

er in parallel and opposite directions. If the films are to be stained at once, no fixing other than allowing the blood to dry will be necessary. If, however, the blood films are not to be examined till later, it is better to fix the blood. This may be performed in several ways.

I find placing the films after drying in air, in a mixture of rectified spirit and Ether, equal parts, for three minutes proves very efficient. Another method which has given good results is to hold the films, while still moist over the fumes arising from ordinary foemalin till film dries.

With regard to the stains used in preparing the specimens, we must use dyes which will bring out as clearly as possible the affinity of the various cells and granules for acid or basic dyes. In so far as my experience teaches, nothing can replace eosin for the former, and Methylene Blue for the latter in giving even results, care being taken to carry out the technique alike in all cases.

The formula for the eosin dye I have been in the habit of using is .5 gramme eosin, 70 c.c. alcohol, and 30 c.c. water. The Methylene Blue solution is that of Loeffler, made by taking 30 c.c. saturated alcoholic solution, Methylene Blue, 130 c.c. of 1/10000 aqueous Caustic Potash solution.

If the films are to be stained at once after drying, then pass three times through flame, (gas or spirit lamp) and proceed. With fixing may be proceeded with at once. Place in Eosin solution two minutes, methods, staining wash in distilled water, dry and then place in Methylene Blue solution half a minute, again wash, dry thoroughly and mount in Canada Balsam. Examine these films with a microscope with a magnification of 300 diameters or over. We will note in these films the size and shape of the red cells, their oxyphile power the presence of nucleated forms. Further in the white cells we note whether increased or not, whether new forms are present, and we can now determine by counting, the relative ratio of the various forms. These color preparations are absolutely essential to differentiate between the various forms of leucocytosis in various conditions. Take the leucocytosis which occurs in favorable cases of Pneumonia before the crisis; here the increase is in the Polynuclear. In lymphatic Leukaemia, the increase is in the small mononuclear elements.

Immediate microscopic examination of a fresh drop of blood is often of importance in determining whether it would be necessary to carry out a complete examination of the blood; for in this way we