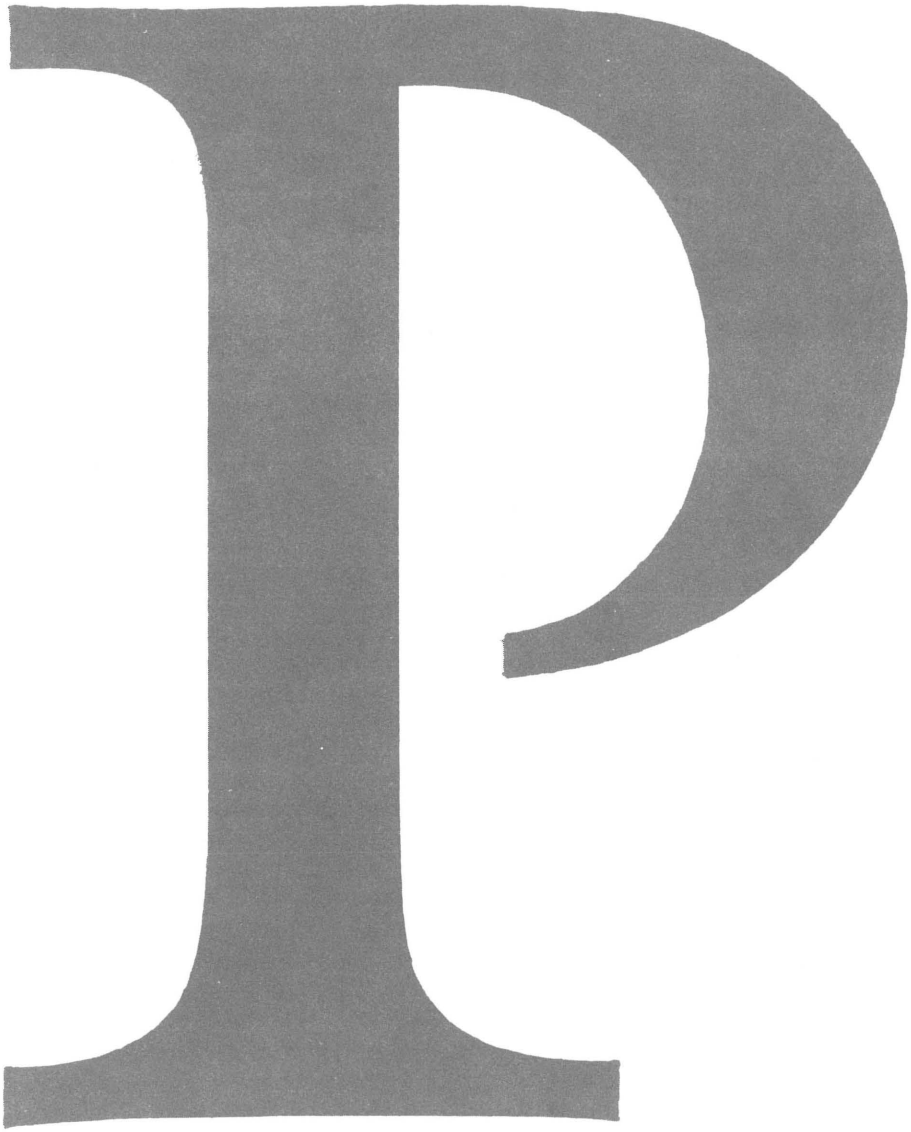
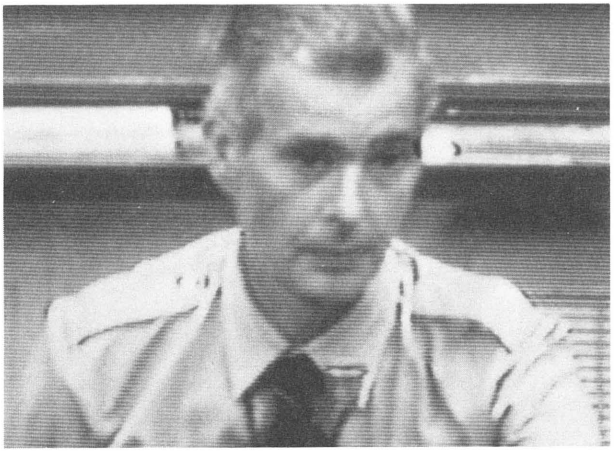


Henk Drost *The punchcutter is a prisoner to the designer.*

Sometimes I have to change such little things, that I cannot see the difference.

Punch Cutting Demonstration

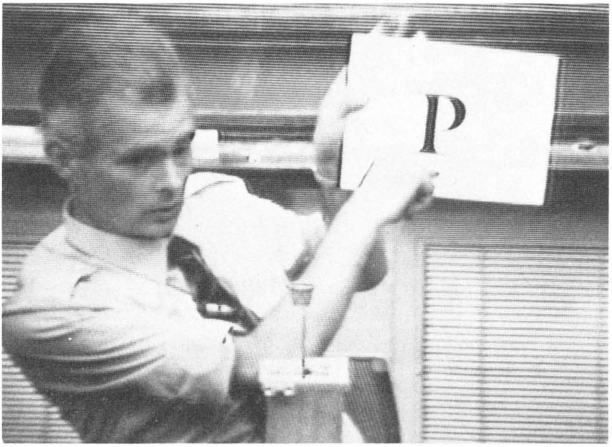
Henk Drost



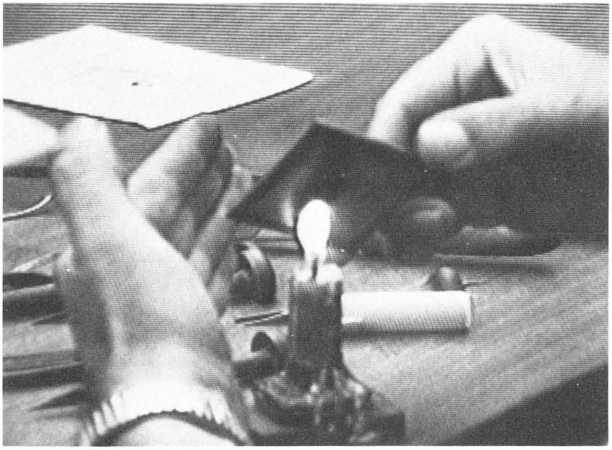
The following article is excerpted from a demonstration of punchcutting given by Henk Drost of the Enschedé Foundry in Haarlem, Holland. These photographs are taken from a video tape made during the demonstration and show some of the steps involved in hand punchcutting. Drost's comments have been edited to accompany the photographs.

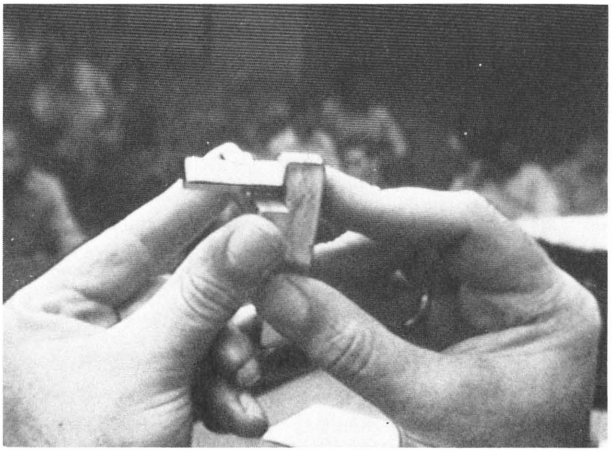
Visible Language, XIX 1 Winter 1985
Author's Address: c/o Joh. Enschedé & Zonen
Grafische Inrichting B.V., Klokhuisplein 5, 2011 HK Haarlem

I am going to describe how we are making punches at Enschedé and Sons in Haarlem.



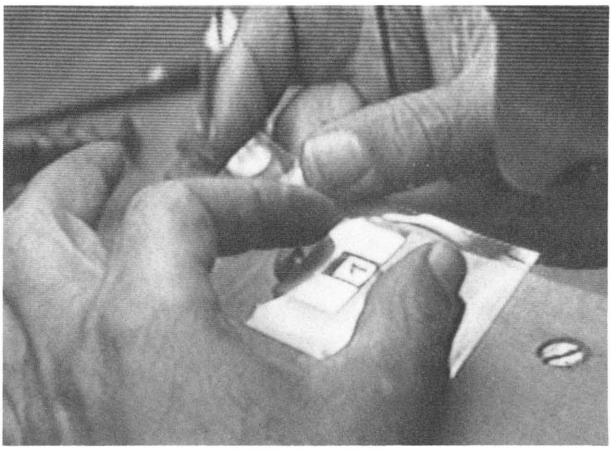
The drawing of the letter is transferred in the required size to a small plate through photo-etching; from this plate a smoke proof is made.

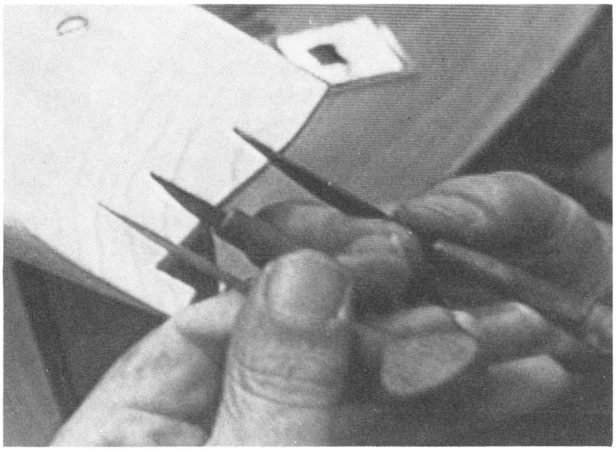




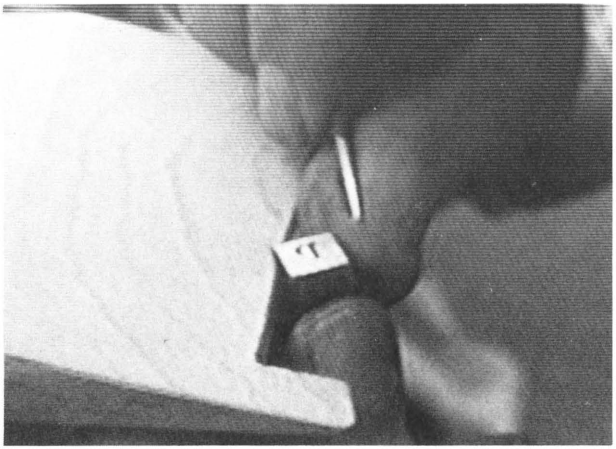
I start with a rough piece of steel, and square it on two sides.

When the steel is ready, a little varnish is put on top of the steel. Then the smoke proof is transferred to the steel.

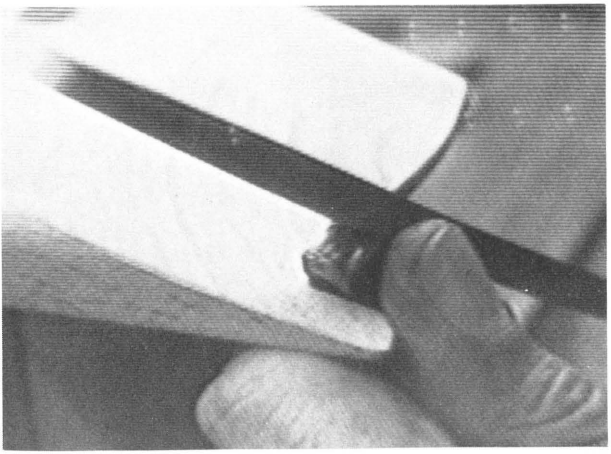




A graver is used to cut the steel. There are three kinds: a sharp one, a round one and a flat one.

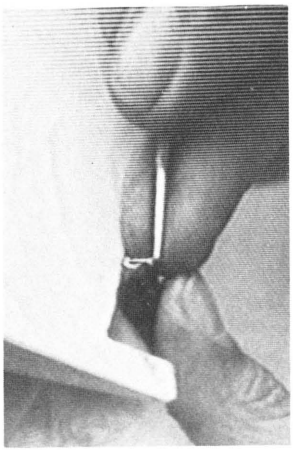


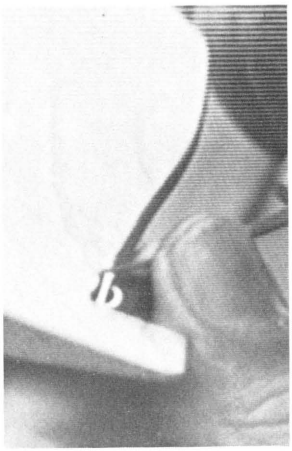
When the drawing is on the punch, the round graver is used to engrave the inside or counter of the letter. I never use counterpunches. I think that those tools are not as nice to use as the gravers. The punchcutter must make most of his tools himself, even grinding his files to the right size.

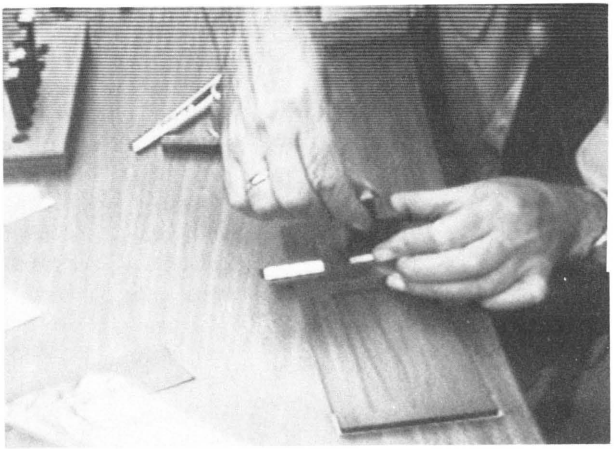


When the counters are smooth and clean inside, I start on the outside of the letter.

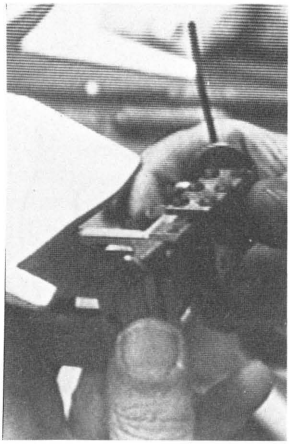
At first, I use big files and then finer files. I take off any steel that I do not need.







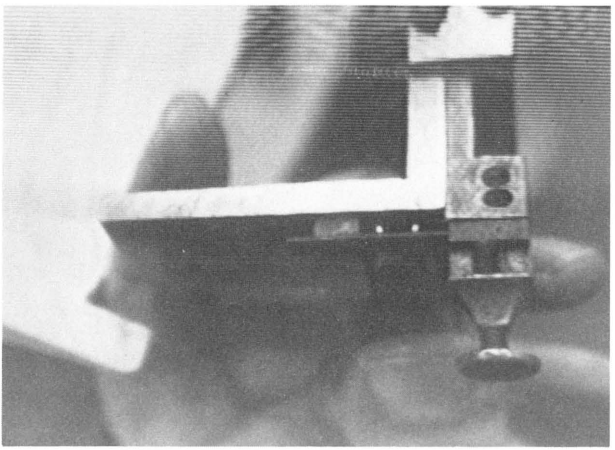
When the graving is finished, I grind the punch on a stone to smooth it off. Then the punch is ready to make the first smoke proof for control.

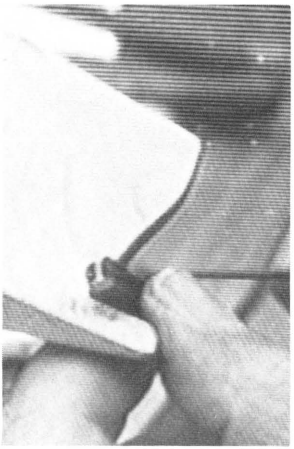


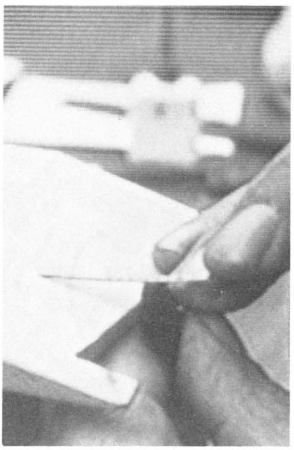
I warm the punch like the plate and make a smoke proof. Then I can see the letter as it will print on the paper.

Using a lining gauge, I can see if the baseline is straight.

The base of the letter must be a little hollow, not flat. I should see, on two sides of the baseline, two little spots. When I print the letter, the line comes out flat. If I have a flat part on the punch, and I print it, then it comes out round. So the punchcutter makes the base just a little bit hollow.



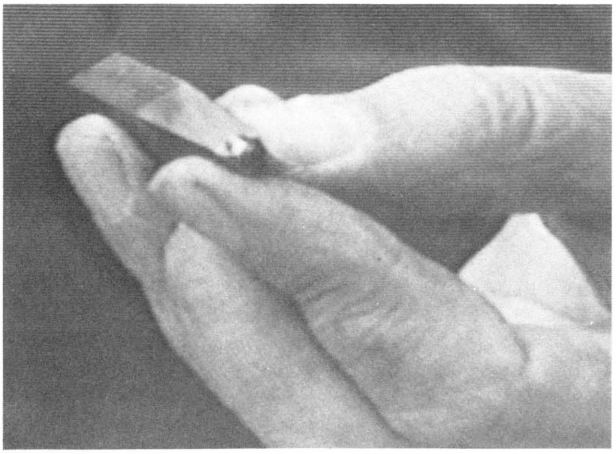


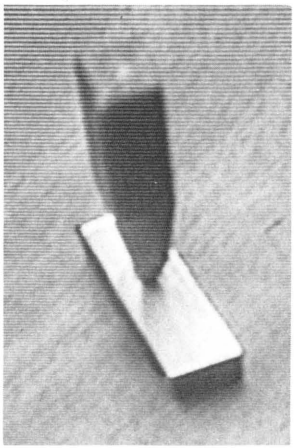


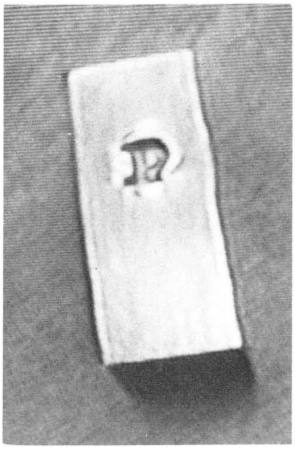
Using the lining gauge, I can see that part of the stem is good, but on the other side there is a little spot that I have to take off by filing.

I also have to see if the height is correct, and that I do with a little tool that is called 'crocodile teeth.' Then I grind the punch again on the stone.

When the punch is ready, it is fixed for hardening and striking. Before I make the punch ready for striking, I have to make the sides very steep, for driving into the matrix. Then I clean the punch and put it in the fire. When it is light red, I put it in water. It is black when it comes out. The punch must then be cleaned and tempered by warming it up again until it is yellow—light yellow. After it is again put in water, I am ready to strike the matrix.







To strike a matrix, I need a piece of copper, a rough piece. I polish it and mark the place where I want to strike the punch. At Enschedé, we have a press for striking. After the striking, I take the punch out, and then have an unjustified matrix, or strike, which has to be justified by hand with a file. It is difficult to make the sides square and to the right proportions. When I have justified the strike, I have a matrix which can be used for casting.

I can then cast type. The type is planed to the right height and then can be used for printing. It takes a whole day, more or less, before a punch is ready. That is why I have shown you just the steps here.

(Hugh Dubberly, photo)

Above: Henk Drost working at the Enschedé Foundry in Haarlem, Holland.
Left: Left to right, Charles Bigelow, Stan Nelson, Henk Drost.