PERISCOPE.

(d) Bilious Discharges are sometimes pap-like, sometimes watery, cometimes serous; they usually contain biliphæin instead of caprophæin. It is detected by means of Heller's test. Great importance is often ascribed to them, as they are supposed to be connected with an affection of the liver. When diarrhœa sets in rapidly, the first motions almost always contain biliphæin; this is, therefore, formed after the exhibition of purgatives, in the commencement of cholera, &c. Where biliphæin is long persistent (cholorrhœa) we may infer the existence of an affection of the liver. In dysentery the excretion of bile seems somewhat increased.

The green stools which occur during the use of mineral waters often proceed from sulphuret of iron. After calomel, they proceed from sulphuret of mercury, but we should remember in both cases that biliphæin passes off in the beginning, as during the administration of other purgatives.

(c) and (f) Mucous and Purulent Discharges are not easily distinguished. The microscope exhibits no diagnostic characters. In purulent stools the fæcal serum contains albumen. Mucus is found in the mass, as transparent lumps capable of being drawn out into threads; it is also often voided in this form without any fæcal mass. Pus is more equably intermixed; where annuonia is not present, and has not already affected the pus, the ordinary test for that secretion may be applied to these fæcal masses.

All diarrhœal discharges may become ammoniacal; it is a bad sign: we find a strongly alkaline reaction, and with it invariably crystals of ammoniaco-magnesian phosphate. This condition frequently attenda purulent diarrhœa in typhus and puerperal fever. In dysentery the fæces may become ammoniacal without giving rise to an unfavorable prognosis, as the development of ammonia proceeds from the decomposition of of intermingled urea derived from the blood and serum.

Biliary Calculi are in general distinguished from conglomerated faces by floating in water. They may consist of,

1. Cholesterine, which occurs in masses of all possible sizes, sometimes exceeding that of a pigeon's egg; such calculi are ordinarily white or slightly colored with biliphæin. Ignited on platina foil, they first melt and then burn with a yellow flame, forming much soot, and developing a smell of burning fat. They dissolve in boiling alcohol, from which the cholesterine precipitates on cooling in the form of white scales. It is by this process cholesterine is usually obtained.

2. Cholesterine and Biliphæin.—This is the most usual form of biliary calculi; they are of a brownish-yellow or dark orange color, and participate in the characters of Nos. 1 and 3.