ed glass is arranged to move backwards and forwards by means of a screw. Each compartment is then half filled with distilled water and into the outer one a small capillary tube full of blood is introduced, both chambers are then completely filled with distilled water. The instrument is so arranged that when the index is at 100, the tint in the compartment overlying the colored wedge of glass, exactly corresponds with the tint of the compartment to which the capillary tube full of normal blood has been added. Should the blood be deficient in hæmoglobin or contain an excess, the wedge is moved slowly backwards and forwards under the compartment until the tints exactly correspond, when the number on the scale is read off. The result is generally indicated as follows (accepting 5000000 red blood corpuscles per c.m.m. as normal) 5000000 c=Von Fleischl 100=color index 1 so that color index of normal blood is 1. Take for example however, blood in a case of chlorosis, where you have the hæmoglobin diminished, here you may have say 5000000 c=Von Fleischl 75 color index .75. Again in pernicious anæmia where you have a diminution of corpuscles with a relative increase in amount of hæmoglobin, you may have 25000000 c= Von Fleischl 60= color index 1.2. The color index then is merely a convenient way of indicating the richness of each corpuscle in hæmoglobin.

It will be found easier to use this instrument by artificial light, and a good plan is to look down on the compartments through a tube made by rolling up an ordinary piece of foolscap.

In the preparation of specimens for microscopical examination, the essential thing is to have ones cover glasses and slides absolutely clean. This is accomplished by boiling in strong sulphuric acid, and then washing in a mixture of equal parts of alcohol and ether, drying and protecting from dust.

The slightest amount of grease or moisture or foreign bodies, such as particles of cotton fibre, will seriously interfere with results. To obtain blood the finger, or better the lobe of the ear, after having been cleaned carefully with ether, is pricked with a sharp lancet or one of the needles specially prepared for the purpose.

The drop of blood should not be larger than the head of a small pin, and should be obtained without squeezing, as by this means it is said to be possible to produce an artificial leucocytosis, by forcing the corpuscles out of the lymph spaces.

When a suitable drop is obtained the centre of the cover glass is brought lightly in contact with the drop and immediately laid gently on the glass slide. The blood should spread evenly to the extreme edge of cover glass. On no account should pressure be used and for holding cover glass during operation, a pair of forceps bent on the flat are to be recommended.

Much can be learned from fresh specimens of blood prepared in this way, such as, alterations in shape of corpuscles, or any important increase in the number of leucocytes, and the formation of fibrin can be watched.

The procedure in the case of permanent specimens is practically the same, only that the cover glass is laid on another cover glass so that they over-lap to about two-thirds of their extent. When the blood has spread out evenly between them, they are rapidly drawn apart. The best way to do this is to bring the elbows together, with the cover glass held by their projecting ends, between the fore finger and thumb of each hand, on a level with the eyes. The fore arms are then quickly and evenly separated, so that the cover glasses are slid apart as nearly as possible in the same plane. The films of