

settles on every newspaper." How the thing is done he explains by a story of the founder of the *London Times*, who replied to the query why all the articles read as if written by one man, "Oh, there is always some one best contributor, and all the rest copy."

It is an honorable line of "best contributors" to which the *Evening Post* can point in the persons of its editors from 1801 down. There may have been more vivid personalities connected with the American press; other names may suggest more of sound and fury; but what other newspaper numbers, among those who have shaped its policy and wielded its leading pen, men whose names stand for so much of culture and power and fire and integrity as do those of William Coleman, William Leggett, William Cullen Bryant, Parke Godwin, John Bigelow, Carl Schurz, and Edwin L. Godkin? Of marked diversity of gifts, these editors of the *Evening Post* were one in devotion to the highest standards in journalism and in public life. All of them helped to give to their newspaper a certain tone which was recognized by Charles Sumner when he wrote to John Bigelow in 1850, "I cannot forbear expressing the sincere delight with which I read your paper. Its politics have such a temper from literature that they fascinate as well as convince."

Bryant, of course, was the editor who most closely fixed, in the public mind, the association of the *Evening Post* with literature. It was as "The Man of Letters," not the editor, that he was commemorated in its columns, after his death, by Edmund Clarence Stedman. But there were other brave writers, both before and after that Agamemnon. Of the anti-slavery writing in the *Evening Post* in 1835-37, done by William Leggett, an historian of the time says that it was a "really noble series of editorials"; and Bryant himself paid tribute to the memory of his brother-editor, by writing of him after his untimely death:

"The words of fire that from his pen
Were flung upon the fervid page,
Still move, still shake the hearts of men,
Amid a cold and coward age."

As for the pen of Mr. Godkin, which so lately ceased to adorn the pages of the *Evening Post*, what newspaper ever matched it for satire that read like a page of Swift's, for Olympian humor, for fearlessness and fervor, for clarity of moral perception, and for a broad acquaintance with the best that has been thought and done in the world's history, brought to bear upon the endless and apparently petty problems of the day which confront a writer for the day?

A man has mingled feelings, remarked Phillips Brooks, when he walks through a gallery of his ancestors. Their fame is his, yet not his, unless he reproduces and continues it. To its editorial ancestors the *Evening Post* paid on Saturday its just acknowledgments, joining

reverence to those who are dead with greetings to those who are still among the living, and ending with the devout hope, *Sicut patribus, sit Deus nobis*.

ousting AN ITALIAN TAMMANY.

If ever the appeal to the ballot looked hopeless, it was in the case of Naples, and news that the political Camorra was defeated last week by a narrow majority will surprise not only general students of municipal problems, but the Italians themselves. Conditions had seemed too bad to be immediately remedied. More than a year ago the Italian Government was forced, by the accumulating proofs of corruption in Naples, to suspend the municipal government and to place the city in the charge of a Royal Commission of Inquiry. The bulky report of this Commission, which was recently published, gives what should for the future remain a veritable encyclopædia of municipal pathology.

The situation was not one to encourage reformers. Unscrupulous political leaders had been allowed to grow into great power, because they were necessary, or made themselves appear so, to the success of the national parties. The infamous Casale and Summonte may have seemed as necessary to Giolitti's leadership as Croker seemed indispensable to Mr. Bryan's canvass. The Commission of Inquiry followed the matter further, and found that the voting-lists were scandalously stuffed, and that, short of a popular uprising, the candidates of the Camorra could always be counted in. The business of the city was found to be in frightful disorder. In many departments no pretence of adequate bookkeeping had been made, and the heads were only able to say that the money had been spent in some unexplained fashion for the good of the city. Wherever the Commission followed the city's transactions with holders of franchises, or its conduct of public utilities, it found evidences of wastefulness and of corruption. Light, water, and traction companies paid tribute to the machine; the Department of Sanitation showed the same taint. There was no doubt about the disease; the question was as to the cure.

To many it was discouraging that the Commission made no positive recommendations. Conservative editors deplored the fact that the prosecutions which must follow the exposure could be undertaken only after considerable delays. Many feared that the decision to hold a city election in November, and to restore the control to a demoralized people, was at least premature, and might turn out to be disastrous. There were, in fact, many reasons for fearing that the political health of the city had been so completely sapped that the power of reaction was lost. If the political abuses of Naples are of the kind which

we know in most of our American cities, the relation of the machine to the average citizen is of a sort not only to despoil, but to humiliate. Imagine a condition of things where one may not discharge a Camorrist servant without incurring threats and personal peril; where the agents of the "High" Camorra may demand to inspect your books, so that you may be mulcted intelligently on the basis of your profits. A terrorism which in the worst days of Tammany was chiefly directed against the vicious, the miserable, and the poor, has been in Naples systematically employed against the well-to-do; so that to arouse civic courage to revolt against extortion was vastly more difficult in Naples than it was in New York.

Believing that the whole community was honeycombed by the system or blackmailing, many of the North Italian journals feared that a great mistake had been made in appealing to the voters. It would have been safer, they felt, to keep the city under the Commission until the voting-lists had been thoroughly revised, the bosses tried and punished, and a better public spirit aroused. From this prudent, if rather timid, opinion the Committee dissented utterly, and, whether moved by questions of ministerial expediency or by a sole regard for the matter in hand, held to the decision that the city must settle its own political future—and promptly.

The result will show to doubters that it is unwise to think too meanly of the people. The victory over the Camorra, it should be noted, was won in the normal way, by a non-partisan coalition which had frankly no other aim than to "destroy an historic organization." To this end, parties as different as Socialists and Monarchists, as Catholics who had long abstained from political activity and the members of the influential Merchants' Association, who had long suffered from the blackmail system, all united. Against this improvised movement the most desperate efforts of the bosses failed. That it was an heroic cleaning up, those who have fought longest against our Tammany will be freest to admit. Such a victory gives hope to all who are working for decent civic housekeeping. Even Philadelphia need not despair of shaking off her present unenviable distinction of being the worst governed of civilized cities.

THE NATIONAL ACADEMY AT PHILADELPHIA.

PHILADELPHIA, November 15, 1901.

The National Academy of Sciences has just closed here one of the most successful of its autumn meetings, and one of the most agreeable and interesting as to its reception. It met on Tuesday forenoon, November 12, in Houston Hall, which is the general students' club of the University of Pennsylvania. The first paper was a biographical notice of the late Dr. Genth,

who was eminent as a chemist. On Wednesday Gen. Comstock read a notice of the life of Gen. John Newton. The list of papers promised that chemistry would occupy the attention of the Academy more than any other science. But the chemists seem to think—mistakenly, I fancy—that scientific men outside their own fraternity cannot be expected to care for questions of the chemical constitution of this or that class of bodies; and the consequence was that some papers in this department went unread, as did two by Dr. Barus, one of which, on Nuclear Condensation, we were particularly sorry to miss. One of the most important contributions was made on Thursday, by Prof. James M. Crafts, on the "pseudo-catalytic action of concentrated acids." It related to that branch of chemistry, to-day almost the dominating one, which considers the rapidity—or, as the chemists phrase it, the "velocity"—of chemical action. This, we know, in a general way, depends upon the concentration of the different reagents. But how should "concentration" be defined? Hitherto, only extremely dilute solutions have been employed in such researches; and as long as study was confined to them, it was sufficient to define concentration as the number of molecules, or of ions, per unit of volume. It has been well known that this definition would not lend itself to any simple expression of the action of concentrated solutions; but in what manner it ought to be modified has not hitherto been satisfactorily made out. Professor Crafts has found a definition which answers to perfection for certain concentrated solutions, at least. He has selected for study the action of "strong" acids—namely, those which are unable to resist the ionizing action of water—in decomposing many substances, without themselves entering into any chemical combination. This fomenting of discord is what is called, in a general way, catalysis, or pseudo-catalysis when it is suspected that the fomenters are not really quite so disinterested as they pretend to be. Professor Crafts has had the happy idea of adopting, for subjects of decomposition a class of bodies called sulphonic acids, which, for certain reasons, are particularly available for the purpose. In these cases, the proper definition of concentration was found to be that it is the ratio of the number of active ions present to the total number of molecules. Experiments were also made with muriatic acid as the catalyzing agent, with the result that its effect is an exponential function of the amount. This is a fact perhaps as important as the definition of concentration. Although the mass of observations already obtained by Professor Crafts is large, it is likely to be greatly increased.

Another very interesting chemical paper was presented on Tuesday morning by Prof. Edgar F. Smith. Everybody who has read a treatise on chemistry within the last twenty years is aware that the interest in the precise value of the atomic weights of the elements has been immensely heightened by the discovery of the periodic law. All the elements, from atomic weight 39 up, are arranged, according to their chemical properties, in eighteen vertical columns and five horizontal rows; and the atomic weights increase downwards and to the left, the left-hand element in each row (having the lowest atomic weight in that

row) being of higher atomic weight than the right-hand (or highest) atomic weight of the row above it. There are two exceptions only. The atomic weight of Nickel, 58.7, ought to be higher than that of Cobalt, which is 59.0; and the atomic weight of Iodine, which is 126.8, ought to be higher than that of Tellurium, which is 127.5. But while the atomic weights, with those exceptions, always increase, and although upon this table have been based successful predictions of the existence and chief properties of four elements, at least—Gallium, Germanium, Scandium, and Neon, while Crypton and Xenon were virtually predicted—yet there seems to be no exactitude or strict regularity in the amount of difference between two successive atomic weights. This may very well be because many, if not most, of the elements are so impure as to falsify their atomic weights, and in that way completely to mask the law of progression, which is probably itself periodic.

This hypothesis is somewhat confirmed by the fact that there is a gap in the table, which is supposed to represent sixteen successive elements hitherto undiscovered or unlocated; and nearly all the elements which appear in the table just above these undiscovered elements have their atomic weights heavier than we should expect from the periodic law; while all those just below any of the undiscovered elements have their atomic weights lighter than we should expect. This would be just the effect that would be produced if these elements were contaminated with the undiscovered elements. Among the elements whose observed atomic weights are lighter than we should expect them to be, none is quite so remarkably so as Tungsten, which is set down as 184, although we should expect it to be between 186 and 187. Professor Smith has undertaken a new determination of this atomic weight, and has ascertained that there is no known process which will free Tungsten from Vanadium, the atomic weight of which, being only 51.4, must have lowered the apparent atomic weight of Tungsten by a considerable amount. The patience of an inorganic chemist needs to be inexhaustible, and thus far Professor Smith has not himself succeeded in effecting the necessary purification of Tungsten. Meantime, since he has proved that all the hitherto supposed pure Tungsten contained Vanadium—say, perhaps, about 1 per cent. of it—it is probable that the true atomic weight is about what the periodic law would lead us to expect it to be.

Another paper approaching a chemical subject, if Mr. Brush's announced etherion of several years ago can be called chemical, was read by Prof. Edward W. Morley, on the transmission of heat through the vapor of water at low pressures; the name of Mr. Charles F. Brush being associated with his own as collaborator. Mr. Morley proved conclusively that, at certain very low pressures, the transmission of heat through aqueous vapor is very considerably more rapid than through air, though it is always much less than through hydrogen. This paper was read on Wednesday.

There were very few physicists at the meeting, and one may say no astronomers, who were doubtless kept at home to welcome the Leonids. But a geologist, Dr. George Ferdinand Becker, brought out, on

Thursday, a physical phenomenon which one can hardly believe to be absolutely new, although it would probably be difficult to find any record of it. Namely, it is not uncommon to find laminae of slate separated by crystals; but it has hitherto been supposed that the laminae were first separated by faulting or otherwise, and that subsequently the crystals were deposited. An instance in which a crinkle affecting several successive laminae lay in a line perpendicular to all of them led Dr. Becker to cause the following experiment to be made. Horizontal plates of glass, kept from one another at a fifth of a millimetre, were immersed in a strong solution of alum, which was permitted to crystallize. The result was that the crystals forming between the plates forced the latter apart nearly to the distance of a millimetre. Now, since there seems to have been nothing but friction to oppose lateral expansion, it seems that the growing crystal is capable of stresses like those of the solid.

Another note by Dr. Becker was geological in its aim; but its reasoning was purely dynamical. This was a refutation of the orogenetic theory of tilted blocks. According to this theory, the crust of the earth, floating upon a magma, becomes broken up into blocks which are then tilted, so as to lean in oblique positions one against another, thus forming mountain ridges with intervening valleys. But Dr. Becker showed that masses so great as would be required thus to account for mountain formations would, even if each was a block of flawless granite, be broken by its own weight into pieces, some of which would be so thin as to turn quite over upon their sides, so that a sort of discontinuity would result, very different from anything seen in geology.

There were two interesting and brilliant exhibitions by Prof. George F. Barker: one, of the five new gases and their light—helium, neon, argon, crypton, and xenon—neon showing a most extraordinary scarlet light, and argon, with a condenser, a magnificent deep blue; the other, of two of the new incandescent electric lights, (1) that one in which the filament is composed of that same mixture of 99 per cent. thorium and 1 per cent. ceria which shines in the mantle of the Welsbach burner; and (2) that one in which the filament is composed of metallic osmium. Presumably, the hindrance to the extensive use of the latter would be the impossibility of obtaining osmium in large quantities. The method of making the filament of this excessively refractory and hard metal is a secret in possession of the Welsbach Company. Otherwise, since it requires but half the voltage of the carbon incandescent light, there would be very great economy in it. The ordinary voltage would presumably destroy the filament.

On the biological side there were half-a-dozen papers of a high average order of merit; especially two in physiology. The best was on "Snake Venom in Relation to Hemolysis, Bacteriolysis, and Toxicity," by Dr. S. Weir Mitchell and Dr. Simon Flexner, the latter not yet a member of the Academy. It is generally known that Dr. Weir Mitchell was the first to study snake-venom scientifically, but it was not until long after his first researches had been laid aside that, by some subconscious process, well illustrating Whewell's theory of scientific ideas, he was brought to the hypothesis that venom con-

sists of a mixture of two distinct poisons. When Dr. Weir Mitchell had conceived the hypothesis, he called upon a friend to collaborate with him in putting it to the test of experiment; and it was not until many months, had been devoted to patient work, and discouragement was setting in, that the investigators found that the two poisons could be separated by a dialyser, the one acting intensely upon the higher nervous centres, the other disintegrating the blood. Circumstances then again long arrested the further prosecution of the inquiry, during which time it had been somewhat advanced by European physiologists, until last year Dr. Weir Mitchell proposed to his student, Dr. Simon Flexner, to take up the investigation anew upon certain general lines which he formulated. Dr. Flexner seems to have performed his task with distinguished ability; and he certainly presented the somewhat complicated matter with unusual lucidity and fluency.

Another interesting investigation, by a young physiologist, Dr. Horatio C. Wood, Jr., introduced by Professor Barker, had been read on Tuesday and was illustrated by photographs and sphygmographic traces. The problem could not be more important from an iatrical point of view, being that of the peculiarities in the supply of the lungs with vaso-motor apparatus of nerves, and the consequent specific effects of various drugs in incipient pneumonia, etc. The experiments were performed upon dogs, whose chests were opened by median incisions. It was evident that the physiologists of the Academy thought this the weakest link of the work; for when the lungs were so exposed to the air, carefully as the temperature and humidity might be attended to, they were under most abnormal conditions.

One of the stronger of the young biologists, Prof. Henry F. Osborn of Columbia University, put forward an hypothesis of what he called Latent, or Potential, Homology, which he illustrated by a peculiarity in the growth of teeth. When we study the design of the most developed grinding teeth and compare with it the teeth of "recent" horses on the one side and of primates on the other, we find commencing in both these widely separated groups a development of certain folds which are evidently destined to take a certain future development, alike in the two cases. But horses and primates have had no common ancestor for upwards of a million years back, if we accept a chronology whose possible errors can be of no consequence for the present purpose. We appear, therefore, to be confronted with a feature of development which has been lying in *posse* for a million years. What could have been its mode of being during that time? Professor Osborn had two other papers full of interesting ideas. In one of them he proposed to use the features of dolichocephaly and brachycephaly (long and broadheadedness), which have had perhaps an exaggerated esteem among anthropologists, and have been confined to their science, as important factors in the taxonomy of different families of vertebrates.

A paper by Dr. Caswell Gräve, introduced by Prof. W. K. Brooks, was read by the presiding officer. It related to an improved method of rearing marine larvae. Finally to be mentioned is a paper by Mr.

C. S. Peirce upon the logic of the process of drawing historical conclusions from ancient testimonies. This was an elaborate memoir, in which the method of balancing probabilities was combated as being, in most cases, illogical; a different method being developed and defended, with full details of the different conditions to be fulfilled. Three examples were given to illustrate the new method and contrast it with that in vogue among the higher critics. The first related to the Seepsis story concerning Aristotle's manuscripts; the second to the chronology of the Dialogues of Plato (where the data accumulated by Lutoslawski were employed); and the third to the life and character of Pythagoras, this being selected as showing how to deal with the least trustworthy testimonies.

The Academy received the most charming attentions from the Philadelphians. Provost and Mrs. Harrison gave a reception on Wednesday evening in the Museum of Science and Art. A New Yorker would do well to devote a day to going to Philadelphia to visit that museum, one of the most deeply interesting that the whole world contains, if only for these three departments—the Babylonian remains, including those from Nippur; the Japanese Buddhist temple; and the Matthew Stewart collection of gems, which is unrivalled in interest by anything of the sort your correspondent has ever seen. On Thursday Dr. Weir Mitchell entertained the Academy at dinner, where were gathered many of the most interesting men in Philadelphia.

M. D.

THE IRISH LITERARY THEATRE.

DUBLIN, October 31, 1901.

The past week in Dublin has been in many ways one of very great interest. There have been exhibitions of paintings by Irish artists (Mr. J. B. Yeats, Mr. Nathaniel Hone, and Mr. J. B. Yeats, Jr.), and frequent meetings of those interested in the "Irish revival"; and the Irish Literary Theatre has given its third annual performance. The plays of this year were two, one in English—"Diarmuid and Grania"—by Mr. George Moore and Mr. W. B. Yeats; and one in Gaelic—"Cathleen ni Houlihan"—by Dr. Douglas Hyde. To the latter an altogether special interest attaches, as it is the first Gaelic play presented in a Dublin theatre. Both plays received the fullest serious consideration, and the fact that the performances aroused even heated discussion shows pretty clearly that the movement they represent is one of no little significance.

The Irish Literary Theatre was started three years ago by Lady Gregory, Mr. Yeats, and Mr. Edward Martyn, who were afterwards joined by Mr. George Moore. It had for its immediate object the development of Irish dramatic art, through the presentation of original plays on Irish subjects, whether in English or in Gaelic. The movement has had a valuable ally in the Gaelic League, under the Presidency of Dr. Hyde; the aim of the League being to bring about the revival of the Irish spirit, chiefly through the fostering of the Gaelic language. The whole "Gaelic movement," however, aims at nothing short of making Ireland a self-sufficient nation, through the encouragement of all the forces that mean, in the broadest sense of the words, a national culture. It is an

appeal to the native spirit to awake to its own and to recover its treasures of legend and language before they are lost. How far the Irish speech and tradition may be restored to the Irish people, and how far the Irish Theatre has stimulated the Irish intellect, are at present, of course, matters of speculation; but this is certain, that the League is a flourishing organization, and the Theatre has proved that people will come with a keen and critical interest to see an Irish play.

The guarantors of the Theatre proposed that it should continue for three seasons, at the end of which period it would at least be possible to determine whether or not the movement was hopeless, and, if it were not, what steps should be taken to carry it on. Six plays have now been produced: "The Countess Cathleen," by Mr. Yeats; "The Heather Field" and "Malve," by Mr. Martyn; and "The Bending of the Bough," by Mr. Moore, besides the two plays of last week; and the purely tentative part of the project has come to an end. The following steps must, in the nature of things, be experimental, for although the three years have shown that the project is too significant to be sneered at, and too good to be extravagantly praised, yet they have not shown the precise direction that should now be followed.

Municipal endowment of the Theatre has been urged, but this is a hardly probable outcome; doubtless it would be unwise at present to guarantee publicly a scheme that must undergo still a good deal of shaping before it can, in the nature of the case, hope to become wholly national. It would seem to an outsider better to continue, if possible, on pretty nearly the same basis, but increasing the number of performances as circumstances permit, until the movement shall be fairly established as a factor in Irish life. It would be more than a pity if the plan so effectively begun should be allowed to languish. There is in Dublin, not to speak of the rest of Ireland, a public sufficiently interested in dramatic art to make of the Theatre a real institution, provided the plays chosen be not polemic, or didactic, or anything but cleanly dramatic.

Mr. Yeats's desire to present also some of the masterpieces of foreign drama, French, Spanish, Scandinavian, and perhaps Greek, would, if carried out, have the effect of lifting the project out of the reach of faction. For it may in Ireland be difficult to keep the Theatre quite clear of the political and religious strife that enters so vitally into all Irish questions of the present day. To illustrate several different aspects of the reception of the plays, it may be noted that the Roman Catholic Archbishop of Dublin bestowed his episcopal sanction upon them, some people opposed the Theatre because it was called Irish and not Gaelic, some refused to go to see the leading actor in "Lear" later in the week because he had previously acted in the Irish play, and the gallery gods drowned out with Gaelic songs the entr'acte "Funeral March of Diarmuid," because it had been composed by an Englishman. And yet the Gaelic League, which is overwhelmingly Catholic, has several times reflected to its Presidency a Protestant, Dr. Hyde. The total combination of harmonious and discordant elements is not altogether an easy one to deal with.

"Diarmuid and Grania," presented by Mr.