base of the spoon.
3. Put the stack of lolly sticks between the spoon and lolly stick – please see picture below, left.
4. With an elastic band secure the spoon to the stack using a cross pattern.
5. Optional: Colour in with felt tip pens or paint. If using paint, leave to dry.
6. Make projectiles out of scrunched up squares of tissue paper.
7. On a flat surface, press your spoon down and load with your tissue projectile.
8. Let it go! Watch the projectile arc and then fall just as a real catapult would have done.

You can play games to see who can send their projectile the highest or the furthest.

Use only soft projectiles such tissue or tissue paper and do not aim a projectile at anyone.