

clouds in the morning of January 30 (*NATURE*, xlv. p. 365). I may add that the same beautiful but as yet mysterious phenomenon was seen here January 30 and 31, both days in the south-west after sunset. Since the display of December 1885, mentioned by Mr. Backhouse, it has been seen here every year, except 1888, mostly for a day or two in January or February.

H. GEELMUYDEN.

University Observatory, Christiania, May 3.

Wave-Propagation of Magnetism.

IN an interesting article in last month's *Philosophical Magazine*, Mr. Trowbridge has given an account of some experiments made by him with the view of examining for any indication of a definite rate of propagation in the magnetization of iron. In these experiments no indication was observed.

It seems to me, however, that nothing of this sort is likely to be observed where the magnetizing force is as great as that used by Mr. Trowbridge, and that there are two classes of disturbances to be carefully distinguished. For example, in Prof. Ewing's well-known magnetic model, something which looks very like a definite rate is to be seen in the case of a disturbance not sufficiently large to cause toppling over of the "molecule magnets"; that is to say, to cause the little magnets to pass through their positions of unstable equilibrium. On the other hand, with a larger disturbance the phenomenon visibly partakes of a different character. Here, throughout the medium, there are to be seen at irregular moments what may be considered as cases of precipitation of energy, owing to the occurrence of these positions of unstable equilibrium.

These two stages should be carefully distinguished, for an essential in wave-propagation as opposed to a rate of precipitation of energy (such as a rate of ignition, &c.) is obviously that the medium should not be permanently altered.

In some experiments made by me, very much smaller alternating currents than those used by Mr. Trowbridge were employed. But the occurrence of spurious effects, simulating to a remarkable degree the interference nodes looked for, must have effectually obscured in my experiments the true phenomenon, supposing its existence. So that, considering the conditions of both our experiments, I still think the subject requires further investigation before coming to a decision in the matter. Indeed, when larger currents are used, no indication is to be found of even these spurious effects.

In Prof. Ewing's model, when the magnets point on the whole the same way (representing a high state of magnetization), the rate of propagation of a small disturbance affords a more definite problem. Tried experimentally, this latter case might afford more satisfactory results.

FRED. T. TROUTON.

Correction in "Island Life."

IN Dr. Merriam's recently published paper on "The Geographical Distribution of Life in North America," an important, and to me almost inexplicable error in my work "Island Life" is pointed out. It occurs at page 41 in the first edition, and is unfortunately repeated at the same page in the recently published new edition, and consists chiefly in stating that the moles (*Talpidae*) are almost confined to the Palearctic region. But a little further on in the same work (page 48 of first edition, and page 49 of second edition) it is correctly stated that there are three peculiar genera of moles in North America, and the same statement is made at page 115, and again at page 190 of vol. ii. of my "Geographical Distribution of Animals." At page 182 of vol. i. of the latter work, however, the error first appears, and it is this erroneous passage that has remained unnoticed till now, and was unfortunately repeated in "Island Life." In the same paragraph an error of a similar kind also occurs as to the distribution of the lynxes. To correct these errors pages 41 and 42 of the new edition of "Island Life" are being reprinted, and will be sent to all who possess the volume if they will forward a stamped and directed envelope to the publishers.

ALFRED R. WALLACE.

THE INTERNATIONAL CONFERENCE ON CHEMICAL NOMENCLATURE.

AT the meeting of the International Chemical Congress, held in Paris in the summer of 1889, a special Section was appointed to consider the unification of

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chemical nomenclature, and, after discussing a variety of propositions, some of which were adopted, it was decided to form an International Commission for the further study of the subject.¹

The members resident in Paris, having been constituted a permanent committee of the Commission, have devoted an immense amount of time and care to the preparation of a scheme, and it was to discuss their report² that we met at Geneva on Easter Monday last. The French Committee had issued invitations, not only to members of the Commission, but also to many other prominent chemists, so that the meeting was a thoroughly representative one. It is worth mentioning, as an illustration of the sympathetic treatment accorded by public bodies in France to men of science, that the Paris-Lyons-Marseilles Railway Company granted a reduction of one-half on the fare over their line to members of the Congress.

Very happily, the local committee had arranged that all might stay at the one hotel—the Métropole—and it was here that we first met in friendly union on the Monday evening.³ The next morning the Congress assembled at the Hôtel de Ville, M. Richard, the Cantonal Minister of Education, being in the chair. After an admirable address of welcome from this gentleman, who appeared to thoroughly appreciate the importance of the object in view, on the motion of Prof. Cannizzaro it was wisely decided not to follow the complimentary, but somewhat unbusinesslike, Continental practice so frequently adopted, of appointing a different chairman each day, but to have only one. M. Friedel, who had taken the chair at all the numerous meetings of the Paris Committee, having been chosen by acclamation President of the Conference, formal business was at once entered into, and, after the necessary interval for lunch, the sitting was resumed in the afternoon. We met in like manner on the two following days, and the final sitting took place on the Friday morning, but many had left before this. On Tuesday evening, by invitation of the local committee, we visited the theatre, a very beautiful building. On the Wednesday evening, we were entertained by them at a dinner at the Hôtel Métropole, on which occasion a very striking speech was delivered by Prof. von Baeyer, who, after point-

¹ The following chemists eventually consented to serve on the Commission:—MM. Béhal, Berthelot, Bouveault, Combes, Fauconnier, Friedel, Gautier, Grimaux, Jungfleisch, Schützenberger (all representing France), Graebe (Switzerland), Alexejeff and Beilstein (Russia), von Baeyer and Nöling (Germany), Lieben (Austria), Paterno (Italy), Franchimont (Holland), Armstrong (England), Istrati (Roumania), Calderon (Spain), Cleve (Sweden), Boukowski-Bey (Turkey), Ira Remsen (United States), and Mourguès (Chili).

² This report had been prepared by the following:—MM. Friedel (President), Béhal, Bouveault, Combes, Fauconnier, Gautier, and Grimaux.

³ The following is the official list of those who took part in the Conference:—MM. H. E. Armstrong, professeur à la Central Institution, Londres, secrétaire de la Chemical Society; A. Arnaud, professeur au Muséum, à Paris; Adolphe von Baeyer, professeur à l'Université de Munich; Barbier, professeur à la Faculté des sciences de Lyon; Aug. Béhal, professeur à l'École supérieure de pharmacie de Paris; Louis Bouveault, docteur ès sciences, Paris; Stanislas Cannizzaro, professeur à l'Université de Rome; Paul Cazeneuve, professeur à la Faculté de médecine de Lyon; Alphonse Combes, docteur ès sciences, Paris; Alphonse Cosso, directeur de la Station expérimentale d'agriculture, à Turin; Maurice De Lacre, professeur à l'Université de Gand; Michel Fileti, professeur à l'Université de Turin; Emile Fischer, professeur à l'Université de Würzburg; A.-P.-N. Franchimont, professeur à l'Université de Leide; Charles Friedel, membre de l'Institut, professeur à la Sorbonne, Paris; Dr. J. H. Gladstone, F.R.S., Londres; Carl Graebe, professeur à l'Université de Genève; Philippe-Auguste Guye, professeur à l'Université de Genève; Istrati, professeur à l'Université de Bucarest; Albert Haller, professeur à la Faculté des sciences de Nancy; Maurice Hanriot, professeur agrégé à la Faculté de médecine, Paris; A.-R. Hantsch, professeur à l'École polytechnique de Zurich; Achille Le Bel, docteur ès sciences, à Paris; A. Lieben, professeur à l'Université de Vienne; Léon Maquenne, docteur ès sciences, aide-naturaliste au Muséum, Paris; von Meyer, professeur à l'Université de Leipzig; Denis Monnier, professeur à l'Université de Genève; R. Nietzki, professeur à l'Université de Bâle; Emilio Noetting, directeur de l'École de chimie de Mulhouse; Emmanuel Paterno, professeur à l'Université de Palerme; Amé Pictet, privat-docent à l'Université de Genève; William Ramsay, F.R.S., professeur à l'Université de Londres; Zdenko-H. Skrapa, professeur à l'Université de Graz; Ferdinand Tiemann, professeur à l'Université de Berlin.

Le Comité local d'organisation se composait de:—MM. Emile Ador, H.-W. de Blonay, Alex. Claparède, Professeur C. Graebe, Professeur Ph.-A. Guye, Alex. Le Royer, Professeur Denis Monnier, Amé Pictet, Fréd. Reverdin, Professeur Albert Rilliet, Edouard Sarasin.

ing out that experimental chemistry had been carried, early in the century, into Germany from France by Liebig, who was tutored by Gay-Lussac, proceeded to say that, although the science had now undoubtedly reached its highest development in Germany, it was more than probable that, in the future, circumstances would arise which would lead to some other nation—France, Russia, Italy, or England—coming to the fore. On this occasion, on the motion of M. Le Bel, it was unanimously decided to appoint M. Marignac Honorary President of the Congress, and a letter to him expressing our regret that ill-health prevented his taking part in its work was at once signed by all present. We were indebted in many other ways to the local committee, and there is no doubt that the success of the meeting was in large measure due to the forethought and hospitable care exercised by them on our behalf; absolute amity prevailed throughout, and it was clear that all were bent on co-operating to secure the carrying out to a successful issue of a very difficult but most important work. The great advantage to be derived from the personal intercourse which such meetings promote was soon apparent: gradually, the doubts which many entertained as to the possibility of devising a practical rational scheme of nomenclature were dispersed, and ere many hours had elapsed the sympathies of all present were enlisted on behalf of the work; thus a mission has been sent forth which will explain the enterprise to chemists generally.

The resolutions passed at the meetings are appended to this article. These, I think, are in no way to be taken as in all respects final, but they will serve to prepare the way and to indicate the lines on which the work is to be carried out. The position in which we found ourselves placed, in fact, was not one which justified our arriving at decisions which could fairly be regarded as binding. The report of the French Committee was placed in our hands only on the morning of the first meeting, and it was impossible to master its contents at so short a notice, and still less to criticize and test the application of its recommendations in detail. That the scheme would serve but as the basis for discussion was soon evident, when at the very outset a system of nomenclature for the hydrocarbons was adopted very different and far more significant than that recommended in the report; and numerous other departures from its recommendations were carried in the course of the proceedings. Again, some of the most active members of the Congress had confessedly paid attention only to special groups of compounds, and had not tested the application of proposals which they strenuously advocated to compounds of other groups; but as a nomenclature admirably adapted to one class may be open to all sorts of objections when applied to another, the general bearing of recommendations made with reference to special groups will have to be fully considered before they can be finally adopted. The resolutions relating to fatty acids (Nos. 18, 19) are of this kind, and their adoption was warmly opposed by an important minority on the ground that, however well they might be adapted to acids pure and simple derived from open-chain hydrocarbons, their application to acids derived from closed-chain hydrocarbons and acids containing other radicles in addition to carboxyl was beset with difficulty. In order to name an acid in accordance with this resolution, the formula of the corresponding hydrocarbon must be constructed from that of the acid by changing carboxyl into methyl; for example, citric acid, $\text{CH}_2(\text{CO}_2\text{H})\cdot\text{C}(\text{OH})(\text{COOH})\cdot\text{CH}_2(\text{COOH})$, would have to be regarded as a derivative of methylpentane, and would be named methylpentanoltrioic acid, numerals being added to indicate the positions of the hydroxyl and carboxyl groups; in like manner, mellithic acid, $\text{C}_6(\text{COOH})_6$, would be named hexamethylbenzenehexoic acid, although no methyl is present in it. The mental effort involved in visualizing the formulæ from such names as these would

appear to be far greater than if they were respectively named propanoltricarboxylic acid and benzenehexacarboxylic acid, or simply propanoltri-acid and benzenehexacid, the use of the term *acid* being understood to imply the presence of carboxyl. A decision on points such as these can only be arrived at after careful study of the general effect of such a proposal, and there was no time for such a comparison during the brief debate possible at a Conference. In some cases, there can be no doubt that the full force of objections raised to proposals in favour of which a majority subsequently voted was not felt, owing to the difficulty which necessarily arises at an international Conference if the language used be not equally familiar to all present, and consequently full expression cannot be given by all to their views. Moreover, although it is easy to criticize destructively even at short notice, constructive criticism under such circumstances is very difficult; consequently a proposal may be accepted even in face of serious objections to its adoption simply because nothing better can be suggested at the time. An instructive case of the kind arose on discussing thio-compounds. The proposals in the French report were not regarded as altogether satisfactory, and an amendment was suggested and carried which to many appeared most undesirable: the next morning, when the time came to confirm the resolutions arrived at on the previous day, the discussion was reopened, and a slight modification of the original proposal was suggested, which was recognized to be an improvement, and the objectionable resolution was rescinded. Clearly at such meetings much must depend on the right expression being found by happy inspiration at the right moment.

The one resolution which covers all others and which defines the nature of the task to be undertaken is the first. Whatever name we may choose to apply to a substance colloquially, it is clearly an absolute necessity of the times that every compound should bear a *systematic* name of such a character that it can be at once translated into the corresponding formula; and that, *vice versa*, a name corresponding to any particular formula may be devised which we may count on finding in the *official* register, if the compound thought of have been described. The value of such a systematic nomenclature to original workers as well as to students cannot be over-estimated, and few who are qualified to take part in such a work will grudge the time they may spend on it. There was considerable difference of opinion at the meeting as to whether a systematic nomenclature should be devised merely for the purpose of an official register, or whether the object aimed at should be a system of wider application: the majority, I believe, came to the conclusion that it should certainly subserve the one, but if possible both purposes. There can be little doubt, however, that the future student will cut the knot by declining to burden his memory with a double vocabulary in the case of all but the commonest substances, and that therefore there is but one course open to us (cf. Res. 26).

Although sufficiently conservative to retain methane, ethane, propane, and butane, the Congress decided not to adopt the proposal to continue the use of the names formic, acetic, propionic, and butyric for the first four acids of the acetic series, which was advocated by a substantial minority on the ground that their retention would facilitate the change from the old to the proposed new system. This is one of the questions demanding careful consideration. Many will, no doubt, prefer to retain old unsystematic names as far as possible, but it is easy to see that the desire to avoid change may carry us too far in this direction; it will undoubtedly be very inconvenient to the present generation of chemists to abandon familiar and cherished names, but nevertheless it may be a wise course to boldly face the difficulty, rather than inflict on coming generations a partially illogical and unsystematic nomenclature. The argument that the present familiar names

may still be used colloquially is, as I have already said, scarcely a justification of the dismissal of such names from the official nomenclature, as our successors may be expected to object more and more decidedly to a multiplex system as chemical science progresses, and to insist on the adoption of the official as the sole system: the extent to which familiar trivial names shall be retained in the official system is therefore a matter of great importance.

As one aim and object must be to devise a system which is significant and logical throughout, no considerations must be allowed to prevail which will defeat this, and it will not suffice to quote present usage in support of illogical proposals; but this has been done. Thus the Congress decided (Res. 46) to name compounds of the type $R'.N_2$, R' azo-compounds, while retaining the name *diazo*-chloride for $C_6H_5.N_2Cl$. It matters not to us that the manufacturers have chosen to call the colours derived from *diazo*-compounds azo-dyes; if substances such as $(C_6H_5)_2S$ are termed *thio*, and compounds such as $(C_6H_5)_2S_2$ *dithio*-compounds (Res. 43), we are bound to be consistent, and apply the significant term *diazo*- to substances containing two nitrogen atoms. Resolution 46 ought therefore to be in part rescinded. I call attention to this case as an illustration of the tendency to break away from uniformity in favour of what may fairly be termed popular prejudice, which will require to be most carefully guarded against if the various sections of our system are to harmonize.

It will be gratifying to English chemists that the principle advocated for many years past by our Chemical Society, and enforced in its "Instructions to Abstractors"—that particular terminations should be regarded as indicative of particular functions, and should therefore be restricted to particular classes of compounds—has been legalized and extended by the Congress. This is a step of great importance, as we may expect that it will affect even trivial names, and that in future names will be given to new substances which will to a certain extent afford a clue to their nature; the hopeless confusion which now reigns supreme in the pages of the *Berichte*, for example, owing to the disregard of this principle by our German colleagues—who have hitherto been, as a rule, almost uniformly neglectful in matters of nomenclature—will, it may be hoped, ere long give way to more orderly treatment.

But the importance of applying this principle logically was not fully grasped even at the Congress, inasmuch as it was decided to affix the termination *ine* to acetylenic hydrocarbons, notwithstanding that this termination is admittedly indicative of basic properties. If, however, a suitable suffix ending in *ene* could be thought of, there would probably be little difficulty in securing its acceptance, in which case unsaturated hydrocarbons generally would have names ending in *ene*, and saturated hydrocarbons names ending in *ane*, and these terminations could be reserved exclusively for hydrocarbons.

It will be obvious from the foregoing remarks that although a solid foundation for our future system of nomenclature has been laid, much remains to be done before a mature design, perfect in all its details, can be presented for adoption. At the meeting the hope was expressed that a decision might be speedily taken, to enable Beilstein to utilize the proposals in the preparation of the third edition of his marvellous work; but it is clear that we are not yet so far advanced as to make this possible or even desirable, and it would be most unfortunate if Beilstein were at the present juncture to promulgate a system which is manifestly incomplete: nothing can be worse in such a case than to consent in haste, when it is evident that this would surely involve repentance at leisure.

Those of us who are interested in the work, and competent to advance it, must now test in detail the application of the proposals which have been provisionally adopted, and we must assist in contributing to the ultimate establishment of a system on the broad lines of policy laid

down for our guidance at the Congress. As it is not improbable that in the future, owing to the extended use of our language, the major proportion of chemical students will speak English, it is essential that due attention be paid to the matter here in England, so that a system may be devised which we can make use of without difficulty.

HENRY E. ARMSTRONG.

Résolutions prises par le Congrès.

1. A côté des procédés habituels de nomenclature, il sera établi un nom officiel permettant de retrouver chaque corps sous une rubrique unique dans les tables et dictionnaires.

Le Congrès exprime le vœu que les auteurs prennent l'habitude de mentionner dans leurs mémoires, entre parenthèses, le nom officiel à côté du nom choisi par eux.

2. On décide de ne s'occuper, pour le moment, que de ce qui concerne les composés de constitution connue, et de remettre à plus tard la question des corps à constitution inconnue.

3. La désinence *ane* est adoptée pour tous les hydrocarbures saturés de la série grasse.

4. Les noms actuels des quatre premiers hydrocarbures saturés (*méthane, éthane, propane, butane*) sont conservés; on emploiera les noms dérivés des nombres grecs pour ceux qui ont plus de quatre atomes de carbone. Ces noms désigneront les hydrocarbures normaux.

5. Les hydrocarbures à chaîne arborescente sont regardés comme dérivés des hydrocarbures normaux, et on rapporte leur nom à la chaîne normale la plus longue qu'on puisse établir dans leur formule.

6. Le numérotage des chaînes latérales partira de l'atome de carbone terminal le plus rapproché d'une chaîne latérale; dans le cas où les chaînes latérales les plus voisines des extrémités seraient placées symétriquement, la plus simple décidera du choix.

7. Lorsqu'un résidu se substitue dans une chaîne latérale, on emploie *métho-*, *étho-*, etc., à la place de *méthyl-*, *éthyl-*, préfixes réservés pour le cas où la substitution se fait dans la chaîne principale.

8. Dans les hydrocarbures ayant une seule *double liaison*, on remplacera la terminaison *ane* de l'hydrocarbure saturé correspondant par la terminaison *ène* (ex. éthène); s'il y a deux doubles liaisons, on terminera en *diène* (ex. propadiène), s'il y en a trois, en *triène*, etc. Si cela est nécessaire, la place de la double liaison est indiquée par le numéro du premier atome de carbone sur lequel s'appuie cette double liaison.

9. Les noms des hydrocarbures à *triple liaison* se termineront pareillement en *ine*, *diine* et *triine* (ex. éthine pour acétylène. propine pour allylène, hexadiine pour dipropargyle).

10. Dans le cas où il y aurait simultanément des doubles et triples liaisons, on emploiera les désinences *éniène*, *diéniène*, etc.

11. En ce qui concerne les hydrocarbures saturés à chaîne fermée, ils prendront les noms des hydrocarbures saturés correspondants de la série grasse précédés du préfixe *cyclo* (ex. cyclohexane pour hexaméthylène).

12. Les atomes de carbone d'une chaîne latérale seront désignés par le même chiffre que l'atome de carbone auquel la chaîne est attachée. Ils porteront un indice qui indiquera leur rang dans la chaîne latérale en partant du point d'attache.

Dans le cas où deux chaînes seraient attachées au même atome de carbone, les indices de la plus simple d'entre elles seront accentués.

Le même mode de numérotage est adopté pour les chaînes latérales des chaînes fermées.

13. Les hydrocarbures non saturés seront numérotés comme les hydrocarbures saturés correspondants. Dans le cas d'ambiguïté ou d'absence de chaîne latérale, on placera le n° 1 au carbone terminal le plus rapproché de la liaison d'ordre le plus élevé.

14. Le numérotage des hydrocarbures est conservé pour tous leurs produits de substitution.

15. On nommera les alcools et les phénols du nom de l'hydrocarbure dont ils dérivent, terminé par le suffixe *ol* (ex. pentanol, penténol, etc.).

16. Quand on a affaire à des alcools ou à des phénols polyatomiques, on intercalera, entre le nom de l'hydrocarbure fondamental et le suffixe *ol*, une des particules *di*, *tri*, *tétr*a, etc., suivant l'ordre de la polyatomicité (ex. propane-triol pour glycéline).

17. Le nom de *mercaptan* est abandonné, et cette fonction sera désignée par le suffixe *thiol* (ex. éthane-thiol).

18. Dans les acides de la série grasse, le carboxyle sera considéré comme faisant partie intégrante du squelette de carbone.

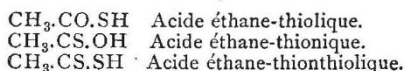
19. Le nom de tous les acides monobasiques de la série grasse est tiré de celui de l'hydrocarbure correspondant suivi du suffixe *oïque*.

On désignera les acides polybasiques par les terminaisons *dioïque, trioïque, tétrioïque*, etc.

20. Les résidus monovalents des acides seront dénommés en transformant en *oyle* la terminaison *oïque* de l'acide.

21. Dans les acides monobasiques à chaîne normale saturée ou symétrique, le carbone du carboxyle porte le n° 1.

22. Les acides dans lesquels un ou plusieurs atomes de soufre remplacent autant d'atomes d'oxygène du carboxyle seront désignés comme suit : le soufre simplement lié à un atome de carbone sera désigné par le suffixe *thiol* ; si la liaison est double, on emploiera le suffixe *thion*. Exemples :



23. Le Congrès donne son adhésion à la proposition suivante sans émettre de vote définitif à ce sujet :

Les éthers-oxydes seront désignés par les noms des hydrocarbures qui les composent, reliés par le terme *-oxy-* (ex. pentane-oxy-éthane pour oxyde d'éthyle et d'amyle).

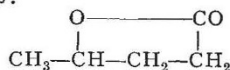
24. Les anhydrides d'acides conserveront leur mode actuel de désignation d'après le nom de leurs acides (ex. anhydride éthanioïque).

25. (12 bis). Dans le cas de deux chaînes latérales attachées au même atome de carbone, l'ordre dans lequel ces chaînes seront énoncées correspondra à leur ordre de complication.

26. Une discussion plus approfondie sur la nomenclature des composés à fonctions complexes est ajournée, et l'étude de cette question est renvoyée à la Commission internationale, pour qu'elle prépare sur ce point un projet qui sera présenté à un prochain Congrès ; la Commission cherchera à concilier les exigences de la nomenclature parlée avec celle d'une terminologie applicable aux dictionnaires.

27. On conservera les conventions habituelles pour les sels ou éthers composés.

28. Les lactones seront désignées par le mot *olide*, indiquant que c'est un anhydride interne d'alcool et d'acide. La position de la fonction alcoolique, par rapport au carboxyle de l'acide alcool d'où dérive la lactone, pourra être exprimée par les lettres grecques α , β , γ , δ , à côté du numérotage habituel des chaînes latérales :



1.4 pentanolide ou 1.4 γ pentanolide.

29. Les acides lactoniques dérivant d'acides bibasiques seront nommés comme les lactones dont ils dérivent, en ajoutant le suffixe *oïque*, caractéristique des acides.

30. La discussion sur les chaînes fermées est ajournée jusqu'au moment où la publication des idées de M. Armstrong, sur ce sujet, aura permis à la Commission internationale de les comparer avec les propositions de M. Bouveault.

31. Dans la série aromatique et tous les corps renfermant une chaîne fermée, toutes les chaînes latérales seront considérées comme des substituants.

32. Aldéhydes. Seront désignées par le suffixe *al* (méthanal, éthanal).

Aldéhydes sulfurés : suffixe *thial*.

33. Acétones : suffixe *one* ($\text{CH}_3.\text{CO}.\text{CH}_2.\text{CH}_3$, butanone 2).

Diacétones, triacétones : suffixes *dione*, *trione*.

Acétones sulfurées : suffixe *thione*.

34. Quinones : Le suffixe *quinone* sera conservé pour les corps homologues de la quinone ordinaire.

Les corps ayant plusieurs fois le chaînon CO.CO seront des diquinones ou triquinones.

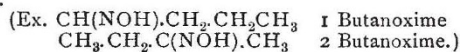
35. Ammoniaques composées : pas de changement (ex. éthylamine, éthène-diamine).

Les corps où le groupe bivalent —NH— ferme une chaîne formée de radicaux positifs seront appelés *imines* (ex. éthène-imine).

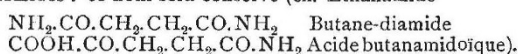
Phosphines, arsines, stibines, sulfines : la nomenclature en usage est conservée.

36. Hydroxylamine : ce nom est conservé.

37. Oximes : seront désignés en suivant les règles actuellement admises ; les corps *isonitrosés* seront nommés comme oximes.

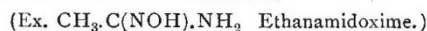


38. Amides : ce nom sera conservé (ex. Ethanamide



Imides : seront conservées.

Amidoximes : ce nom sera conservé.



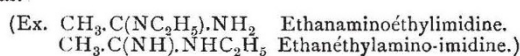
Urée : le mot générique *urée* sera conservé, on l'emploiera comme suffixe pour les dérivés alcylés de l'urée, tandis que les dérivés par substitution acide seront des *uréides*.

Les corps dérivant de deux molécules d'urée seront désignés par les suffixes *diurée*, *diuréide*. Les uréides acides prendront le nom d'*acides uréiques*. On rejettera les désinences *uramique* et *urique*.

39. Amidines : ce suffixe sera conservé.

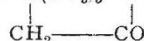
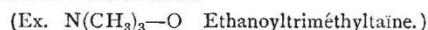


Pour les dérivés, le nom sera dédoublé, et l'on fera précéder du nom du groupe substituant, soit amino, soit amidine, suivant le cas.



Guanidines : le mot générique *guanidine* est conservé, mais différentes guanidines seront nommées comme dérivés substitués de la diamidocarbonyl-imidine.

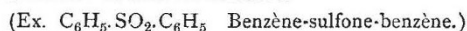
40. Bétaïnes : suffixe *tainé*.



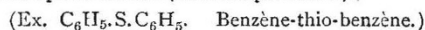
41. Nitriles : la question est laissée en suspens pour la série grasse. Pour la série aromatique, on adopte le préfixe *ciano* (comme nom de substituant).

42. Carbylamines : la nomenclature actuelle est conservée.

43. Sulfones : ce nom est conservé.



Sulfures : on les désignera en intercalant *thio* entre les noms des deux composés saturés (décision provisoire).



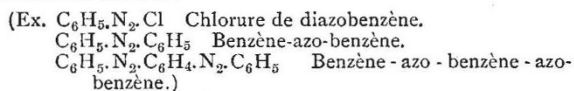
Disulfures : seront désignés de même par *dithio*.

44. Ethers isocyaniques : suffixe *carbonimide*. Ex. Ethylcarbonimide désignera le cyanate d'éthyle de Wurtz ; on dira de même éthylthiocarbonimide pour le dérivé sulfuré correspondant.

Cyanates ; ce nom est conservé aux vrais éthers qui, par saponification, donnent de l'acide cyanique ou ses produits directs d'hydratation. On remplacera le nom de sulfocyanate par celui de *thiocyanate*.

45. Corps nitrés : rien à changer à la nomenclature actuelle.

46. Corps azoïques : les dénominations *azo* et *diazo* seront conservées, mais le mode d'énonciation de ces composés sera modifié comme suit :



THE GEOLOGY OF BARBADOS.¹

THE oceanic series of Barbados forms a group of beds which is clearly marked off from the Scotland series below, and the coral limestone above. The oceanic deposits do not, however, appear everywhere as a continuous band between the two other formations, because the elevation of the island from oceanic depths was accompanied by a considerable amount of faulting, and tracts of the oceanic deposits were dropped down between blocks of the Scotland series. Although this faulting

¹ "The Geology of Barbados. Part II. The Oceanic Deposits." By A. J. Jukes Browne and J. B. Harrison. Abstract of paper printed in the Quarterly Journal of the Geological Society, May 1892.