

would do good service as synonyms. Similar remarks apply to the *peroxyhydrates of iron*. The prefix "sub" is most usefully and indeed indispensably applied in the case of calomel, which is the "lower" or under-chloride of mercury; it would be well if the meaning of the syllable could be always thus restricted to its etymological signification, and never again used in its old conventional sense. The names *tartarated antimony*, *tartarated iron*, *tartarated sodium*, I do not like at all. The sister terms *sulphurated antimony*, and *sulphurated potash* are most happy, their utter vagueness fairly representing the nondescript character of the preparations. But *tartrate* (or *oxytartrate*) of *antimony* and *potassium*, *tartrate of iron* and *potassium*, and *tartrate of sodium* and *potassium*, are at least as definite in composition as the citric trio which are already honoured with the definite names (or, rather, with the old forms of the names) *citrate of bismuth* and *ammonium*, *citrate of iron* and *ammonium* and *citrate of iron* and *quinia*. "Prussiates" might now, I think, be relegated to the synonymic category. Instead of *Liquor Sodæ Effervescens*, B. P., which might possibly be confounded with *Liquor Sodæ*, I would prefer *Aqua Sodæ Effervescens*, and so with *Potash Water*. These are the prominent exceptional alterations to which I would draw attention. Their acceptance is not insisted on, nor is the list exhaustive. Allusion is made to them in the hope that discussion may show which names, on the whole, possess the greatest number of advantages. The alterations I do urge are those considered in the main portion of this paper, those of which I have already given a résumé.

In conclusion, I would state that the Lavoisierian names now proposed for use in medicine and pharmacy have already been freely adopted by many authors, and used as the leading nomenclature of my own and some other Manuals of Chemistry. I commend them to the medical practitioners and pharmacists of Europe, America and the Colonies. * * * * *

The President, expressing his sense of the important character of Prof. Attfield's paper, remarked that one point in it (leaving the discussion of its chemical value to such gentlemen as Professors Frankland and Odling, whom he saw present) was worthy of the best consideration of pharmacists, namely, the importance insisted on by the lecturer of having such a system of nomenclature as should admit of no error between the prescriber and dispenser.

Dr. Frankland expressed his coincidence, on the whole, with the views advanced by Dr. Attfield. He said the scientific chemist was frequently compelled to modify the nomenclature of chemical substances, in order to explain his processes and theories; but for a Pharmacopœia the most important point was that the names should individualise the substances. He noticed one or two inconsistencies in Dr. Attfield's list of proposed names; one that he proposed to leave the name sulphate of iron to distinguish the ferrous sulphate. To take, also, the first name on the list, acetate of ammonium. The termination here had been changed, but a little further down he found acetate of morphia, which was a corresponding salt. He asked if it would be possible to change this name to *morphium*. Or at least the indefinite termination *ine* might be maintained. Practically it was of but little moment, for physicians would doubtless continue to avoid the

terminations, whatever they might be. He (Dr. Frankland) thought that with but very few changes Dr. Attfield's scheme was well calculated to harmonize the nomenclature of the Pharmacopœia with the present condition of science, and that it would make but a very inappreciable difference to those who had to employ the names in medicine.

Dr. Redwood remarked that in every new Pharmacopœia change of nomenclature had to be made, the object generally having been to assimilate the names to scientific theories. In the last Pharmacopœia some changes had been made with this object, and others with the view of rendering the names more specific. In a future Pharmacopœia he had little doubt that a still greater change of nomenclature would be required. But there was no immediate intention of producing a new Pharmacopœia, and the present one would probably last for another ten years. If a new one were now in preparation he (Dr. Redwood) would be an advocate for exactly such changes as Dr. Attfield had proposed. The changes were so simple, and yet so perfectly in accordance with modern chemistry, that it would be hardly possible for any Pharmacopœia committee to reject them. He also agreed with Dr. Frankland that the termination of the alkaloids should be *ine* instead of *ia*, as in the case of morphia, strychnia, and others. Dr. Frankland had mentioned that the terms sulphate of iron was not sufficiently distinct, there being two substances of that name. He (Dr. Redwood) considered that it was quite sufficient in such a case for the more unusual salt only to be distinguished, which was done at present. It would only be more troublesome to use the affix *proto* to the sulphate of iron, and would serve no purpose. He could not agree with Dr. Attfield's proposition to substitute white arsenic for arsenious acid. Dr. Attfield had proposed that the term acid should not be employed for substances which did not contain hydrogen. If this were the only instance, it might be allowed to pass. But there were other cases, as for instance, chromic acid. Ought we to change this for chromic anhydride? He was not prepared to advocate such a cumbrous nomenclature. He quite agreed that red chromate of potash would be a good substitute for the present name. For the sake of brevity he would advocate the retention of the name black antimony, not giving it the title which Dr. Attfield had suggested, namely, black sulphide of antimony. He would not care to see the name carbonate of bismuth altered to oxycarbonate of bismuth as now proposed. Carbonate of lead and other salts were just as objectionable, these being quite as certainly oxycarbonates. To change the names of the double salts now named tartarated iron, tartarated antimony, and tartarated soda, to the suggested names tartarate of iron and potassium, and so on, would not, he thought, be an advantage. He would like to see the names changed, but not to what was now suggested. Why not return to the old names of potassio-tartrate of iron, etc., and use also the old term ammonio-citrate of iron? With regard to the salt citrate of iron and quinine, he would suggest ferro-citrate of quinine as an expressive and simple title.

Dr. Odling thought Dr. Attfield's proposed scheme of great importance. He could hardly coincide with Dr. Redwood respecting the value of such a discussion. Presuming that ten years was, as Dr. Redwood had said, the average duration of life for a Pharma-

copœia, and considering that the present one was of exceptional excellence, allowing it ten years from now, he could not think that it was any too early to commence the discussion of any changes in the nomenclature. He would have commented on Dr. Redwood's criticism of the proposed term *white arsenic*, but he thought that after the glowing eulogium which Dr. Redwood had himself passed on *black antimony* almost immediately afterwards, he (Dr. Odling) might leave the two to balance each other. He fully agreed that names including the use of Latin and Greek numerals should be avoided as much as possible. To distinguish substances by naming their colour was an excellent means of definition, for while it involved no theory, it possessed the strongest probability of being a description which might be expected to be permanent. He also concurred with Dr. Attfield's remarks concerning acids. It was not originally of much importance to which class of bodies the term acid should be applied, but as general consent had given it to those which were compounds of hydrogen, he thought it of some importance that it should be retained for them. Bodies similarly described should possess similarity of character. He (Dr. Odling) did not exactly agree with Dr. Attfield's sketch of the history of the origin of the binary nomenclature of salts. He was aware that the theory might be found in some of Lavoisier's writings, but he hardly thought it had been recognized by him. He instanced many terms used by Lavoisier, which seemed to indicate that he had not formed any such theory. And he believed that it was not until the time of Davy that it was fully expressed. In a few cases he thought Dr. Attfield had striven a little too earnestly to attain exact scientific accuracy, which he (Dr. Odling) could not think was required. He coincided with Dr. Redwood in many of his remarks on this point. He agreed that the name sulphate of iron was quite sufficiently distinctive. The same argument, however, would not apply with regard to calomel and corrosive sublimate. It was important that sub-chlor, and perchlor, should be designated. He concluded with a few words on suffixes and prefixes. In a scientific sense he preferred the adoption of suffixes, but he could not but admit the force of the arguments advanced for distinguishing chemical substances used in medicine by prefixing the syllable. This was necessary as long as physicians would perversely adhere to their system of abbreviating words.

Dr. Quain being called upon by the President, said he had not come to speak but to learn; he had not been disappointed. He had come also as a conservative, to protest against any changes of the names of medicinal substances merely to meet the views of scientific chemists; but, scheme proposed, he was glad to find was the reverse of this. It was impossible for practical physicians to follow minutely the theories of scientific mistis, and they had the strongest possible objection to any violent changes of nomenclature. He thought the present Pharmacopœia so exceedingly good that he anticipated for it a long existence.

Mr. T. B. Grover made one remark on the danger often arising from the similarity between the abbreviated forms of the names acid, hydrochloric, dil., and acid, hydrocyanic, dil., and suggested a return to the old name for the latter of *acidum prussicum*.