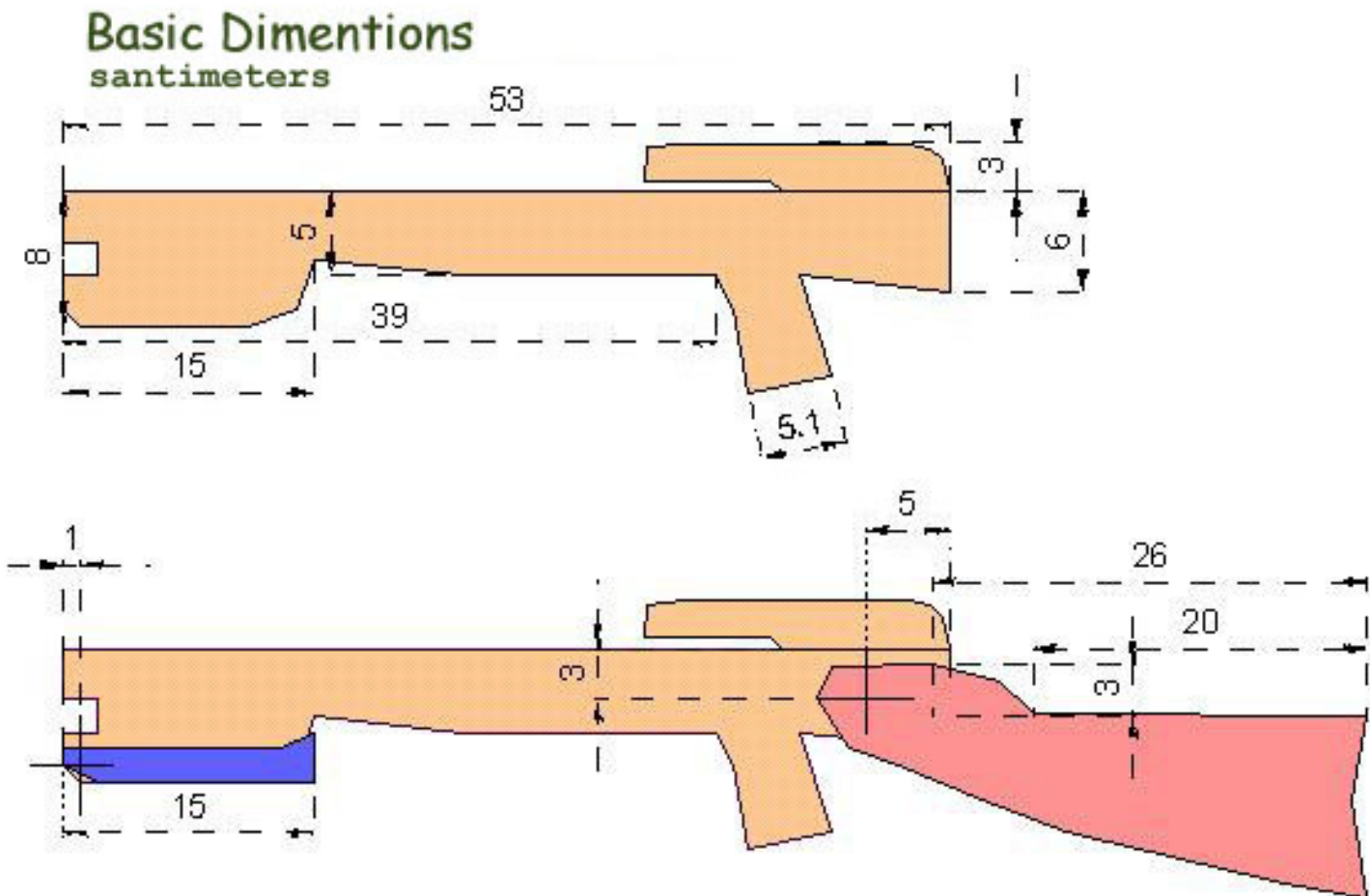


CROSSBOW CONSTRUCTION

Part One - Basic Dimentions.



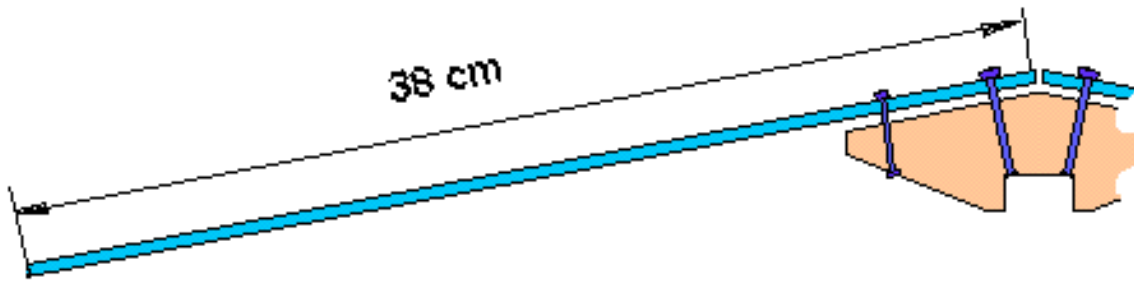
Material used for stock is the birch.

Part Two - The Prod.

Well, not much to say about it. The best matereal is the fiberglass, but I have not found a suitable piece of it. So, the first bow was made from some unknown plastic, found in the garage. It was 65 cm long and has about 37 kg draw weight. All was OK for some weeks, but then it got a terrible string follow. My current prod is made the next way: I took an old slalom ski, sawed back part of it, then cut it lengthwise. Thus I got limbs and mounted them on central section with long bolts. So I got a prod wich is longer than normal, but it works well , and does not have any string follow. It's draw weight is about 43 kg.

Alternatively commercially produced prods can be purchased from several manufactures at a

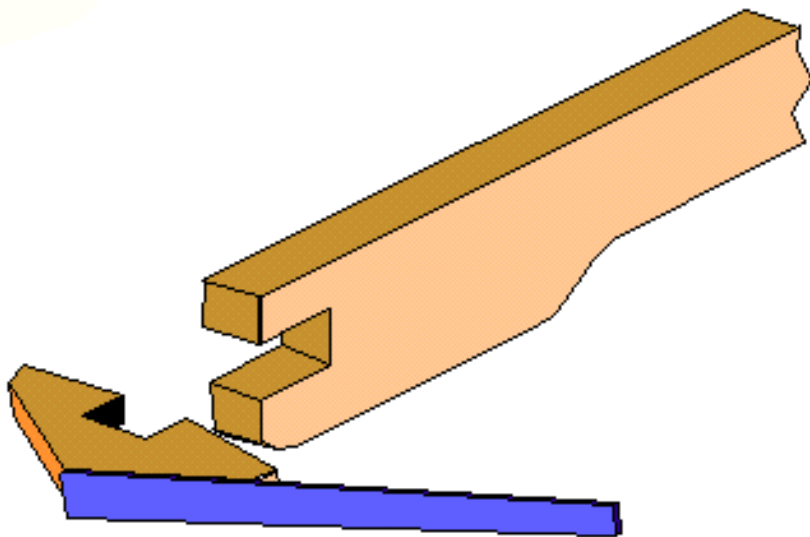
fraction of the cost of finished crossbows. One such supplier is: Alchem Incorporated, 314 East 195th St. Euclid, Ohio 44119 (216) 313-8674 alchem@en.com



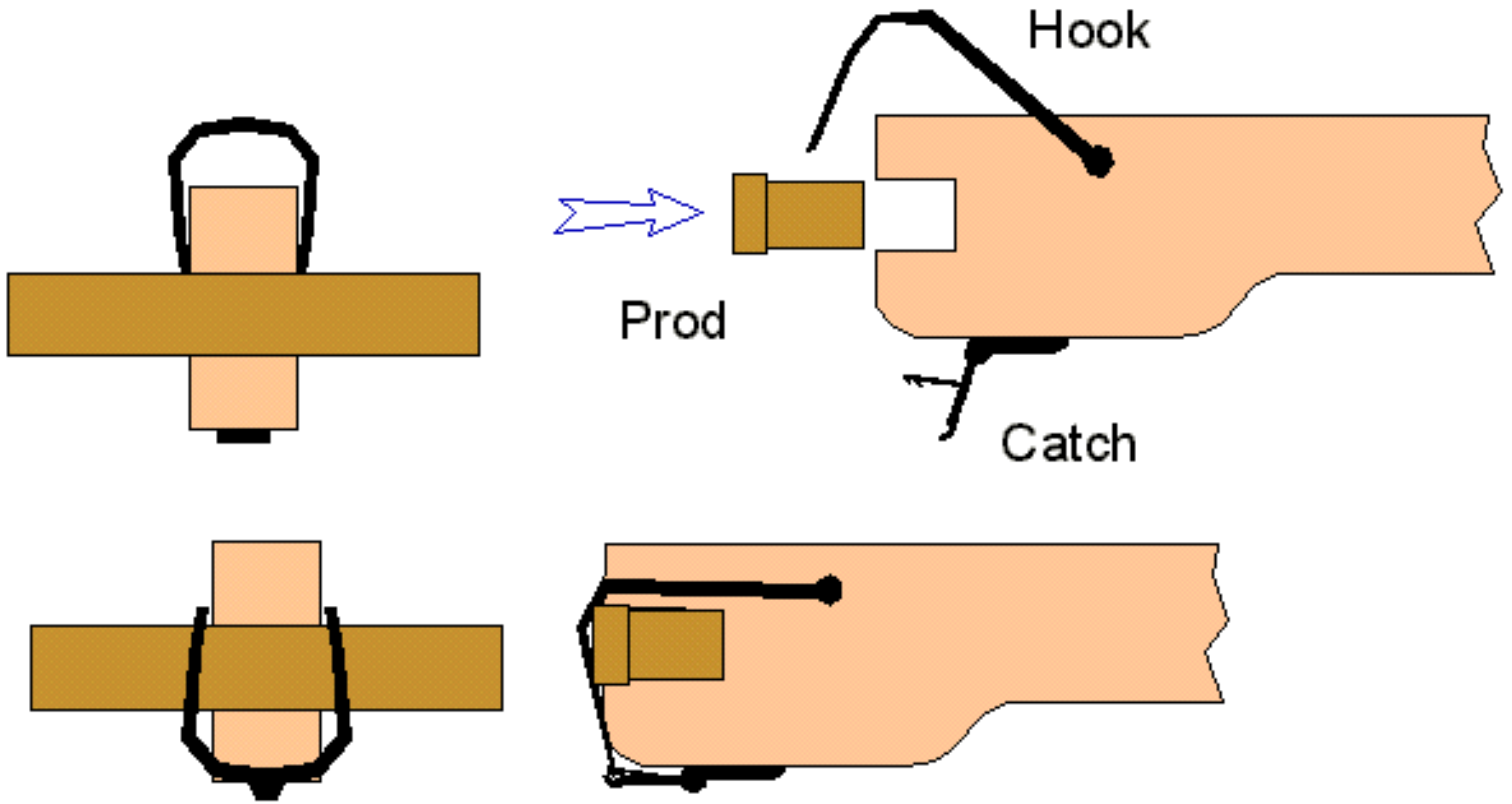
Part Three - Bow Irons and assembling.

Of course, I wanted to make a prod removable. So, I took a catch from old-fashioned ski binding and used a resilient hook. When the catch is locked on the hook, the hook folds and clasps the prod to the stock. Notches on the stock and on the prod fit into each other and the prod is reliably fastened into place.

Here is the general scheme of what it looks like



And here is a more detailed drawing

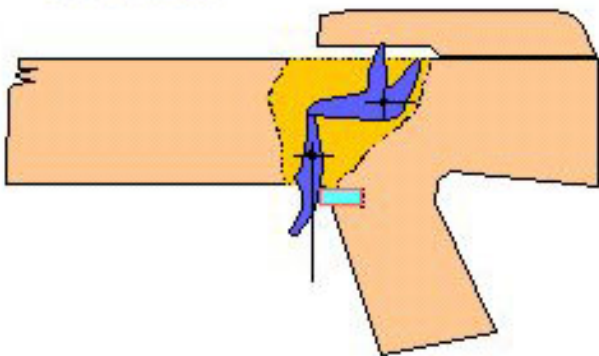


Part Four - release mechanism.

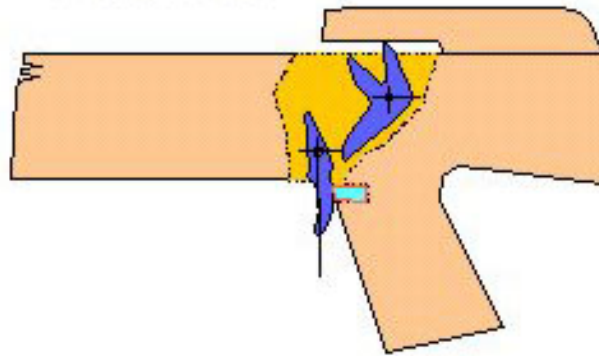
I made a simple mechanism, containing only two steel details, including a spring.

Release mechanism action

Cocked



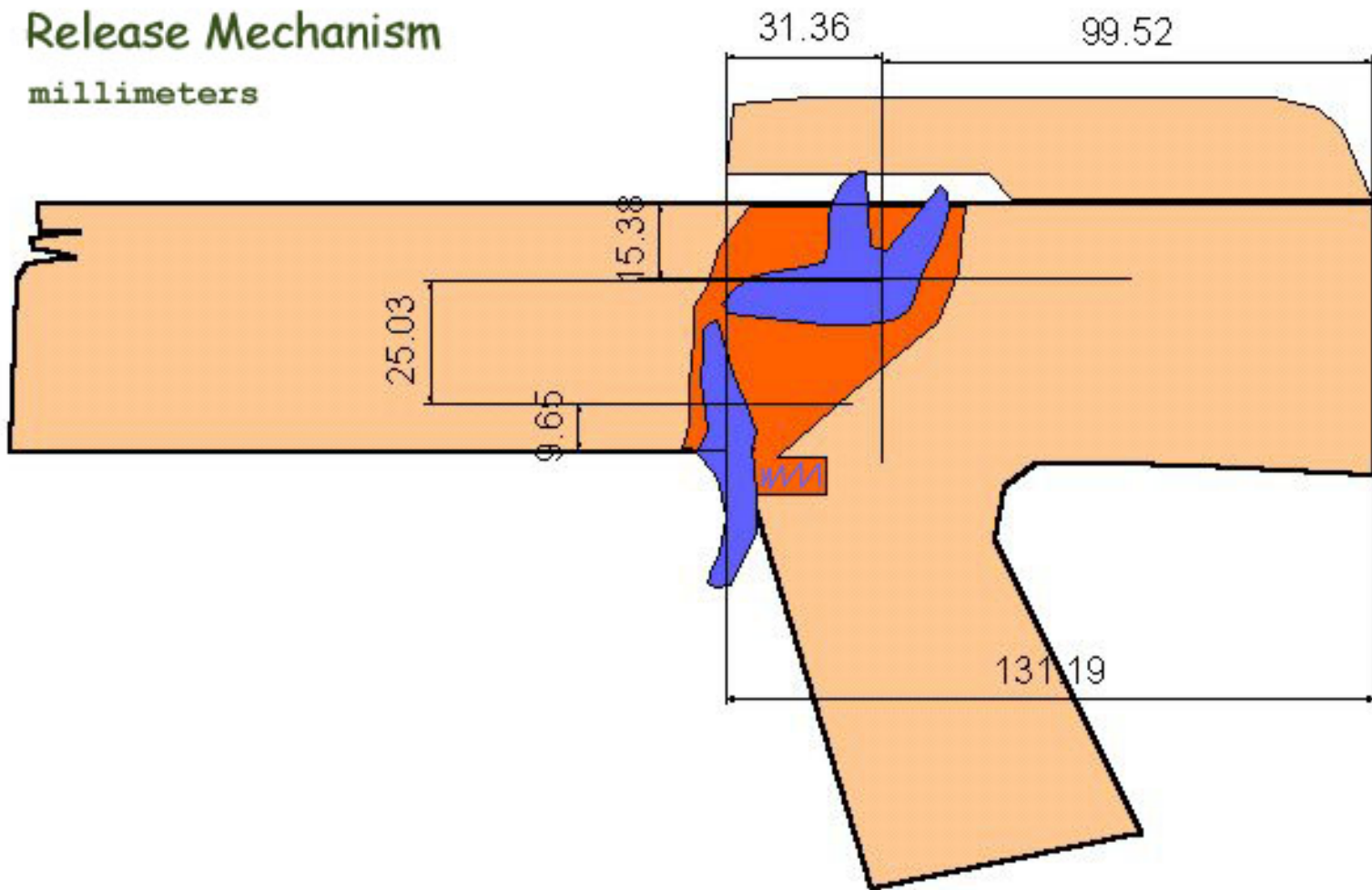
Released



I hope pictures show, how it works.

Release Mechanism

millimeters



Here are release mechanism dimentions

Release mechanism dimentions

millimeters

