PARASITOLOGY CENTER, INC. (PCI)

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Making thin blood films

It is essential that slides used in making smear preparations be unscratched, non-corroded, and meticulously clean, free from grease, dust, acid, or alkali; that slides be handled by their edges; that the blood be taken as it exudes; that the process be done rapidly so as to prevent coagulation; and that **smears be left to air dry** in a horizontal position away from flies and dust. The fingertip or structure to be picked is cleaned with 70% alcohol, after which a prick is made with a blood lancet or a sterilized needle. The first drop is wiped off with absorbent cotton or gauze. Mark necessary data with wax pencil on the end of each slide.

Thin Film. Place a drop of blood on one permafrost slide about one-half inch from the end. Take a second (regular) slide and place it on the surface of the first slide at about a 45° angle, as indicated below, and move it to the right until contact is made with the drop of blood (Fig. 1). The free end of permafrost slide may be supported by the third finger. As soon as it touches the blood, the latter will spread. Now push the top slide toward the left, being careful to keep the edge pressed uniformly against the surface of the horizontal slide. In this way a thin smear with uninjured host cells and possible protozoans and /or microfilariae will be obtained. The size of the drop of blood and acuteness of the angle formed between the slides, will determine the thickness of the film, a more acute angle resulting in a thicker film; we need thin films. **Allow film to air dry thoroughly. Slides will be rejected if they are covered by another slide or coverslip.**

Repeat to make 2 more slides. Ship back to PCI in provided slide holders.

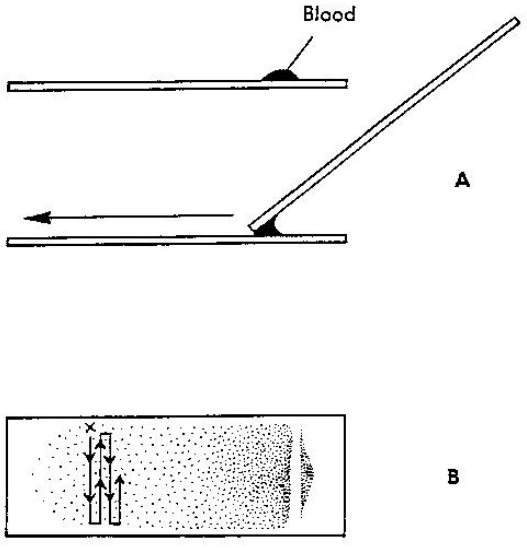

Fig. 1 Method of thin blood film preparation: **A,** position of spreader slide; **B,** well-prepared thin film; arrows indicate area of slide used to observe accurate cell morphology.