

**Copy of a printed diagram referenced as "Fingerprints. Haemoglobin A + A2 (diagram)"**

**Contributors**

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ing peptide, which has a lower  $R_F$  in the case of haemoglobin A<sub>2</sub>. Finding a doublet for peptide 12 in the mixture of A and A<sub>2</sub> peptides 10-14 established the reality of the chromatographic difference.

It was also noticed at this stage that whereas peptide AT-12 gives a slate color with ninhydrin, peptide A<sub>2</sub>T-12 gives at first a yellow color with ninhydrin which later turns blue. Peptide A<sub>2</sub>a, also gives an initial yellow color (which later becomes blue) with ninhydrin, but this is not such a bright yellow as with peptide A<sub>2</sub>T-12.

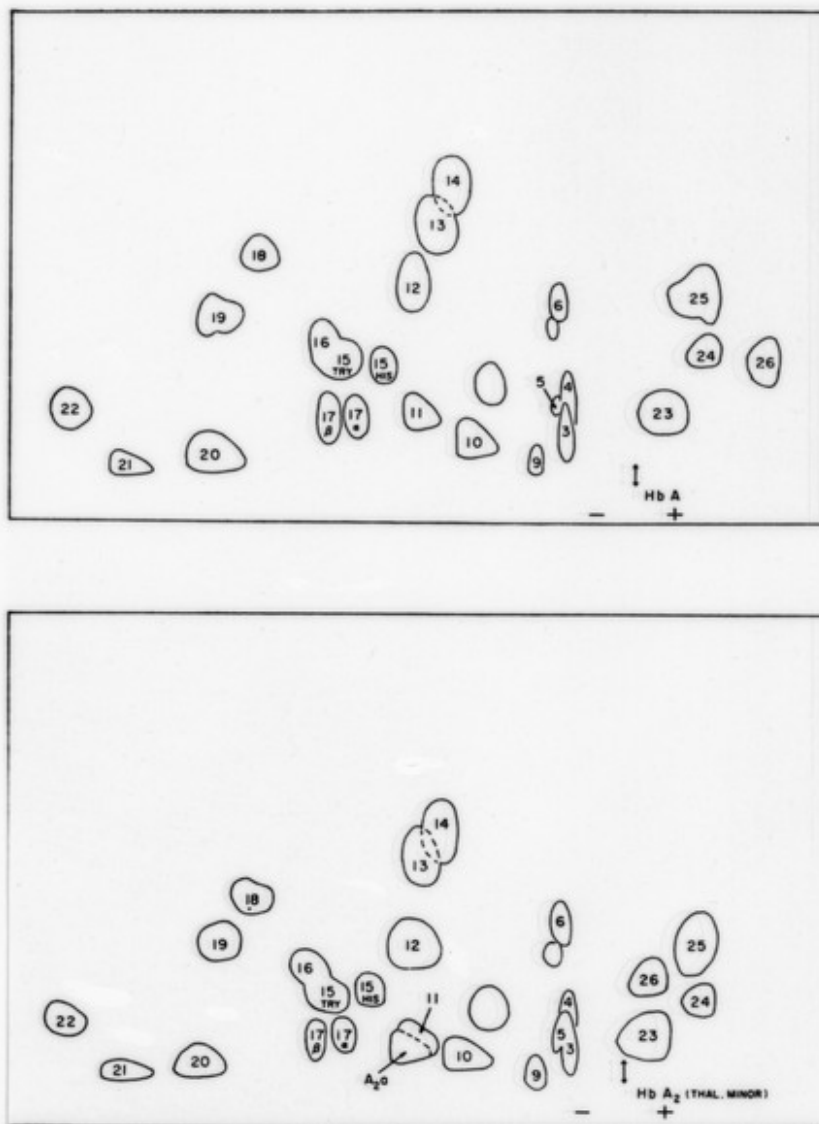


Fig. 5. Tracing of the fingerprints of haemoglobins A and A<sub>2</sub> showing the numbering system used.

Fingerprints stained for tyrosine showed that the peptides from haemoglobin A and A<sub>2</sub> giving a positive reaction were identical except that the tyrosine-positive peptide of haemoglobin A<sub>2</sub>, uncharged at pH 6.4, gave a stronger color relative to the other tyrosine-positive peptides. In the case of haemoglobin A, the tyrosine-positive peptide gave a weaker color. The lower  $R_F$  than that of haemoglobin A. The explanation for this difference is not yet