

## A Labeling System for Plastinated Prosections

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### Abstract

The aim of this study was to devise a practical and inexpensive labelling system for plastinated prosected specimens. Letters printed in various colours are punched in either a round or a pointed shape by means of a specially constructed punch and subsequently glued onto the specimen. The final product is clearly labelled and valuable for purposes of learning or examination.

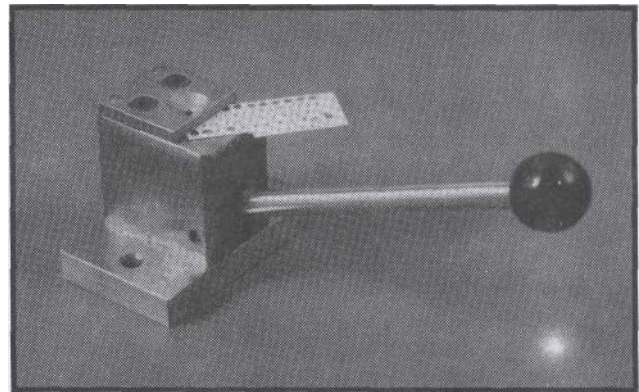
### Introduction

Development of Technology is always followed by a vast number of challenges. Plastination of prosected material has left the technician with the challenge of how to identify or label the different structures (Jackson, 1987). The aim of this study was to develop a labeling system for prosected plastinated specimens.

### Materials and Methods

Alphabet letters are printed on 0,5mm thick Poly vinyl chloride (PVC) sheating. This is done by using a hot lead block containing an alphabet. Pigment stamping foil is used to print the letters onto the PVC (Brune, 1987). The PVC is cut to a size of 150mm x 70mm to make handling easier. The letters are spaced 5mm apart and are 3mm high from top to bottom.

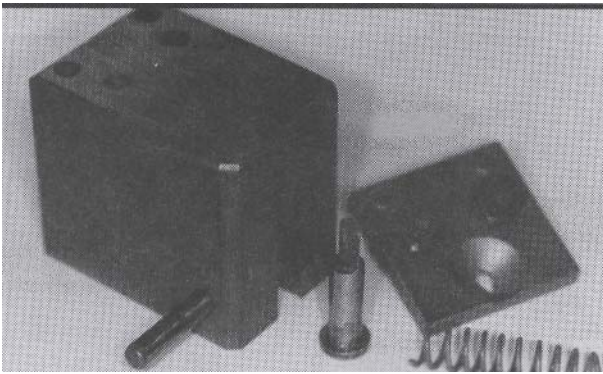
A special punch was made as can be seen in figure 1. The letters are visible through the top die plate (figure 2) of the apparatus and the letter may be centralized before punching. The punching is an easy process. The punch moves from below and pushes the letter through the die plate to the top (figure 3). The round punch used here has a diameter of 4mm. To produce arrows a pointed punch was made. These pointed markers use the same alphabet and are used to indi-



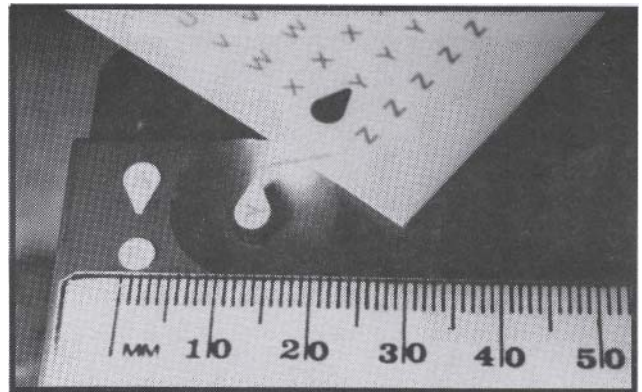
**Figure 1.** The punching apparatus with the die plate on top for easy centralizing of the letters.

cate small structures without obscuring them (figure 4).

The lettered discs are secured onto the prosection using household clear silicone. A thin layer of silicone coats the top surface of the disc as well. Because some specimens are large with more structures, more than one alphabet may be required and the solution to this problem was to print alphabet-letters of various colours, using different coloured pigment stamping foil on the white PVC.



**Figure 2.** The top die plate (right hand side) and the punch (centre of photo) for pointed markers.



**Figure 3.** The punch moves from below and pushes the letter through the die plate to the top.

### Results

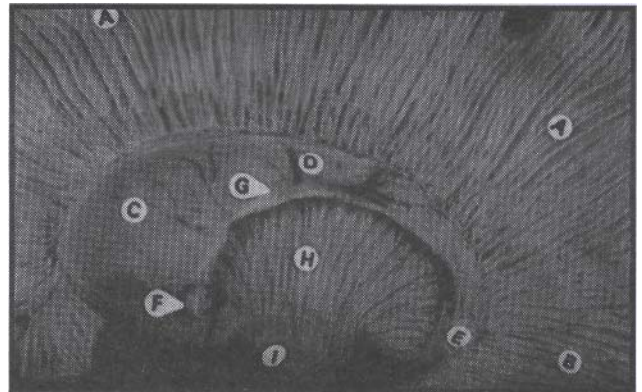
This labelling system was found to be very practical and we even used these discs (labels) on the bottled prosections (wet specimens). Cyanoacrylate glue was used in the case of bottled specimens to attach the labels onto the prosection. The letters are easily identifiable and, due to the small dimension of the disc, it seldom obscures structures. The glue is of lasting quality and very few cases of re-application have occurred.

### Conclusion

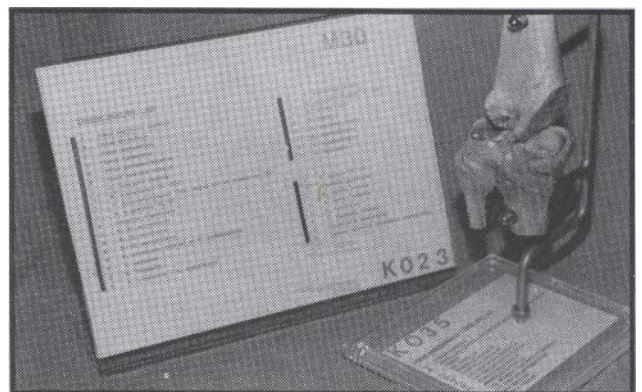
Because only letters and arrows are used on the prosected specimens, without names, these specimens may also be used for spot tests. Next to the specimen in the study centre (museum) is the legend enabling the student to identify the structure he is looking at (figures 5 and 6). Finally, a specialised engineering shop will be able to manufacture these punches and apparatus at a very low cost, making this identification method very cheap.

### Bibliography

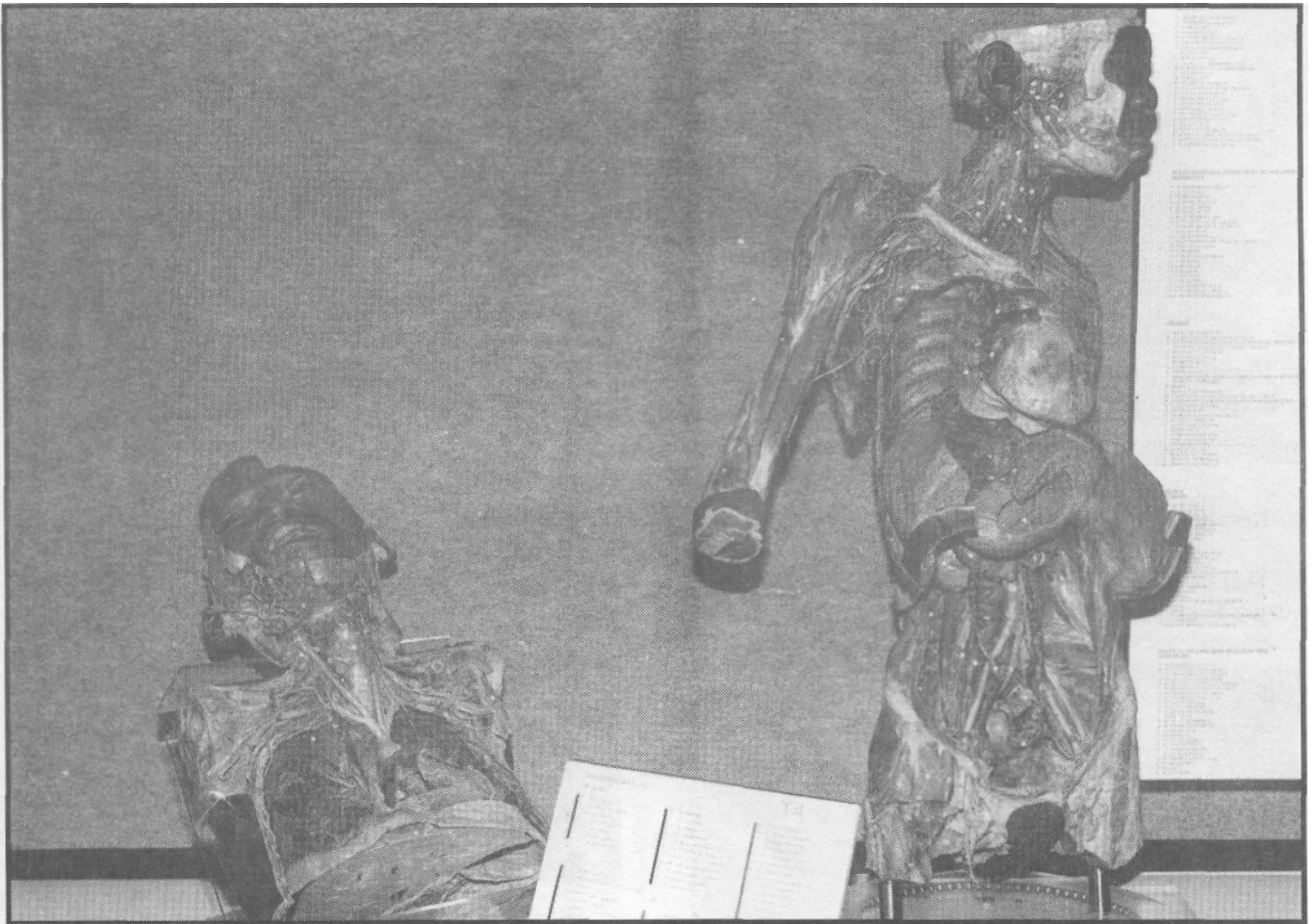
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**Figure 4.** Both markers use the same alphabet. The pointed markers are mounted next to the small structures without obscuring them.



**Figure 5.** The legend can be taped to the transparent base. Alternatively, the legend is mounted in a perspex stand.



**Figure 6.** Two large prosections with their legends as used in the study centre.