



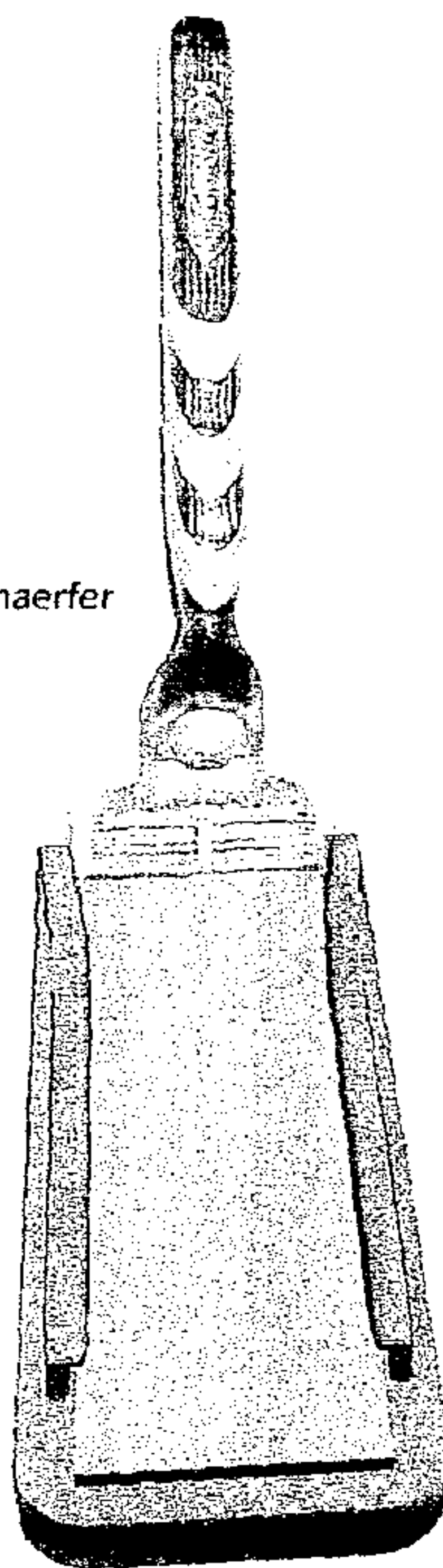
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(54) Titre : DISPOSITIF D'AIGUISAGE DE LAME DE RASOIR COMPORTANT DES RAILS DE GUIDAGE
 (54) Title: NEW RAZOR-BLADE SHARPENER

Fig. 1b

AA
 Rasierklingschaerfer
 im Gebrauch



AA... Razor blade sharpener in use

(57) **Abrégé/Abstract:**

The invention relates to a razor blade sharpener, which is manually operated and by means of which razor blades can be sharpened as needed in an easy, controlled, and even manner in order to reduce razor blade consumption. The construction is designed in such a way that the lateral guides push the blades evenly onto a padded lining made of plastic or leather.

ABSTRACT

The invention relates to a razor blade sharpener, which is manually operated and by means of which razor blades can be sharpened as needed in an easy, controlled, and even manner in order to reduce razor blade consumption. The construction is designed in such a way that the lateral guides push the blades evenly onto a padded lining made of plastic or leather.

New Razor-blade Sharpener

The invention at hand pertains to a new Razor-blade Sharpener with whom one can sharpen Razor-blades over and over and herewith extend the life of the blade significantly. The device is attachable to a holder of a Razor that is already available in the market and that contains also the spare blades. The Razor the spare blades and the Razor-blade Sharpener are compact all in one place.

Generally, Razor-blades can't be used more then 3-6 times before they start to scratch unpleasantly the skin. They now have to be replaced or sharpened with our Razor-blade Sharpener.

This invention has the purpose to reduce the consume of Razor-blades drastically from approximately 70 blades a year to 2 blades a year and at a price of almost 4.50 \$ a piece leads to significant savings. The sharpening process takes maximum a second and can be repeated any time during shaving.

There is a Razor-blade Sharpener known in a US Patent write up 5,036,731, it contains a Sharpening portion, a container to securely store the sharpening portion, a glide surface so that the blade can be moved back and forth. The sharpening surface consists of a glas plate that is secured over floor plate of the device. The Razor-blade Sharpening device requires a set angle otherwise it gets stuck on the surface. Also this Razor-blade Sharpening device is sensitive for storing bacteria and cant be properly cleaned.

In contrast, the use of the Razor-blade Sharpener moves only in one direction and the move is guided with two rails that are arranged conically to easy guide the blade head into the rails and over the sharpening surface. This process also guaranties a consistent pressure applied to the blades and also protects the glide strips from being quickly worn out. This makes the usage easy for everyone. The sharpening surface is visible and can easily be washed or deinfected.

In the W02007/079756 is a description about a Razor-blade Sharpening device where the user has to move over the sharpening device without any controlled movement. It can easily be that he/she slips and damages the razor-blade in the process. Also with this device it is possible that unwanted bacteria deposit themselves in the device.

With the newly invented Razor-blade Sharpener the blade head is laid on the surface, then the blade

head is pushed securely between two rails to the other side and with consistent pressure will be sharpened along the way. The cleaning of the device is very easy as well.

In regards of the British Patent 9322550 the user is required to alter the pressure and besides that, newer multi-blades can no longer be sharpened with this device.

As a contrast to the Razor-blade Sharpener that is the content of this invention, the pressure to the blades is consistent and comes from the surface that is flexible and the rails that guide the razor-blade head. As the blade head is pushed through the device, the surface deforms to touch the blades but only gentle pressure is applied to the glide surfaces of the blade so that they last a long time. This guaranties always the same results for the lifetime of the Razor-blade head.

The invention of the US Patent 2,043957 is requiring a special type of blades that did not serve to shave but rather blades that remove paint. Modern razor blades can't be sharpened with this device, because form and shape of new blades have changed over the years.

The Razor-blade Sharpener is designed exclusively for modern Razor-blades and the sharpening process does not happen in a box that has to be shaken.

As already mentioned, the new Razor-blade Sharpener solves the problem of excessive use of blades and reduces this to one or two per annum. Would the glide surface hold longer, the blade could be used longer as well. This represents a significant savings for the consumer and also helps the environment to a certain extend.

Example 1

From Figure 1 is visible that with the two motion controlling rails push the Razor-blade firmly onto a surface made from a foam with a leather or synthetic surface. The surface presses upward and the rails downward, which guaranties an even pressure to the blades that have microscopic burs that are created during the shave and need to be straightened out with the help of the Razor-blade Sharpener. Also from Figure 1 is visible, that the rails are higher and wider in the front to assure an easy entrance to the rails. This produces an easy, controlled push through the rails and moves the blade head into the appropriate position as well. The Razor-blade head will be moved through the Razor-blade Sharpener once or twice

to achieve the wanted effect of a smooth shave over and over again.

Example 2

From Figure 2 is visible that the rail fit on the back into already existing Razor-blade containers. This way all parts the Razor holder, the spare blades and the Razor-blade Sharpening Device are at the same location. This worked whether or not there are reserve blades available or not. Also the Razor-blade Sharpener works as a stand alone.

Patent claims

1. New Razor-blade Sharpener that uses two rails that are arranged parallel to each other to guide Razor-blade heads over a surface of leather or synthetics padded with medium dense foam to guarantee consistent pressure upward from the surface and downward from the rails.
2. New Razor-blade Sharpener, in addition to paragraph 1, has two rails that are in the front of the device higher and wider to guarantee an easy insertion to the parallel rails that guide the Razor-blade Head through the Razor-blade Sharpener.
3. New Razor-blade Sharpener, in addition to paragraph 1-2, that produces equal pressure from the foam and the rails. It creates a double wave on the sharpening surface that sharpens the blades but protects the gliding stripes from damages.
4. New Razor-blade Sharpener, in addition to paragraph 1-3, that is wider and higher and guarantees an easy way to get the Razor-blade head between the two parallel aligned rails. This guarantees an even and straightened push through of the Razorblade head.
5. New Razor-blade Sharpener, in addition to paragraph 1-4, that has rails that merge closer together until they are parallel to each other to align the Razor-blade head. The pressure applied evenly causes the surface to bend in a double wave and the metal rings on the side of the Razor-blade head protect the glide stripes from excessive use.
6. Usage of the new Razor-blade Sharpener, in addition to paragraph 1-5, allows Razor-blades to be sharpened up to 200 times. The Razor-blade Sharpener is so designed that it can be connected to the Razor Holder that contains also the spare Razor-blades. It can also be used as a stand alone device.

Fig 1.

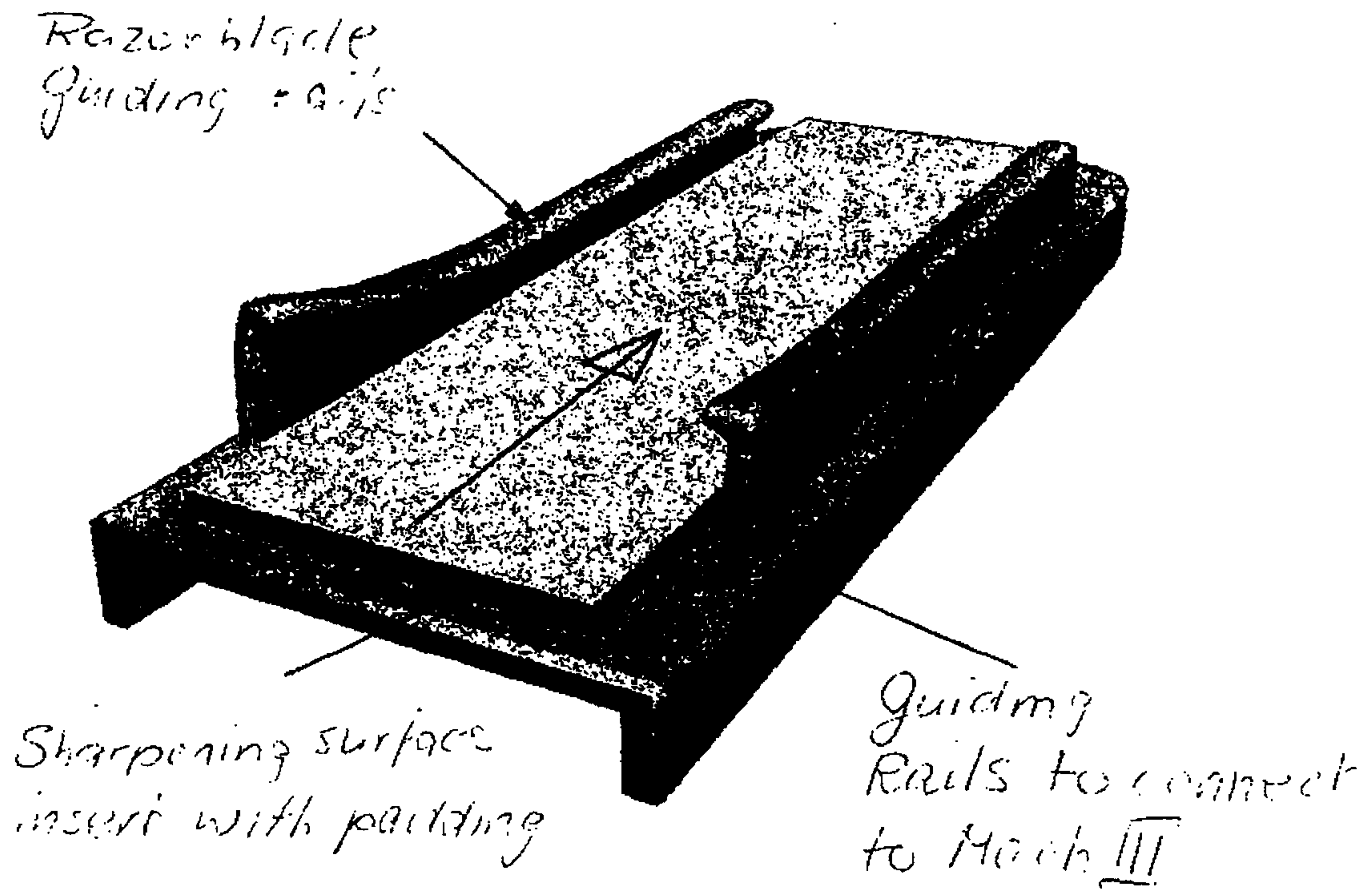


Fig. 1a

Comparing to Mach III from Gillette

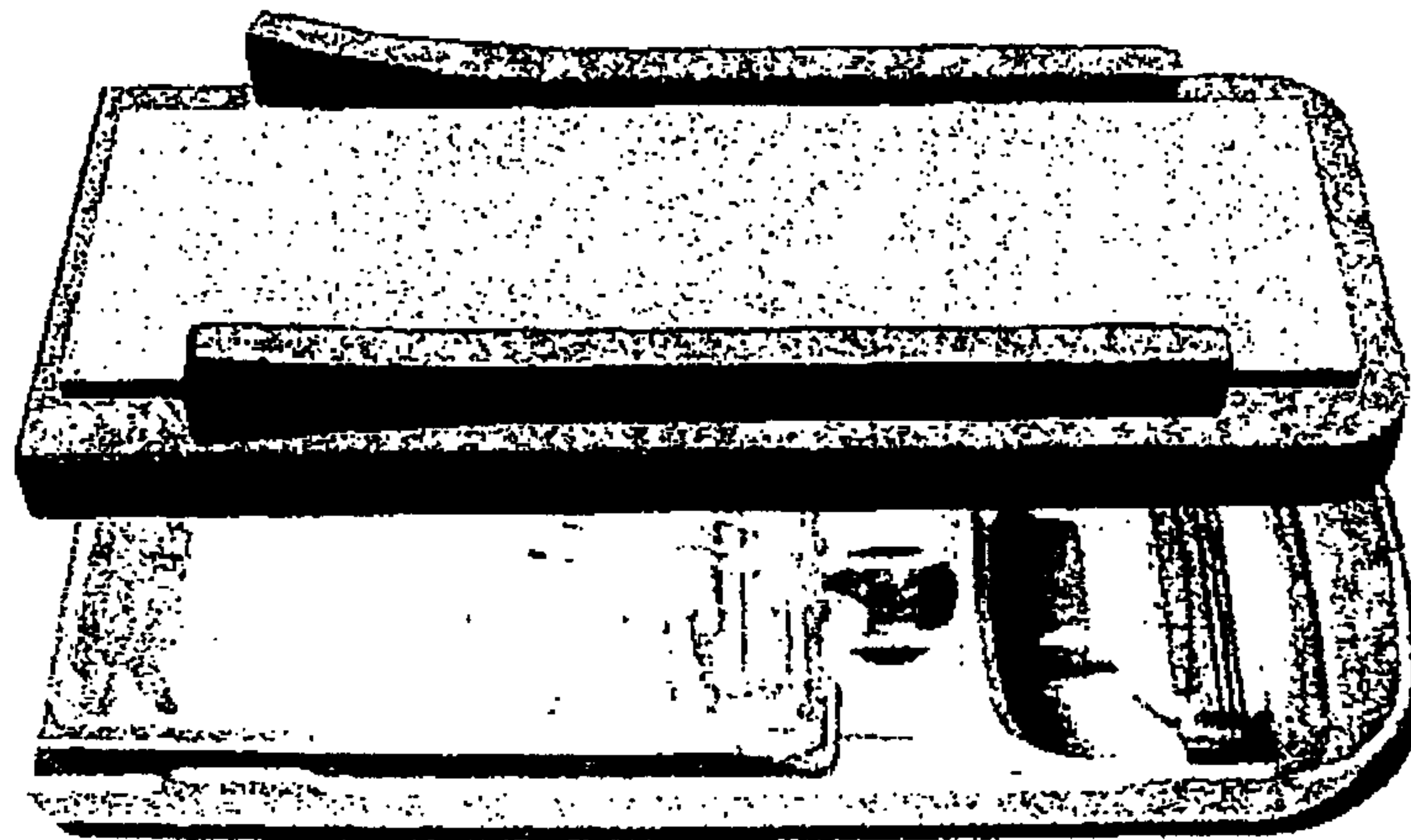
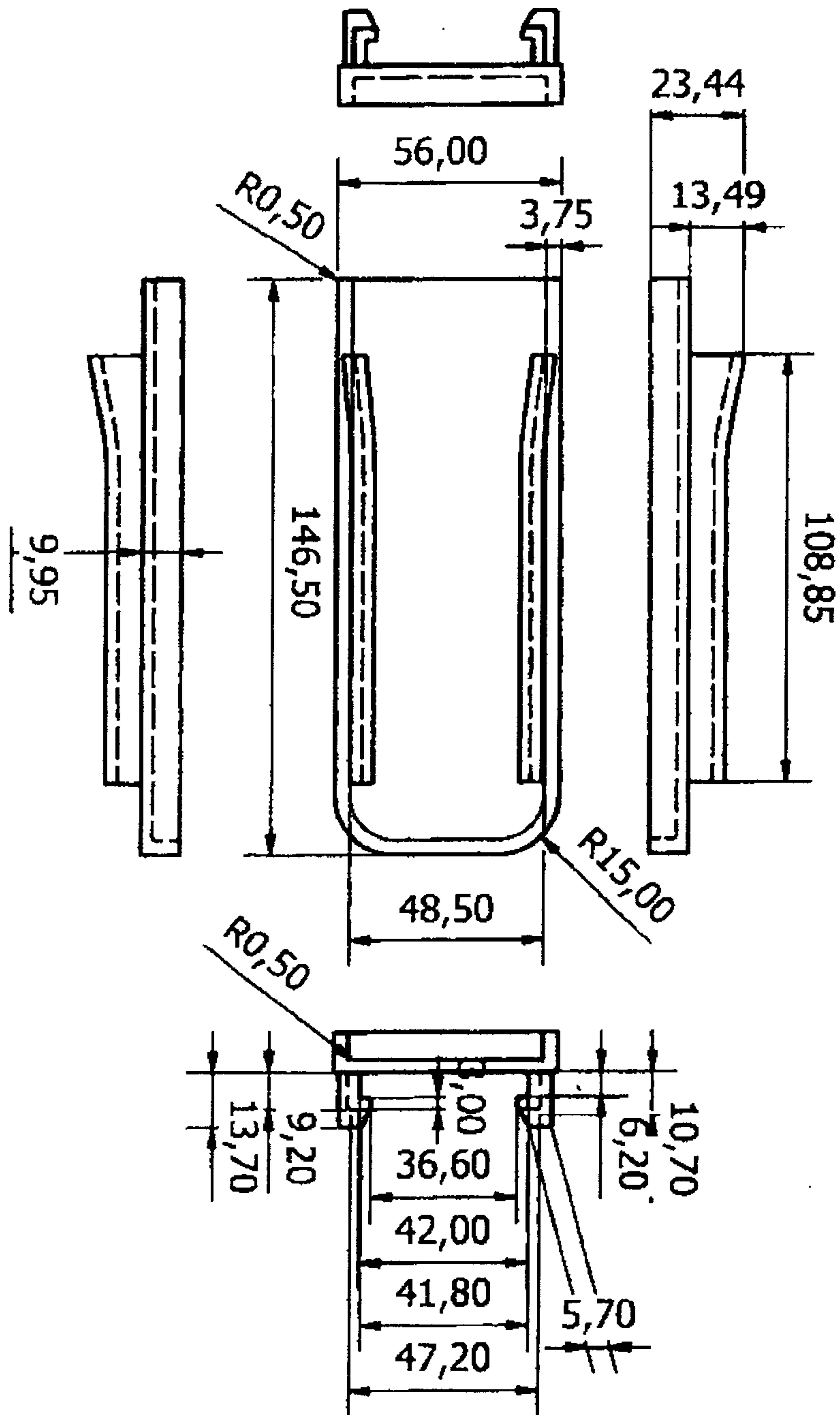
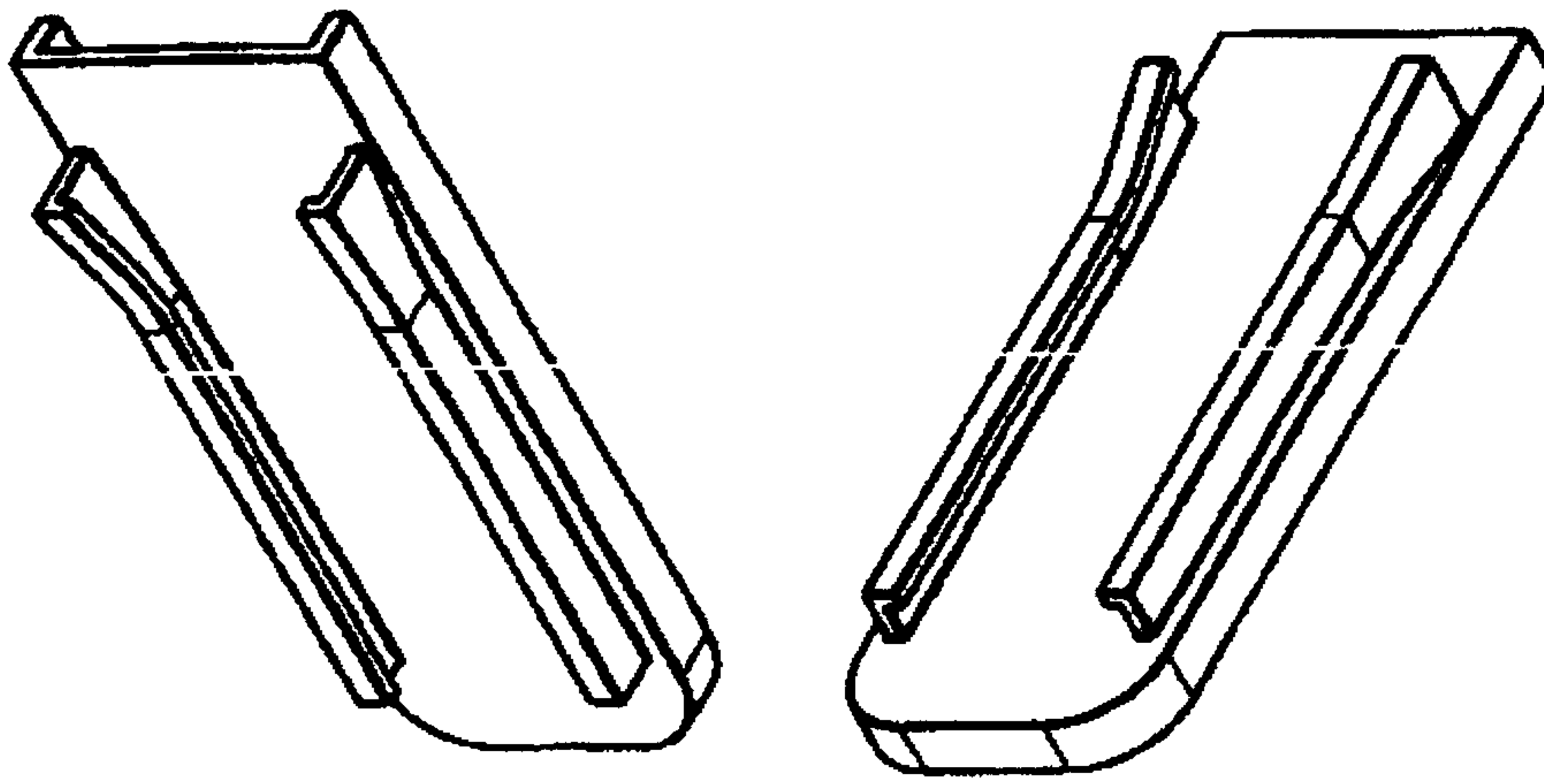
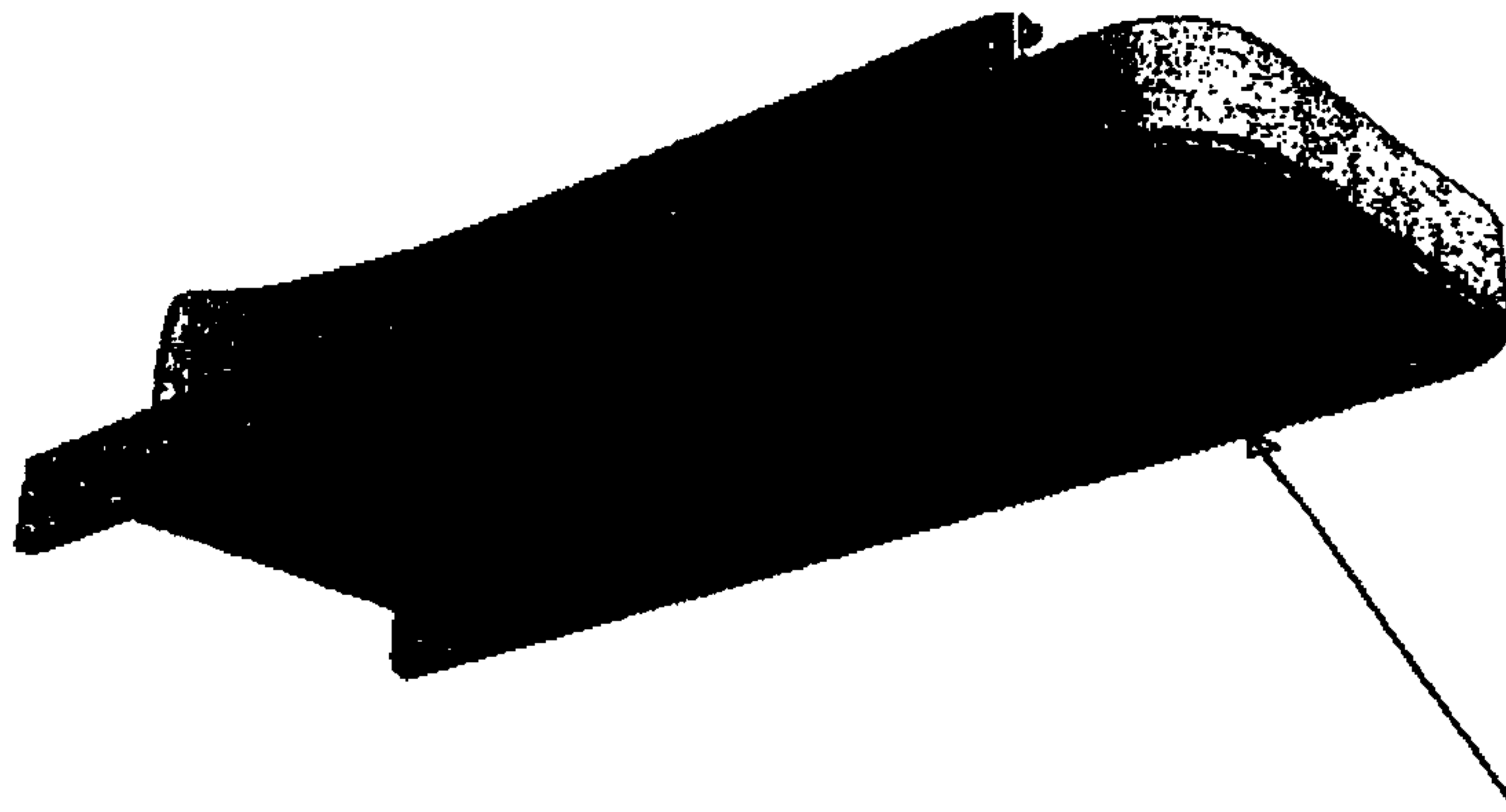


Fig 3/4



Designed by Roger Zullig	Checked by	Approved by	Date	Date 06/09/2010
ECHO Technology Inc.				
Razorblade Sharpener				
12100_001			Edition	She 1/

Fig 2.



Fitting
rail to connect it to
Mach III from Gillette

Fig. 1b

Usage of
Razorblade
Sharpener

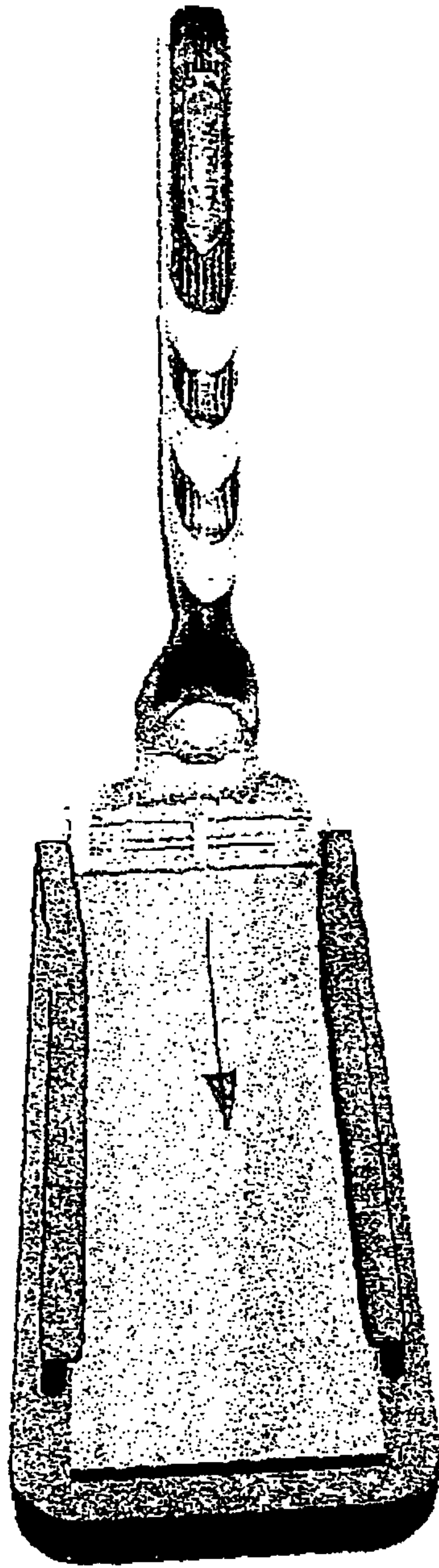
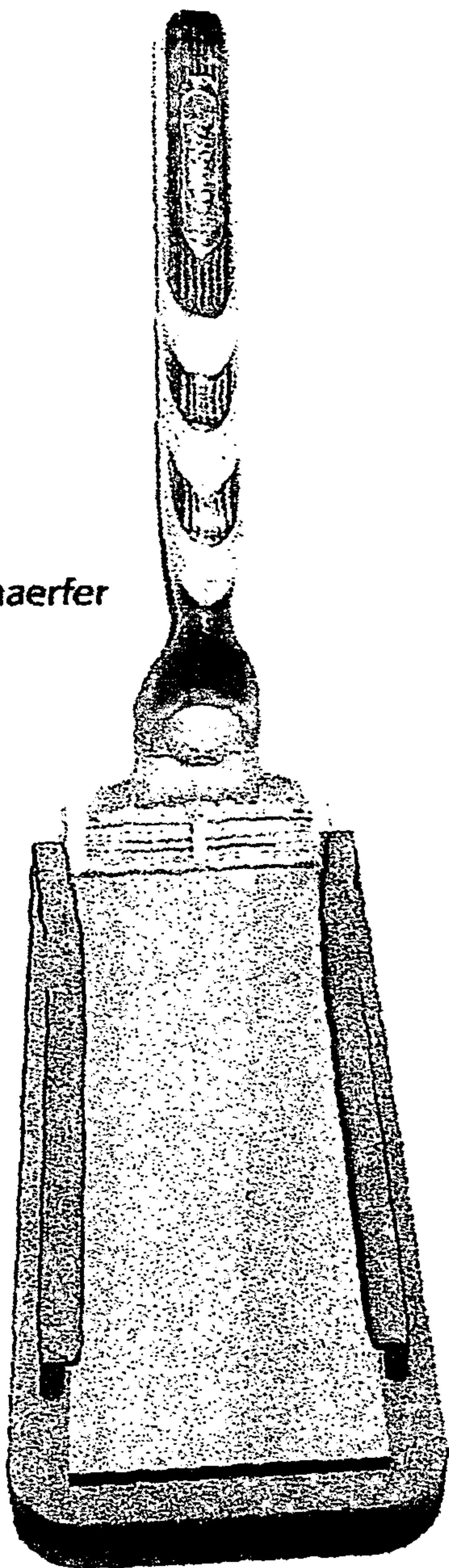


Fig. 1b

AA

Rasierklingschaerfer
im Gebrauch



AA... Razor blade sharpener in use