it will be enlarged hereafter when additional investigations have been superadded to those, by which the foregoing has been demonstrated.

111. The probability of medicines being decomposed by the blood in transitu.-Our knowledge of this circumstance can only be obtained indirectly. We cannot say of a medicine removed from the body, in a transformed character, that the change occurred in the blood; for before the effect could be there located, it is necessary to exclude from the inquiry the agencies of other parts by which the decomposition may have probably been effected: Thus, 1st. Before absorption medicines may be decomposed in the stomach; 2nd. In the excretions after elimination; and 3rd. At the lungs during circulation. The first class comprises among other alterations several of a strictly chemical kind-acids unite with bases, alkalies are neutralized, alkaline earths and bases conbine with acids, compounds of vegetable acids are converted into carbonates, carbonates under some circumstances are decomposed .- Nitrate silver certain other salts and metallic oxides all enter upon new combinations. -Again certain insoluble agents saline, oleaginous, resil.ous, balsomic. &c., become soluble by commixture with the alkalinefluids of the duodenum. Other insolubles as calomel, &c., are dissolved by the alkaline chlorides that are present throughout the whole alimentary tract; and lastly, chemical reductions are now and then observed as of bichlorid mercury into calomel or reguline mercury. That some medicines are decomposed in the excretions is shown in two principal ways-Firstly, by the substance being removed from several emunctories and only excreted changed by one, while from the others it passes out undecomposed. Such as turpentine; this circulates in the blood without suffering any change. and it is eliminated through different surfaces; in the breath it may be perceived by its characteristic odor, but in the urine it has undergone a change, and instead of its old odor it now has that of violets. Secondly. the same fact is declared when a medicine is removed from the body in different states of constitution, thus sulphur is sometimes exhaled as sulphurous acid, and at other times as sulphuretted hydrogen; the same has been observed of its compounds with metallic bases, these are sometimes removed unchanged and at other times more or less altered. Hence the effect is to be referred to the agency of the secretion in which the substance is found and not to the blood through which it passed intact. In the third and last class we include the following examples :-- The conversion of benzoic and cinnamic acids into hippuric acid, of tannic into gallic and pyrogallic acids, of a similar transformation in the astringency of uva ursi and cinchona, of salicine into hydruret of salicyle, and of oil of mustard and ammonia into sulphocyanid of ammonium. These conversions are simple chidizations, and as such