

**Copy of a printed drawing of a model of collagen structure referenced as "Elliot's model. Collagen structure"**

**Contributors**

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the fold, instead of the C=O group as in Ruggens's diagram, we get the structure shown in figure 6. This arrangement may be visualized by imagining a planar zigzag fold (as in figure 6a) in the plane of the figure, and then pushing alternate C=O groups below and above this plane. In this way, the plane of the OC< group

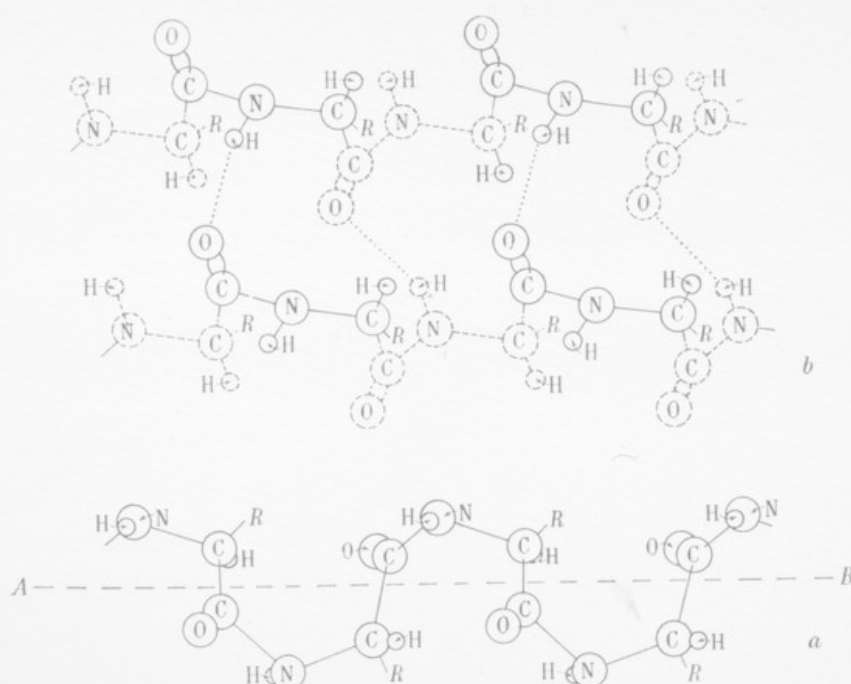


FIGURE 6. Fold proposed for collagen. See text.

is brought sufficiently near the perpendicular to the fibre axis to account for the unique feature of the collagen spectrum, namely, the 'perpendicular' dichroism of the  $4600\text{ cm}^{-1}$  band, which indicates the direction of the in-plane  $\text{C}=\text{O}$  deformation mode.

Figure 6b shows a side elevation of the spiral. In order to assist interpretation, atoms and bonds which are on the side of the section plane  $AB$  nearest to  $b$  are shown in broken line. The diagram is roughly to scale as far as bond lengths and bond angle are concerned. The perpendicular  $\text{N}-\text{H}$  and  $\text{C}=\text{O}$  stretching modes