

NOTES ON BLOOD AND BLOOD EXAMINATION.

THE study of the blood is a subject at once important and fascinating; a study too, in which it would be well for all practitioners to interest themselves. For any practitioner who makes a careful examination of the blood in his suspicious cases will learn much of practical importance to his patients and will throw light on many previous dark points. Late investigations into the domain of Haematology are extending wider our knowledge of the conditions of the blood and the blood re-actions, in disease. One investigator goes as far as to state that he can make a diagnosis of incipient Phthisis by examining the blood alone—basing his diagnosis on the morphological and staining characteristics of the white cells. But this work is based on the incorrect hypothesis that the white cell of the blood is in miniature the prototype of the entire body. Now practitioners as a rule are in the habit of disregarding all discoveries in the domain of medical science unless they can at once apply such clinically.

The examination of the blood is by no means a complicated procedure, in fact it is a very simple one, but it requires certain special instruments and a knowledge of technique, which is however readily acquired by practice. Just here let me say that in making any series of blood examinations if comparative results are desired, then we must always carry out our procedures in a like manner. A few notes on the composition of the blood with regard to points of examination may not be out of the way. Blood consists of the Plasma and Corpuscles. We have at present no good means during life, of examining the Plasma to determine any changed conditions in its composition. Hence it is on a study of the corpuscles, red and white, that we depend for our knowledge of blood changes.

In making a blood examination we usually attend to four points.

- 1st. Determine the number and character of the red corpuscles.
- 2nd. Determine the percentage ratio to normal of Haemoglobin contained.
- 3rd. Determine the ratio between the red and white cells.
- 4th. Determine the percentage ratio of the various forms of white corpuscles, one to the other, noting the presence of any new forms.

In examining the red corpuscles we note their number, size, outline, intensity of color (Haemoglobin), grouping, and the presence of