ed to chronic diseases; but the statement originally made by Petters in 1857, and confirmed by Kaulich, Betz, and Cantani, that acetone is developed in the blood and fluids in diabetes and other diseases, has been in recent times fully established; and, as is generally known, a particular group of nervous phenomena, "diabetic coma," has been ascribed to the presence of acetone or allied substances in the blood.

In 1868, Senator described a case of sulphuretted hydrogen poisoning resulting from an error of diet, and pointed out that the digestive organs are the origin of nearly all acute and chronic dyscrasia, and that self-infection may occur, and is followed by a series of nervous disturbances. Even during the normal digestive processes, putrefactive products of a poisonous naturephenol, indol, and the aromatic series—are developed, and Brieger has lately obtained a poisonous alkaloid from peptone; while in abnormal digestion there are such products as butyric acid, sulphuretted hydrogen, marsh-gas, etc. All these substances have a more or less poisonous influence on men and animals, causing (in large doses) convulsions, paralysis, coma, and death; in small doses, dulness, vertigo, dimness of sight, tinnitus, etc. While the nervous system suffers most evidently, it is not alone affected; the kidneys being also frequently involved. Most of these substances are secreted by the kidneys, and irritate them. Changes in the digestive system have a direct influence in causing renal disease; and a certain chronic affection with albuminuria, still ordinarily regarded as a local disease, in Senator's opinion originates in the digestive system, and is of an autochthonous dyscrasic nature. [The author is apparently alluding to the chronic insidious form of granular kidney.—*Rep.*]

In diabetes the dyscrasia is undoubted, and is generally regarded as the cause of all the phenomena except the excretion of sugar. This last is probably due to some alteration of the digestive functions in the stomach, intestines, or liver; so that we may call diabetes an autochthonous entero-hepatogenous dyscrasia.

The uric acid diathesis, and gout, rickets, and many other conditions not so well defined, as, for example, oxaluria, also belong to this class.

But, besides the digestive organs, this self-body where the blood-supply is insufficient infection may depend upon processes occur-and in this manner, when the blood-supply

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ring in any of the normal or pathological cavities of the body; not only abscess-cavities, lung cavities, and purulent collections in the thorax and abdomen, but especially the urinary bladder and passages.

In chronic cystitis with ammoniacal decomposition of the urine, there gradually supervene dulness, depression, digestive disarrangements, "urinous" smell of the breath and sweat, drowsiness, and coma. These phenomena have been attributed to the absorption of ammonia, and this "ammoniæmia" has been more or less identified with "uræmia." This is not the place to discuss the identity of ammoniamia and uræmia. Ammonia is probably not the only or even the principal cause of this dyscrasia, though it is the body which by its smell makes its presence most noticeable, and doubtless has its origin in the decomposition of urea. But the decomposition of urea gives rise to various other products, such as the sulphur-compounds, the ferments, etc., and in those cases where pus and mucous are undergoing decomposition, other putrefactive products are present in considerable quantities. The eminently poisoncus nature of decomposed pus is well known, and is attributed to the presence of certain unstable fatty acids, e.g. butyric. Trimethylamine must also be mentioned as a product of the decomposition of purulent urine in the bladder, for the production of which the lecithin of the pus affords abundant material.

Finally, it seems not impossible that such decompositions may take place not only in the natural and pathological cavities of the bodies, but in the parenchyma and in the fluids of the tissues, even as primary conditions; that they can do so in consequence of infection from other parts, is no longer doubtful. But there are grounds for Velieving that imperfect oxidation causes decomposition in the tissues. Hoppe-Seyler has said that insufficient introduction of oxygen, either from obstruction in the air-passages or from excessive demand for it through great muscular exercise, causes, generally in the liver, perhaps in other organs, changes similar to those of phosphorus-poisoning, and in consequence an increased secretion of urea at the expense of the constituents of the organs. Leucin and tyrosin are found in the most different parts of the body where the blood-supply is insufficient