Professor's preparation as the attenuated solution of hyponitrous ether as found in the shops differs from the spirit of nitrous ether of the Pharmacopœia.

The syrup of iron with ammonium citrate presents no inducement for fraud, and really resembles in appearance nought else but the syrup of the pyrophosphate, which is an apple green, while the syrup proposed by Mr. Rother is an olive green. As the pyrophosphate is more expensive and even more difficult to prepare, we would have nothing to fear from that direction. It could be prepared by the manufacturing chemists and obtained by the pharmacists of a reliable quality, from which all other ferrated syrups and elixirs containing phosphate of iron could be extemporaneously formed.

In thus recommending Mr. Rother's preparation over mine, I am led by a firm conviction that it is not only better, but fills a purpose heretofore unfilled as a reliable base for other preparations. I refer to my syr. phosph. iron and potash citrate, which is prepared on precisely the same principle as Mr. Rother's, yet scarcely equals it in merit.

By using phosphate of ammonia in a saturated solution, I have succeeded very well in dissolving the magma thrown down from the sesqui-salts of iron by phosphate of soda, the liq. tersulphate perhaps giving the best result; but the subsulphate is very eligible. Any of the alkali salts will dissolve the sesqui-salts of iron if the acid be somewhat in excess, but ammonia possesses greater solvent power than any other, the citrate of ammonia being the best preparation for this purpose. By using the exact chemical equivalent of the phosphate of soda necessary to precipitate one pint of liq. tersulphate of iron (which is about ten ounces), as fine scales as those obtained of the pyrophosphate can be as easily made, and which are really more soluble. The olive green color heretofore alluded to contrasts in a marked degree with the apple green of the pyrophosphate.

The chemical character of the phosphate of iron with ammoniocitrate (Fe₂O₃, PO₅+roHO), indicates that it contains a larger amount of iron and a smaller amount of phosphoric acid than the pyrophosphate (2 Fe_2O_3 , 3PO_5 + 9HO). This salt of iron is worthy of further investigation.