

It would be well to take the titer of this solution occasionally. The same substances used for determining the activity of the chlorine in the lime are used for this purpose.

To ten mils of the finished solution add 20 mils of 10 percent solution of potassium iodide and 2 mils of acetic or hydrochloric acid. Measure into this mixture, drop by drop, from a burette, a decinormal solution of sodium thio-sulphate until decoloration is complete. The number of mils used multiplied by 0.03725 will give the weight of the sodium hypochlorite in 100 mils of the preparation.

In order to determine the alkalinity of the Carrel-Dakin solution or note its freedom from caustic sodium, add to 20 mils of the solution 0.2 of phenolphthalein; if correctly prepared no red coloration should appear.

Estimation of the amount of chlorine in the chlorinated lime is of the utmost importance and the method for doing this is simplicity itself. One may use the method given in the U. S. Pharmacopoeia, or the following, which is the one mentioned by Carrel in his note to the *Journal A. M. A.*, December 9, 1916, p. 1777, and which note is reprinted in the *American Journal of Pharmacy*, February, 1917, p. 84:

"Weigh out 20 grammes of the average sample, mix it as completely as possible with 1 liter of ordinary water and leave it in contact for a few hours, agitating it from time to time. Filter.

"Measure exactly with the gaged pipette 10 mils of the clear fluid; add to it 20 mils of a 1 : 10 solution of potassium iodide and 2 mils of acetic or hydrochloric acid. Drop a drop at a time into this mixture a decinormal solution of sodium thiosulphate until decoloration is complete.

"The number of mils of the thiosulphate solution required for complete decoloration, multiplied by 1.775, gives the weight of the active chlorine contained in 100 grammes of the chlorinated lime."

## SOME EXPONENTS OF AMERICAN PHARMACY.\*

BY JOHN F. PATTON.

The history of pharmacy, like that of any other branch of science, is a story of evolution. Embracing not only the compounding of medicine but a host of collateral branches allied to it, the history of each would make a tome of large proportion.

The development or progress of any branch of human endeavor must take into account the individual exponent, so that its history is but an amplified biography. It is always interesting as well as instructive to know something of the character of a person who has developed an industry, exploited some branch of the sciences, or invented a useful implement; hence, biography forms an important part of our libraries.

It is a well-known fact that those engaged in scientific pursuits develop a subtle condition of mind free from the weakness of selfishness, which is so inherent in human nature. Those of us who were acquainted with the subjects of the following sketches will bear testimony to the truth of the above statement.

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\* Abstract of a paper read before Section on Historical Pharmacy, A. Ph. A., Atlantic City meeting, 1916.

When we look back over the list of eminent men, whose work has added glory to American pharmacy, and note their lack of conscious superiority, their modesty, their willingness to work without desire of applause or hope of material reward, we can truthfully say, "These were great men."

Becoming a member of the American Pharmaceutical Association in 1880, my first attendance at the meetings of the Association was at Saratoga Springs, in the latter part of the summer of that year. At one of the sessions of that meeting, something happened that occurs occasionally in deliberative bodies; namely, a parliamentary tangle. This, with motions, resolutions, amendments, etc., the question before the house became quite obscured. No one seemed to know the next step to be taken, when a gentleman of marked personal appearance arose, and with a few words cleared the atmosphere, and pointed the way out of the difficulty. His comprehension of the situation and the clarity of his statement prompted an inquiry as to his identity. He was Dr. E. R. Squibb, of Brooklyn.

This man stands out prominently in the galaxy of eminent American pharmacists, whose mental equipment, and useful devotion to high ideals, challenges our highest admiration. Following the demoralization incident to the close of the Civil War, a host of small pharmaceutical manufacturers sprang into existence. Many of their products were of the poorest possible quality, disappointing to the physician, and useless to the patient. Just at this juncture, Doctor Squibb stepped on the stage, and at once raised the standard of quality in medicine. His influence is felt unto this day.

A loss to pharmacy and a grief to his friends, was the passing of Charles Rice. Eminent in ability, and most pleasing in personality, generous, just and modest, he was ever ready to serve, regardless of the work involved, or the sacrifice demanded. As a writer and speaker, his style was concise, lucid, and convincing. Having at his command a dozen languages, he was a "thesaurus" of pharmaceutical information. The work he did for American pharmacy, in laying the foundation for the revision of the Pharmacopoeia of 1880, and as chairman of the committee for the two subsequent revisions, was invaluable. He left his impress on that great work, and made it the peer, if not the superior, of any similar standard the world over. The sense of justice he exhibited, in his refusal to accept the rather generous honorarium tendered him for his work on the Pharmacopoeia, because he held it would not be fair to his associates, marks the freedom from selfishness that is characteristic of the scientific mind.

Another one of our great men was our beloved fellow member, John M. Maisch. "None knew him but to love him, None named him but to praise." Professor Maisch was a comparatively young man when he died, being only a little over three-score years of age. Equally large in body and mind, the work he did in nearly forty years of service, representing about five hundred contributions to pharmaceutical literature, tells the story of his busy life. The varied experiences of his early years in Germany fostered in him the growth of a love of liberty. His free and independent spirit rebelled against breathing the stifling air of repression, so he came to the "Land of the Free." America is great because we have been enriched by the lives of such men as John M. Maisch.

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