

circumstances into acetic and butyric acids. In the course of their investigations they also prepared and examined the anhydride of propionic acid, propionic ether, propione, propylal and propylene, the three last obtained by the distillation of dry propionate of baryta.

*Stearone*.—Heintz has shown that stearone  $C^{33}H^{56}O$  is really produced during the distillation of dry stearate of lime, a fact which had been disputed by Rowney.

Illenkamp has examined the action of sulphite of ammonia on nitrobenzole and nitrotoluole, and has obtained two new acids.

Rammelsberg has examined the composition and crystalline forms of the tartrate of ammonia, and the double tartrate of potassa and ammoniac.

Muhlhauser has examined the products of the action of nitric and hydrochloric acids upon the protein compounds, and has found among others a volatile body, chlorazole, which is poisonous, burns the skin intensely, possesses a powerful odour, and explodes when strongly heated.

*Fulminuric or Isocyanuric Acid*.—Liebig and Schischkoff have described under these names a new tribasic acid isomeric with cyanuric acid, but forming entirely different salts with bases, obtained by the action of alkalie chlorides or iodides upon fulminating mercury. Many of the salts are finely crystallized and explode when heated.

*Ononine*.—Hlasiwetz has examined the body obtained by Reinsch from the root of *Ononis spinosa*, he finds that it is decomposed by baryta into an acid and a new glucosogenous body, which he calls Onospine, this again by dilute acids is resolved into sugar and a crystallizable substance Ononetine. The decomposition is analogous to that observed in populine.

*Amides*.—Rowley has examined a considerable number of the amides of fatty acids.

*Veratrine*.—Merek has made some experiments upon pure veratrine and some of its salts, and gives as the formula of the alkaloid  $C^{64}H^{52}N^2O^{16}$ .

*Eyasurine*.—Desnoix announces the existence of a third alkaloid in *nux vomica* in addition to strychnine and brucine; it remains in the mother liquor after these two have been precipitated by lime. In its properties it is exceedingly similar to brucine.

*Volatile bases*.—Greville Williams has published in the Chemical Gazette of November last, the valuable paper read before the meeting of the British Association, on the basic constituents of coal tar, and on chrysene. The communication is not of a nature to allow of an abstract.

*Napthaline*.—Dusart has obtained two new compounds of napthaline, by acting on the protonitrate with potash and lime. He calls them nitrated phthaline and nitrephthalinic acid. From the former he obtained a new alkaloid Phthalidine having the formula  $C^{16}H^9N$ .

*Nitroglycerine* has been examined by De Vrij, who gives the formula  $C^6H^6(NO^4)^2O^6$ . He prepares it by gradually adding 100 grms. of glycerine of specific gravity 1.262, to 200 cubic centims of monohydrated nitric acid cooled down to  $14^\circ F$ . As soon as the two liquids have united to a homogeneous mass, a quantity of sulphuric acid equal to that of the nitric acid, is gradually added, keeping the temperature below  $32^\circ F$ . the whole time to avoid an explosion. To purify it dissolve in ether and wash with water. It explodes at a temperature above  $320$ , and also when struck.

*Coumaramine*.—An artificial alkaloid has been obtained by Frapoli from nitro-coumarine.

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