

at first pleasant, followed by a strongly *alkaline* and *feruginous* after-taste, which persists."

He then proceeds to show the reasons why a good preparation is impossible. The chief trouble lies in the peptone, of which it is impossible to obtain in the open market satisfactory or uniform specimens. Whether obtained from meat or fish albumen they "are prone to *rapid putrefaction* and yield iron combinations of most *offensive* odors."

Of *Liquor Ferri Peptonati cum Mangano*, which is openly and frankly intended as a substitute for *Pepto-Mangan Gude*, and on which substitute an immense amount of time and labor has been expended, the author has the following to say:

LIQUOR FERRI PEPTONATI CUM MANGANO.

"When made according to the present formula, with the materials obtainable on the market, the National Formulary preparation may be described thus:

"A dark brown *sluggish* liquid, with a most *offensive* odor, not unlike a mixture of *ammonia* and *putrefied beef extract*. Taste *alkaline*, *saline* and *nauseating*. It deposits after a time a *dirty white sediment*, which soon covers the bottom of the vessel.

"The finished product contains about .15 per cent. iron, .145 per cent. or less manganese, and .234 per cent. ammonium hydroxide, the latter serving the *sole purpose* of developing more *offensive* odors.

"I have prepared four samples, in each case using different samples of peptonized iron, the finished products being almost identical.

"The trouble with this preparation lies principally with the peptonized iron and ammonium hydroxide, although there is room for improvement elsewhere.

"Of six samples of peptonized iron examined, the products of the principal manufacturers of pharmaceutical chemicals, *all* showed that *putrefaction* was in progress.* Of seven examined for iron content, only one showed over 5 per cent. Fe O (3.5 per cent. Fe), and this one sample has not yet been on the market under the name of peptonized iron or iron peptonate.

* Dr. Harrison is not alone in his opinion. All pharmacists who investigated the matter think the same. Mr. M. I. Wilbert, one of our foremost pharmacists, and a member of the Council of Pharmacy and Chemistry of the American Medical Association, says: "This formula [for *Liquor Ferri Peptonati cum mangano*] directs that commercial ferric peptonate be used. This substance at best is *variable*, is *unstable*, and, as 'usually met with, is *decomposed* and *unfit* for use. Commercial manganese peptonate, suggested in the alternative formula, is even more unsatisfactory than the ferric peptonate."—Amer. Jour. of Pharmacy, May, 1907, p. 211.