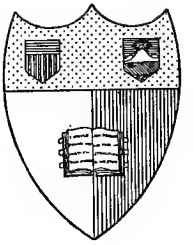


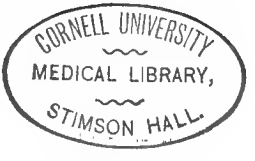
SUGGESTIONS

TO

MEDICAL WRITERS

BY

GEORGE M. GOULD, A.M., M.D.



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PREFACE.

DURING the publication in the *Philadelphia Medical Journal* of the editorial notes entitled, *Suggestions to Medical Writers*, I have received many requests that they would be gathered and published in book form. In now doing so I have added an article entitled, *History and Psychology in Words*, which, although having no special medical significance, seemed pertinent and of service in setting forth the logical connection of the medical and evolution aspect to general philologic study. I have also inserted an article on one phase of *Medical Paleography*, that relating to signs and abbreviations. Several of the paragraphs in Chapter II were contributed by two of the collaborators of the *Journal*, who have kindly allowed me to use them. I am grateful for the courtesy of Mr. H. O. Hall of the Library of the Surgeon-General's Office, and Mr. Francis E. Wessels, of Philadelphia, in permitting the inclusion of their articles contributed to the *Philadelphia Medical Journal*.

The editor of the worst-edited, most immoral, and, taken as a whole, the most supremely vile "medical" journal I have ever seen, thus commands his contributors:

> After having written an article, try to read it over yourself. If you cannot succeed, do not imagine we can, and send it, but rewrite it.

The pathetic experiences which suggested this remarkably worded advice are also intimated in the further order: "Write on white paper and use pen and ink." This editor and all of his contributors do not fail roundly and frequently to denounce ignorance and ignoramuses, but the denunciations are in terms, by means of syntax, and with a method of spelling that never before came together in a typesetter's room. True to character, they are proud of what they suppose learned and scientific, so they religiously retain the diphthong in *anæmia*, *gastrorrhœa*, etc., but the diphthong they retain is, I regret to observe, not the etymologic one. They say *anoemia*, *gastrorrhaea*, *hoemorrhage*, etc. I suppose they would write *aedema* and *oether*, and contend that *aethèr* is correct! From all of which appears the ancient but ever new truth that theory outruns action, and that preaching is easier than practising. It is, however, equally plain that the nonpractising preacher should not be stoned, nor should derision be expressed in language which the poor sermonizer has rightly condemned. "I can easier teach twenty what were good to be done, than be one of the twenty to follow mine own teaching."

Philadelphia, January, 1900.

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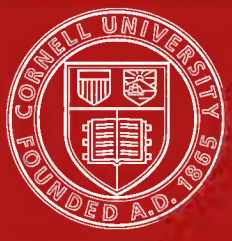


CHAPTER I.

INTRODUCTORY SUGGESTIONS AS TO MEDICAL ENGLISH.

ONE can read scarcely a sentence of medical English without bumping against the fact that this is a strange sort of a jumble—this iatric language of ours. We find that the structures of the body and its diseases are named by words that are not English. Even in the single-sentence title of an article there will be a hodgepodge of Latin and English. We should protest against this nonsense. Let us anglicize our names of diseases, bones, nerves, veins, and muscles, and quit dragging about with us the tags and barbarisms of medievalism. It is long past the time when the medical snake should have thoroughly sloughed and left behind the old skin of a Latinity that is usually poor philology, sorrier science, and the very superstition of English. There are some terms which it may be difficult to anglicize, but let us "force them to come in" by any amount of wheedling or by downright compulsion. Take the tables of anatomic parts and with a little good-will all the Latin names can be anglicized without much trouble. A few of the muscle names may bother one a little. Let us appeal to our anatomists and quizmasters and get them to help us with our chronic philologic dyspepsia. The obstinate words must be adopted and taught English manners. We have these poor slaves on our hands; it is we that brought them to this land of freedom and enslaved them. It is both ridiculous and useless to scorn them and keep them as outcasts. Let us teach them good manners, and good service of our profession and of humanity. That is only sound sense, social or linguistic. As for ourselves, let us never italicize such terms; do not let us flatter either the modern sticklers, or

the old Latin spooks, but march these mummers and mummified words straight out into the daylight of good Anglosaxon English. They will feel much better there, than when they are left flitting and hiding about the cellars of some musty European cloister turned into a secret dissecting-room. The argument that the Latin titles to articles and names of organs are necessary in literature for the cataloger's sake, or for any other reason, may be smiled at in silence. I cannot help feeling that he is a better anatomist who says *eustachian tube, squamous suture,* etc., than one who speaks of the *Tuba eustachii,* the *Sutura squamosa,* etc.; that he is a better clinician who speaks of *purulent otitis of the middle ear,* or of *pulmonary tuberculosis,* than one who says *otitis media purulenta,* and *phthisis pulmonalis.* In this connection a word, many words of praise, if they would better help, is deserved for the nomenclature of neural terms advised by Professor Burt G. Wilder, and the majority of the Committee of the American Anatomical Association on revision of the nomenclature of such terms. Of all the attempts to modernize, shorten, and make less incongruous our anatomic names, this is the best, most common sense, and best built on general evolution laws. We should do all we can to render it practical, or rather practised.

Nearly all of us pull the old skin along behind us in our prescriptions, thinking that we must at least write in bad Latin the names of the articles we prescribe. The reasons given for continuing this custom will not bear investigation. In the first place, to write a prescription with parts here and there in sick English, and other parts in moribund Latin, illogically and whimsically dumped together, is "neither fish, flesh, fowl, nor good red herring." There are probably not a score of American physicians who can write off-hand a whole prescription in correct Latin. Why should we 999,981 ignoramuses flatter the pride of these aristocrats and make them laugh at us in their sleeves for our bungling? "Don't

want the patient to know what we are prescribing?" That is a confession a man would hardly make if he suspected its implications. Ethically it implies a desire or a need to bamboozle patients,—a method of treatment that is hardly flattering to our character, or to our ability to cure. If we need to do this, either our personal art or our scientific ability is as medieval as is our language. If we feel bound to humbug hysterics who will not have the good sense to get well or to die, we have the chemic names for drugs, and we can, as a friend of mine says he must do, keep a gallon of pink pellets of sugar of milk for distribution, with solemn directions as to taking.

Most of the patients we try to deceive with Latin are sharp enough to find out what the words mean—if they can read the doctor's handwriting—so there is nothing for it but to "go the whole ourang," as the Darwinian convert said. True medievalism, wherein such nonsense arose, was minded to do the business thoroughly, and devised a complete set of hieroglyphic signs for every drug. As modern science approached, these stupids slunk back again into their alchemic garrets and cloister-cellars, let us hope to die, unless some medieval-minded modern wants them, and will, *more suo*, galvanize them into life again.

Let us vow that from this day we will write every prescription in frank open-hearted English! The dead, wrinkled, dried ultramontane skin is not good science; as written, it is certainly contemptible philology, and, Heaven help us! it is not at all pretty! And what a labor it has been to trundle it all the way from Rome to Chicago! Strange that it has not been utterly worn out; but it is not more strange than the explanation that as in personality so in language, the first and last creation of personality, the whole past somehow or other exists in the present. Every word and every letter bears the marks of at least 5000 years of history, and pathetically tells of its 5000 years of struggle with ignorance, prejudice, and evil. But it as clearly points the way by evolution

methods to unrealized ideals, and undreamed science. Ours is the duty to obey the hints and suggestions. At least we need not, like some middle-aged medical scatologist, make up our prescriptions with snakeskins, and other such indescribable things, from the Walpurgis Night of history.

But when we have anglicized our anatomies so that they do not sound like a degenerate Roman of a thousand years ago shouting at us moderns through a historic megaphone; when we have turned all the cacophonous jargon of our prescriptions into honest and self-respecting English, we find that our medical language is still largely made up of a lot of Grecian odds and ends. These *-itises*, *-otomies*, *-ectomies*, *-ostomies*, etc., etc., are neither English-looking nor English-sounding. They help to form a strange and unique mixture, composed, first, of a completely undigested and almost indigestible Latin mass thrust bodily into the English stomach, which is the principal cause of our thousand year-long "stomach-ache," and from which we are today in much distress, as evidenced by philologic intestinal borborygmus, tenesmus, etc. Another considerable portion of the large Roman feast has been well digested, that is anglicized, and it gives us much of our strength. But our literary hunger grew, and it still grows, and we have to feed on Greek roots brought out two thousand years after the tree has died (*pace* modern Greek and its praisers,—to *us* it is dead) and transported over thousands of miles to our shores. These roots, radices, radicals, it is true, are perhaps better than nothing in our great word-hunger, and since we are so foolish as to scorn our ancient but still good old Anglosaxon market. But at least it is an Anglosaxon stomach that we have, and that is the best assimilative organ, philologic or socialistic, that has ever been created; it is also an Anglosaxon brain that uses the food, and that is the best brain today on the globe. We may therefore hope that by means of our good Anglosaxon stomach, brain, and conscience, we may finally digest, cure and

conquer all linguistic difficulties, and make our medical language a real and not a parasitic part of the English language. In so far as it remains semidetached, unassimilated, a gibberishlike half-English, just so long will medicine be a half-science, and our art a trade.

And now, what is the great hindrance to the attainment of this most desirable anglicization of medical language and the scienciation of medicine itself? Nothing in the world but the conservative sticklers who will not permit, or fondly imagine that they are forbidding, progress in English philology. Of course they cannot do much harm, these old ladies with their brooms, because, happily, tides, whether oceanic or linguistic, do not pay much attention to antique dames or brooms. The most unstable of all created things is language. While in a way strictly evolutionistic there are still a hundred unanswered *whys* as to every law of phonology. Language is the very Proteus of the old myth. Printing has undoubtedly served to fix in some measure the form of words, but that subtle, waterlike instability and mutability of sound will never in the least be harnessed to or much "broken" by the printed word. The result is that we have, and especially in English is it peculiarly true, two languages, the spoken and the printed. The word *though* should be spelled with two letters, the Anglosaxon thorn letter *th* and *o*; the word *laugh* has three sounds, and so with nearly every word in the dictionaries.

Shall we then start on the "fonetik tak?" Heaven forbid! The sole reason that England and the English language are what they are, the sole reason why the nation, the race, and its tongue are the best we have, and are bound, meek or not, to inherit the earth, is that they and we are evolutionists, and not revolutionists, nor devolutionists. A language or a form of government is the handiwork of a people, its art-products, the outcome of its psychic life. The Anglosaxon way is to guarantee and demand freedom for the individual, and that all changes

shall be growths by slow increments of change. Advance a step, make the little gain secure, then another step, and so on until the continent and world is ours. In politics this steady, unwearied, slow advance is the reason England is what she is and we are what we are as nations.

And precisely so in language! There must not be any sudden cataclysms or revolutions. The fonetik fok are crazy, and only to be likened to the French topsyturvyists of 1793. They would be the destroyers of true progress, and if there were the slightest danger of this wild communism being translated into fact, they should every one be gibbeted, body and soul. To destroy the literary product of all time, which phoneticists would do, is a crime against every element of civilization, for which no punishment would be too great.

But there is no real danger from these foolish people. If it pleases them to dream their dreams and live in an impossible world, indifferent to the savage needs and binding duties of this one, we may smile and pass on. It is strange, however, that as intellectual as they are, they cannot see one absolutely fatal objection to their theory, which is this: The spoken language is not only not uniform as regards its sounds in any one city, State, or nation, but the sounds never remain the same in any one place or as spoken by any people for a considerable length of time. It is probably a literal truth that no sound is the same when made by any two persons, or at two different times. Within large limits, both of time and place, these differences are trivial and might be ignored, but the far-traveler, and the long-liver find the differences too intolerable for any unvarying symbols. Hence it is that if a set of symbols were made today for all the sounds used by the people of New York, they would not suit the Chicago or Denver folk, and none of them would be satisfied next year. Thus it is that the written and printed language must always remain practically a different language from the spoken one. This is the lesson taught by Grimm's law, Verner's

law, and to be learned in any study of ten minutes of phonology or of etymology. Indeed, this is the very reason or mechanism of the development of one language out of another.

But because this is true, it by no means follows that there is, will not be, must not be, any changes permitted in the printed language. The organism that dislikes change is very ill; the one that fights change is moribund; the one that does not change is dead. Language is an organism,—and "tout est dit!" Hence that is not a true, genuine, wise, or real conservatism which resists all change. This extreme is as absurd as that of the fonetik revolutionists. We medio-tutissimus people are, of course, the sensible ones, and we are accomplishing something. A few years ago a brave fellow undertook to kill the ligatures *æ* and *œ*. There was a wild fluttering of scared wings, and dire were the croaks and prophecies and maledictions. Who to-day in medical writing writes *haemorrhage* in the United States? Two or three, who, for other reasons, are foaming at the mouth with personal hatred of the proposer and who would not ligature his arteries if hemorrhage were sure to be the death of him. The ligatures *æ* and *œ* are irritating to true English eyes and ears, as are all umlauts, and the rest of the misty, musty, nasal, cranky, throaty habits we formed while learning to talk, and especially while we were learning to speak English. The sensible Englishman long ago began ridding his speech, written or spoken, of *æ* and *œ*, and we find ourselves in the thick of the process, pawing to get our hinder parts free. The pernickety sticklers cry in alarm, and mumble something about etymology, but they are like the passionate convert who, praying vehemently concerning his sins, checked himself with the thought, "Not so loud, God might hear me." So, the appeal to etymology must be made only to the ignorant. I do not know how many hundreds or thousands of good English words there are commencing with *pre*; now what is sauce for the goose is sauce

for the gander, and if we must begin *esophagus* with *œ*, then the sticklers must spell *prae* instead of *pre*, *aequal* instead of *equal*, and *aether* instead of *ether*. Well, the old sinners *æ* and *œ*, are dead and not even Fell's method can resuscitate them,—so we need not make our *requiescat* too long nor too high pitched.

The etymology argument against change in language reminds one of the old story of the borrowed kettle: "Your kettle was cracked when I got it; I mended it before I returned it; I never had your old kettle." The etymologic kettle was badly cracked before the sticklers borrowed it; thousands, perhaps the majority of words, do not tell any clear story of their origin in their present forms; may even tell horrible lies. The mendings by the sticklers would really ruin or would have ruined the poor old thing. Lastly, the sticklers never had the pot,—that is, they have no idea of genuine etymology or progressive linguistics; in fact they do not even understand the first principles of etymology and phonology. Moreover, borrowings of etymologic pots and kettles were forever rendered useless by the invention of printing, which at once made unnecessary the absurd and impossible attempt at an accurate or complete preservation of word histories by the single shape or form of words. Not a sound or a letter of *wig* tells of *pilus*, whence it came, and who, in the French *eau* could suspect it to be derived from *aqua?* It is the dictionary-men's duty to tell us of the million interesting things of word-origins and word-histories. The word we use in writing, printing and speaking has far different and higher duties than that of the historian. It has to make history, not write it! The first gasburners were constructed in the shape of a candle; the first railway cars in the shape of a stage coach. The etymologic conservatives would have our electric bulbs and Pullman cars return to the earliest styles!

Another most commendable advance upon the lines already initiated and half carried out by Englishmen in

the past, is the excision or "cur-tailing" of one of the useless tails too many of our adjectives we inherited from France. Somehow or other, can anybody tell us why? we stupidly thought we must put another adjectival tail to the thousands of words already sufficiently adjectived by the capable and most efficient *ic* of the French. These sensible people said *domestique*, *scientifique*, *publique*, etc., and if we translate, it would seem that *domestic*, *scientific*, *public*, etc., would be a sufficiency of adjectival caudalization. Our ancestors, strangely enough, did not think so and grafted a second tail to the first, so that the puppies now trot about, or once did so, and according to the sticklers should forever do so, with this duplicating, tautologic *-al* tail springing from the first. It is indeed a sorry tale! *Domestical*, *scientifical*, and *publical!* Well, there are hundreds of words in English in which we have already relieved the poor dogs of the useless tail, and only the worst sticklers now prefer the double tailed pets, even keeping these at home. But there are others in which the surgical operation is sometimes performed and sometimes not. There are a few in which we have become so accustomed to the appearance of two-tailed species that we can laugh at these who grin at us, and wait awhile before demanding the surgeon. Those with a terminal *-ic* in the root (as medical, surgical, etc.), require the *-al*, perhaps,—and perhaps not.

There is one further method of wise shortening in the adverbialization of these *-ic* adjectives. The spirit of the language has already done it with one word. Everybody says *public*, not *publical*, and everybody says *publicly*, not *publically*. In exact correspondence why should all the adjectives ending in *-ic* not form the adverb by a direct attachment of *-ly*, (*-lich*, or *-like*) instead of uselessly (not uselessically) adding the *al* before doing so? Why not say *scientificly*, *biologicly*, etc.? Having *transverse*, we do not say *transversic*, or *transversical*, or *transversically*, but, for the latter, simply *transversely*. There is no reason ex-

cept that in such things we are inclined to be perversically perversical. It surely cannot be called unscientifical to do so.

One of the most ridiculous of all the little farces that the sticklers delight to play is that in which they feign disgust at hybrid words. Knowing little about the formation of foreign languages, especially English, and more especially medical English, a remarkably ugly Jack-in-the-box is fashioned to spring out at every innocent who may touch its house. *Conjunctiva* is of Latin extraction, and *-itis* of Greek parentage, therefore by all that is pedantically holy, dare not unite the two! A reverenced German quotes Horace to us, in this connection, as to the folly of putting a man's head upon a horse's shoulders. Well, in fact, did Roman never wed Greek? Did they never have children? Were these children hybrids, and were they impotent and sterile? If the beings who made the words could intermarry, why not their words? The unconscionable stupidity mated with prejudice which is shocked at hybrid works in medical English should be pickled and given the place of honor in our museum of teratologic marvels. The language is full of hybrids and to what one can object in them, it is impossible to see. The puerile impertinence of the contention is outrageous. Medical English is itself, wholly and to its last syllable, just such a hybrid, the youngster being of Greco-Roman stock with an English foster-father to train him up in the way he should go. It would be just as sensible to demand that all the words in one article or in one sentence should be of one strain, Greek or Roman, or Arabic, exclusively, as to demand that our huge compound words should be of this immaculate conception. One may use a word of Latin roóting in a sentence in close contiguity with one of Greek ancestry; why does the dovetailing the two together become a sin against the philologic Holy Ghost? What is the marvelous power of a little separating "m quad"? If one may not say *conjunctivitis*, of course one must say, I suppose, *mucous-*

membrane-of-the-eye-inflammation. The sole questions to be asked about hybrid words are, are they useful, expressive, short as possible, and better than others do they serve the purpose to which they are put? If so, this earnest, busy, clear-headed profession of ours is going to use them despite all croaking.

Finally, these gentlemen in a sort of despair, gave up all the old-time arguments against change and said that it was useless to try to make any, even the least and fewest changes in language, because it was all an unconscious process governed by hidden and immutable laws, and no one person or body of persons could influence language, their proposals positive or negative not being rejected or accepted, but simply ignored by the world. Exactly the reverse of this is true, and this theory of the *philologisch Unbewusste* is false, root and branch. There is an instance, thousands of years ago, of a written language being chosen, even to the letters of the alphabet, and molded into shape by a single man. Before printing, did not every scribe who wrote do it with his consciousness? Was not every change effected the result of conscious design? Was not the invention of printing a conscious business down to every dot and hyphen? After printing became common was not every word and letter drilled, marched and countermarched through millions of consciousnesses, of proof-readers, writers, critics, rhetoricians, grammarians, and readers? Has not every medical word, good or bad, that has been added to our medical and scientific languages been made by consciousness? Of the thousands that have been killed and that are buried in the lexicon-cemeteries, did they not die because men consciously chose not to use them, consciously chose others in the place of them? Surely never concerning any other product of the human race has consciousness been so constantly and instantly both father and mother, both educator and lord! This unconsciousness chatter, and shirking all responsibility for our language, this laissez-faireism, is disgracefully untrue and

inethical. Wiser and truer it would be to preach the accountability, rigid and continuous, for every word one utters or writes. It is absolutely true, whether one construes them literally, philologically, or morally, that "By thy words thou shalt be justified, and by thy words thou shalt be condemned."

In addition to the foregoing the following excerpts are taken from a paper read at a meeting of the American Medical Editors' Association held in Atlanta, Ga., 1896:

One of the most amusing inconsistencies of a small class of minds otherwise progressive, scientific and rational, is their unreasoning conservatism concerning the spelling and use of certain words. On any other subject, for instance therapeutics or surgery, they will welcome investigation, and further it, admitting the duty of improving upon the old, and of pushing on toward a more simple and perfect science. But if it is suggested that language, the tool of thought, deserves consideration, is very clumsy and archaic, is capable of being improved—at once they shrink and are shocked at the temerity.

This attitude of hatred of innovation in one single field of human activity, while admitting the law of progress in all other departments, is also coupled with a second inconsistency, a dogmatism of conviction that the change or modification of language urged is barbarous, almost sacrilegious, that you are a sort of ill bred upstart and ignoramus in advocating it, and that the old form you desire to supplant is the correct one, while your newfangled thing is absurd and is born of ignorance. The bigotry of the average Englishman in these matters is a charming exhibition of medieval-mindedness transferred to an age of civilization and progress. He actually thinks that the spelling-reformer, however infinitesimal and microscopic the spelling-change advocated, is the product of "Americanism," and of American ignorance of how to spell. The

American inheritor of the English dogmatism tries to hide his feeling, shrinks from such laughable exposure of his own ignorance, and even covers the sheep-skin of his ignorance with the lion-skin of erudition. I shall not soon forget a contributor whose English was equal in barbarity to that of our average senator, whose spelling by any standard was atrocious, and whose medical ideas were of course on a par with their means of expression, but he was certain of one thing, that he wanted *hemorrhage* "spelled rightly, with Æ." This to him was the symbol of scholarship,—his nose was safely in the sand of erudition, but his whole body was delightfully visible.

I have had the pleasure of replying to but three or four critics of a few tiny philologic reforms or changes that seemed to me wise. Besides these four the world seems content either to accept or to reject in silence. I was struck by the fact that in all four their objections were solely based upon two foundations: their personal dislike of change, and their complete ignorance of philology. Concerning the argument, *de gustibus*, there is surely no discussion, because taste, proverbially, is simply a subjective affair. But dogmatic opinion upon a subject in dispute, the deeply-rooted dogmatism about things without a single minute's study of them or of their history, —this in a supposedly scientific man is—let us call it deplorable. It is amusing, even instructively amusing, but it is once more, deplorable. Such a person, if a diagnostician, would be shocked if you asked him to pronounce dogmaticly upon an unstudied question of therapeutics or of mental disease; or if a surgeon he would not express the least judgment as to cataract extraction, etc., but without an instant's study of philology he settles a philologic dispute off-hand and forever. Five minutes of glancing through any one of the hundreds of books on the subject would have closed his lips, but that does not give him pause. He is sustained by the fact that "the English language as now written is good enough for me," and there

float through his mind hazy ideas that etymology demands the present method, and that at best you are a very bothersome and conceited person.

To one who has pondered the subject, however little, it must be painfully apparent that every other product unconsciously developed in the evolution of the race, whether plows, guns, matches, or books, has been found capable of betterment, and all civilization consists in improvement of or improvement upon, the crude devices of early awkwardness. Why should language then be an exception to the rule? Those who have examined carefully aver that our language is a sorry instrument of thought, and bears about the same likeness to an ideal language that a hand-sickle does to the best reaping and binding machine of our day. It is plain, therefore, that the obstinate prejudice against any change whatsover in it is most ill-advised and unreasonable.

We do not advise radical changes. The proper attitude of mind is one that welcomes slow and slight changes toward shortening, thus lessening the severe burden of education, and the expense of printing. Reform has a double motive here, psychologic and commercial. It has been estimated that our outrageous spelling costs one year of school-life of every child. The financial saving by lessening every printed page one line would probably pay the expenses of our government, and perhaps also retire on a life pension the Senate besides. This line could be saved, and at least a day or two of the wasted school-life spared by abolishing *æ* and *œ*, by lopping off a few redundant tails of words, and by observing a half-dozen little rules,—all of which are not only advisable but philologically necessary, not only not improper but genuinely proper.

As to *æ* and *œ*, these diphthongs are difficult to write, and they are against the genius of the language. They have already been sloughed in a large number of words, and those who oppose what they are pleased to call "the mutilation of our beloved language," must answer our

demand for a rule. Shall we reinsert the *æ*, and *œ*, in words at present spelled with *e* and which were derived from older words spelled with the darling diphthongs? And if you spell *hæmorrhage*, will you, as you should, pronounce it *he'-mor-aj?* It seems to me the etymologic sticklers are false to the old love, however true they may be to the new. Most of our words, for example, beginning with *pre*, are derived from the Latin *præ*. There are possibly a thousand of these words, such as *prescription prepuce, pretend, preference*, etc. Shall we spell them all *præscription, præpuce*, etc.? Shall we also be (etymologically) correct and write *hæresy, hæretic, anapæst, pæony, phænomenon, mæander, hæmatite, æther, dæmon, æsthetic, apharæsis, diæresis, archæology, palæography, gangræne, pædobaptist, cænobite, cæmetery, cælestial, æconomy, epicæne, æsophagus, phœnix, solœcism*, and hundreds of derivatives and similar words as they are written? Will you spell *diocese, diœcese?* Will you spell *fancy, frantic* and *frenzy* with a very etymologically proper *ph*, instead of an incorrect *f*? If so, your phancy will make your readers phrenzied, and you phrantic, I fear. Will you write *tansy, treacle*, and *treasure* with a *th*? If so, lay up your threasure in heaven, and drink much threacle and thansy while your days do last.

Etymologic spelling is a long-exploded absurdity. It has led many a poor word-grubber into the quagmires of absurdity. It was, says the great English etymologist, a sort of mania in the sixteenth century, and has thrown confusion and ridicule into the study of language. "Its ignorant meddlesomeness introduced many false forms," so that hardly any word now tells its genesis or history by its written form. Every word must be examined separately, its changes both of form and sound must be studied historically, before we can know much about it. The final dictum of Skeat is as follows:

The shortest description of modern spelling is to say that, speaking generally, it represents a Victorian pronunciation of

'popular' words by means of symbols imperfectly adapted to an Elizabethan pronunciation, the symbols themselves being mainly due to the Anglo-French scribes of the Plantagenet period, whose system was meant to be phonetic. It also aims at suggesting to the eye the original forms of 'learned' words. It is thus governed by two conflicting principles, neither of which, even in its own domain, is consistently carried out.

It may be said that as many of our medical terms are not derived from the Greek or Latin by a real and historical process, but are *de novo* creations, using the ancient roots and stems as convenient materials of coinage, the objection does not hold, and that our words do therefore show their originals by their form. Alas! not even this poor excuse bears scrutiny. The centuries have infected the modern word-minter, and the inevitable hurry and destiny of evolution will not let the need of condensation rest. Even while we look at our printed dictionary the zeitgeist is telescoping our words. Who now says *thyreoid* and *choreoid?* These forms are perfectly proper, and your dictionary-man with the awful sword of etymology and conservatism held across his path, may be forced to write them so, but he smiles sadly as he does it and shakes his head despondently. Every one of the hundreds of words ending in *-oid* is derived (supposably) from the Greek εἰδὸς. Why, then, is it *-oid* and not *-eid; bulb* and *bulbar* should be *bolb* and *bolbar*, as they come from βολβός. *Croup* is from A.S. *kropen*. How can an etymology-lover write *hyoid?* What resemblance is there to the Greek word? Our convenient compound word should etymologically be spelled *thyreo-hyoeid*, instead of *thyro-hyoid*. Why is one who forbids one literal iota of change in present words so utterly indifferent about the changes that have already crept in in the past? There are thousands of words in which Greek *i* has been changed to English *e*, as e.g., all the words ending in *-rhœa*. He is wrathful because one wants to change them to *-rhea;* why not so to those who changed the original *i* to *e?* He is as idolatrous of his beloved thousand

-hæms, but the Greek was *hai* and not *hæ.* One of the most ludicrous instances of this imaginable is the very new coinage which its author spells *cæliotomy.* The anger of enraged Jupiter was as nothing to that aroused by the suggestion to shorten this to *celiotomy.* But in that word as given out, there is, "once you trip on it," perhaps not "twenty-nine," but at least two or three "distinct damnations, one sure if another fails." Why in the name of holy etymology, if derived from Greek κοιλια do we have *c* instead of *k,* and why *coe* instead of *coi?* If the *cælia* is derived from the Latin, then why the hybrid? Surely one who pretends passionate devotion to pretty Ettie Mollie G., must not at the same time be paying court to her hated rival, the little illegit Miss Hybrida.[1]

Every page of the dictionaries proves the absurdity of trying to make spelling teach etymology; and it is a fact that nobody, certainly not spelling-reformers, more certainly not the conservatives, cares two beans for the etymology. If we did not have the printed word to stamp the coin it would be a different matter, but with dictionaries everywhere to give the origins and histories of all words, what imaginable service or usefulness is there in attempting to load each down with its biography? In reading or speaking no one can think or wishes to think of the roots of thousands of years old. As well demand that your boquet of roses shall have their roots and soil. The investigating botanist may do so, and may know all about the root and branch and stem, but workaday folk are not botanists or radical philologists. If one in reading had to know or keep in mind a half-conscious recognition of the etymology of each word, he would be able to read about one book a year, civilization and science would stagnate, and we might, could, would, or should, all become congressmen, millionaires, or jingos.

[1] Another sorry neoplasm is *uranalysis,—analysis of ur*—to replace an equally absurd word, *urinalysis,—alysis of urine.* I have looked in vain for the words *alysis* and *ur.*

The only proper and sensible purpose of spelling is its phonetic purpose. All the philologic tories of all christendom or heathendom combined cannot prevent the inevitable modifications—even entire changes of the spoken sound. In that witches' caldron of modern English, especially the medical variety, we have from every source cooked a most remarkable hodgepodge of illogic and inconsequential conglomeration. Our ancestors have commanded us to eat of it, but let us not choke it down, hiding our tears of disgust, and vowing it is incomparably toothsome. We assuredly should not with glee add more of the worst to the ollapodrida, and when we have a justifiable opportunity to make it a millionth part better, we should not set up a cry of revolt, and cry, Sacrilege! In an African forest the trail or pathway has constantly recurring detours, angles and curves, so that one walks about twice as far as necessary to reach lands' end. No object prevents following a straight line. Why is this? It is because once a tree blew down here across the path, there a limb broke off, there a stone rolled down. So the savage went around these objects, forming a new and crooked path. When the termites devoured the tree the new trail was more worn than the old one, and with thoughtless imitation the men kept on laboriously winding and twisting in their way instead of going straight on and across. It is the barbarian's habit of mind to keep on the unreasoning way his predecessor traveled. It is the essence of civilization to make straight the way. The incongruities of medical nomenclature and the stock-still standing of irrational conservatism lead one to wonder if we are ever to awaken to the need of philologic civilization. No judicious reformer asks for revolution, but for evolution: we need be in no hurry; we should not make profound and radical changes, because, among other reasons, it is impossible to bring them about; but when men oppose every jot and tittle of change, when they fight against one single conscious change of precisely

the same kind as has already been a thousand times wrought,—then surely one must with open-eyed astonishment ask, Really, now, were you not born in Africa?

I wish again to emphasize the limitation that we do not advise one clean straight jump into phonetic spelling. We seem like some mothers,—the uglier and sicklier our orthographic child the more we love and cherish it. The maternal love is wise, but the other is mania. Turn to Germany and what do we find? So far as phonetic writing is concerned their language was already marvelously perfect, but because it was not entirely so, the Germans within a few years past have made it so. How is it with Germany as to science generally, and education, and especially as to medical science? The thousands of our young men sent to her laboratories is sufficient answer. Well, this nation, as I have said, in a few years, and at one sweep, has cut the Gordian knot of spelling, simplified and shortened education thereby, and while we are squirming and making wry mouths over a few paltry and insignificant changes, she has wholly reformed the language that Goethe and Lessing wrote.

One of my four kind critics once wrote me remonstrating, solely on the ground of euphony, against cutting the *-al* off the tail end of many adjectives; "he didn't like it," he said, "it didn't sound well." He seemed wholly forgetful that the overlong tail of a thousand such words had already been lopped off, or perhaps had never grown out. In some countries the sheeps' tails are so long that they hitch a tiny wagon to each animal, so that it hauls its caudal extremity instead of dragging it on the ground. Now the difference between these sheep and our medical Bo Peep *al*-pacas, is that the words grow no valuable wool on their tails, and that we trail them on the ground behind us as the ladies do their dress-trains. Sheep and words and ladies are alike in the one important respect that, in the poet's immortal lines, if we let them alone they'll surely come home, dragging their tails (and much else also) behind them.

To my genial critic who wished his words and sheep (his ladies, too, I wonder?) to have tails and trails twice too long, I sent the following skit, to illustrate the already recognized fact of the redundancy of many word-tails, and to suggest that we either retail all the short-tailed curs, or that we curtail all the long-tailed puppies. Either one thing or the other; if you refuse to say *chemic* and *theoretic*, then you must not say *scientific* and *hydrochloric*. If you make us say *chemical* and *theoretical*, then, like a sucking dove we will roar you for consistency and ask that you be *scientifical*, or else we will prescribe *nitrical* and *hydrochlorical* acid for your alarming *gastrical* torpor and obstinacy. My strabismic letter to my friend was as follows :—

Some Scientifical Difficulties. — The patient was at the Polyclinical Hospital—a very sick woman; she was ascitical and cyanotical; she had an anemical (dicrotical or anycrotical) murmur; splanchnical and splenical dulness was pronounced. Neither the allopathical nor the homeopathical consultants could determine whether the affection was of extrinsical or intrinsical origin, whether anabolical, katabolical, atrophical, septicemical, lithemical, luetical, hemical, hemolytical, thermical, tabetical, hepatical, or encephalical. The specialists were called in, and laryngoscopical, ophthalmoscopical, gynecological and otoscopical examinations were made. The laryngoscopical man said a diphtherical membrane was forming, and the phrenical nerve was pressed upon. The next averred the difficulty was esophorical or exophorical, that a blennorrhagical inflammation, perhaps a rheumatical iritis existed. After an endoscopical examination the gynecological expert said pelvical (or pubical) disorder was present and a bad cystical and chorionical state of affairs. The ear-man claimed that the disease was specifical, that the otical ganglion was syphilitical and its condition pathognomonical. The diagnostical and prognostical difficulties were certes becoming most prolifical!

As to therapeutical measures, one advised cardiacal and tonical treatment, another hypodermical; one thought hydriatical methods good, another antiphlogistical, while still another suggested hypnotical and soporifical agents. Galvanical and faradical electricity, as well as statical and franklinical, were advised.

The surgeon after a diagnostical incision (under anesthetical precautions) spoke of a plastical operation. Caustical applications to the throat were considered good, and the exhibition of prussical, or of borical, nitrical and hydrochlorical acids, perhaps also carbolical with malical and acetical acid drinks. The general physician thought antineuralgical and antirheumatical prescription sufficient, but the obstetrician would have added oxytocical ones.

The patient died of *al*-coholical paretical dementia, superinduced, it is thought, by despair at the orthographical and phonetical conservatism of progressive Americans.

If a word is an adjective can you make it more so by tautologic caudalizations? (There are a few words whose stems end in *-ic*, such as *vesical, clinical, logical, finical*, etc., and these require the *-al* to make them adjectives, but these are provings of the rule, and the query, Why don't you say *vesic, logic*, and *clinic?* is the prompting of thoughtlessness. I would not object, however, in the least, to clipping these also.) If a word needs two adjectival tails why should we not say *bestialic, linealic*, etc.? If these were admitted of course the *-al* lovers would have to add their pet to the word, and we should have *bestialical, linealical*, etc.—each sheep would then require two toy-wagons. This reminds one of the wonderful word *pocket*handker*chief*. The primary good word was *kerchief*, a head-covering; we now call a piece of lace or linen a pocket-hand-head-covering. I am not unmindful of the hyperfinical distinction that some hyperfinical folk have sought to establish as regards *-ic* and *-ical*, *-ac*, and *-acal*, that the *-ics* and *-acs* denote primary objective attributes of or pertain to the things, while the *-icals* and the *-acals* denote secondary qualities—of the nature of or connected with the attribute in *-ic* or *-ac*, i. e., more remotely and subjectively relating to the thing. For example, a *cardiac valve*, the *cardiacal qualities* of a drug; a *historic answer;* a *historical treatise;* a *comic paper;* a *comical idea.* But this contention is impossible of realization. 1. Because hundreds of words by

custom have become absolutely limited to either form singly and alone. 2. Because not even the best writers observe the distinction. 3. It is altogether too fine a distinction to be made by the ordinary workaday humanity. 4. It would not satisfy *-al* ophiles, who want the *-al* on the end of some of their words, without question, forever and ever, world without end. Amen! Think of saying *Arabical, Teutonical, Celtical*, etc.! We should, of course, have to adopt *bestialic* and *bestialical* (or *bestic* and *bestical*), *clinic* and *clinical, syphilitic* and *syphilitical*, and so on to the end. It is quite plain this system-mongering and analogy-craze leads us into sorry plights. In fact, it should be apparent upon a minute's reflection that in a language so utterly composite, illogical, and nonsystematic as ours, the argument from or for analogy is absurdity itself. In one respect this is an advantage, because when we can succeed in battering down the dead wall of ancient prejudice, and explode the arsenal of etymologic spelling, then we may bring some order and sanity into the rebellious mob of English words.

Of one thing we may rest assured: All the tory immobility of all the world cannot prevent change. It is as useless to attempt it as to try to stop the rising tide, or to stay the resistless and silent forces of evolution itself. It is the part of wisdom to guide evolution, not to fight it to death; to guide language-evolution in the interests of brevity and perspicacity, not to cling irrationally to the old ways which clear vision must see are doomed. The language of Chaucer, and even of Shakespeare, as shown in the original forms, is an utterly different language from that we speak to day. The ordinary American, if he could hear Chaucer speaking, or if he could listen to a phonographic repetition of his actual speech, could not understand a sentence, hardly a word of it. The printed form cannot bind the ever-fluctuating pronunciation. The province or function of the printed (or written) word is to stand as a symbol or visible analog of the spoken word.

Etymology to the dogs! Printing makes certain a record of the etymology, and to seek to clog the word itself with it is the worst of delusions. Our duty scientificly, sociologicly, and philologicly is to keep the printed form plastic. The crystallized language is a dead language, and when there is no plasticity of language there is none of the minds and civilization of those who speak that language. There is a subtle, but all-powerful reaction and retroaction of language upon mind. Men progressive in science and sociology must be progressive in language and the use of language. Prick a German word and it bleeds. There is the pulsing heart of meaning behind it, flooding it with sanguine significance. French words, and the Greek-derived or Latin-derived words of our own tongue are as bloodless, dead and meaningless as are to us Chinese pictographs. The comparison of the large, plastic, energetic, capable German with the narrow, crystalline, stationary, incapable Frenchman, must at once spring into view, and the prophecy is clear as to which one is to inherit the future. The French birth-rate is about equal to the death-rate; that of the Teuton is far in excess. Do we believe in progressive Teutonism, and Anglosaxonism, or in reactionism, toryism, and ultramontanism?

Specifically, the microscopic modifications I have urged here are as follows:

1. Abolish in English words the archaic, unnecessary, bothersome *æ* and *œ*, supplanting it by *e*.

2. Cease adding the tautologic *-al* to adjectives having already one adjectival suffix, *-ic*. It is already done in thousands of words; finish the job.

3. Drop the useless hyphen in words whose parts are derived from classic languages. In ten thousand words you have already done so; finish with the rest. But retain the hyphen in such compound terms as express a single idea by two semifused English words, especially when both are nouns. *E.g.*, say *antitoxin* (not *anti-toxin*), *culdesac* (not *cul-de-sac*), *postmortem* (not *post-mortem*), *ventrofixa-*

tion (not *ventro-fixation*), etc. Keep the hyphen, when it is necessary to avoid confusion and doubtfulness of meaning, as in *curet-spoon, heart-murmur, skin-disease, sleeping-sickness*, etc.

4. Drop the useless *-te* from *curet, brunet, fourchet, etiquet, cigaret*, etc. You have already lopped it off from *cutlet, doublet, quartet, quintet, sextet, septet, racket, minuet, fillet, corset, stylet, tourniquet, boquet*, etc. Finish the job.

In the same way cut off the useless *-me* from many words, writing *program, gram, centigram*, etc., just as already we do *telegram, anagram, diagram, epigram;* let us make an end of it.

5. Use figures instead of spelling out numbers, at least those above ten.

6. Anglicize foreign terms when a goodly portion of your readers will not understand them in the originals. Use italics as little as possible; use as few foreign words and terms as possible, because the vast majority of your audience cannot understand them (even if you do); and because there's a deal of silly conceit in airing exotics of speech.

7. As to the spelling of chemic terms, accept the recommendations of the American Association for the Advancement of Science, which after years of dispassionate investigation advised that we drop the final *e* in *bromid, iodid*, etc., and in *bromin, iodin, atropin, quinin*, etc. Say *phenol* instead of *carbolic acid, glycerol*, instead of *glycerin*, etc.

8. Abolish all diereses and accents. They cannot teach pronunciation, and they are useless luggage. Let us write *oophorectomy, cooperation, ptomain, leukomain*, etc., without the diereses. When a foreign word is Anglicized let us do it completely, and not drag over into our domain the exotics of foreign habit, leaving it, *e.g.*, neither English nor French. Leave to the poets the acute, the grave and the circumflex accents; they are foreign to the spirit of our own tongue.

9. Do not bother about hybrid terms. A mule is a better animal than either its father or its mother. It is only

finicky sticklers that are horrified by hybrid words. There are many thousands of them in our language, good words, too, that have been used for centuries, and that always will be used. There is no earthly objection to them—and indeed we should rather welcome them if they are good words, expressive and short. More than any other language ours is adapted to receive them and use them, and there are more of them in it than in any other language. Instead of being ashamed of the fact we should be proud of it, as it shows our receptivity and plasticity. If we are bound to have the defects of our virtues, let us not be ashamed of the virtues of our defects.

CHAPTER II.

TITLES, REFERENCES, ETC.

AMBIGUOUS OR INSUFFICIENT TITLES.—Is it not a sin for a writer to bury information that may be of considerable importance, under a title that gives the reader not the slightest suspicion as to the nature of the subject under consideration? Any person who has ever attempted to investigate a subject in medicine knows only too well of the annoyance and immense waste of time from this source. The degree of ambiguity in titles varies from those in which the writer gives absolutely no information as to his subject, to those in which just enough is given to make it necessary for the conscientious investigator to waste a half hour of valuable time in looking up a reference which is of no use for his purposes. As an example of the first degree, how commonly we see men reporting "rare cases" and "unusual diseases" without anything more definite about them. A teacher and writer of considerable repute reports a "Surgical Clinic," without anything more definite either in the title or in bold-faced type in the body of the article. Could a sane man expect that any one who wanted especial information about empyema would consult that article? Yet that is the subject discussed. Another writer reports "Three Cases of Sarcoma and Epithelioma." Why not entitle the article, *Sarcoma of the Scalp, Epithelioma of the Nose*, etc.? and save the time and patience of the man who is looking up the literature of sarcoma of the superior maxilla. We suppose that the first and main object of medical writers is to impart information which in some way will prove interesting or valuable to other members of the profession. Yet the writer not only renders a service to others,

but, by presenting proof of his attainments, may reasonably expect to reap the benefits which naturally come to those who possess superior knowledge when their ability is made known. In your own interests, as well as in the interests of medical progress, be explicit in your title when you report your "recent experience in abdominal surgery," and thus insure the wide dissemination of your opinion with regard to tropical abscess of the liver and sarcoma of the stomach.

ENGLISH TITLES AND NOMENCLATURE.—In addition to the titles of articles expressing the exact nature or subject of the article, we think that all terms, names, etc., should be in English. Doubtless those who write these titles and give diseases, anatomic terms, etc., their Latin equivalents, have never seriously asked themselves why they do so. What imaginable use the custom may have is certainly beyond the wisdom of man to divine. To be sure it may be supposed to suggest a certain classicism or erudition in the writer, but that is a bit of humbug that is peculiarly unamerican. When one is insecure as to his syntax he may try to set himself right by antique spelling or Latin hocuspocus, but the assumption of medievalism and the mimicry of a dead language in reality make for ludicrousness by very contrast. Perhaps there is a vague idea floating about one's fancy that the Latin title is for the sake of the indexers, the catalogers, and the foreigners who do not know English; but it would seem unnecessary to kill this poor ghost of a reason, by hinting that the catalogers would prefer good English to bad Latin, and that the educated foreigner whose eye we wish to catch knows English quite as well as Latin. There remains the fact that 99 out of every 100 of our readers do know English well, while these 99 know Latin very ill, or not at all. The *reductio ad absurdum* is given to the folly by the intermixture of English and Latin in the one title or sentence. Surely Nick Bottom would laugh at such bastardy as "Otitis media chronica

with mastoid complications," or, "Dermatitis gangrænosa infantum following vaccination," and yet such outrages are daily perpetrated and the authors of them live on. Every disease, every bone, muscle, or other tissue of the body has or may have an exact and scientific name in English. The memories of students and physicians are sufficiently heavily loaded with the fact itself without adding the infliction of names a thousand years old; medical terminology and nomenclature, moreover, have sins enough to bear without still dragging this old slough of crackling skin. Let us end mumbo-jumbo and live in the nineteenth century, and let us write and speak in the most virile and living language of the world.

Avoid Long Titles.—In the program of the meeting of a learned American medical society, held A. D. 1898, the title of one paper was made up of 40 or 50 words, and another required 20 or 30 words. For the sake of mere pity of librarians and catalogers, this sort of thing should not be encouraged nor allowed. There are other and sufficient reasons, but that one alone should suffice. A good title is short; its object is to classify and to catch the student's eye. The longer it is, the less it is likely to do so, thus defeating the author's first object. The classification must be general, and not replace the detail and description which properly belong to the text.

References.—One who has bibliographic work to do soon stumbles upon the fact that references to journals, books, etc., are all too frequently incorrect or incomplete. The student relying upon these references is often compelled to hunt for hours or days for the original of a statement or article when some careless footnote has sent him on a fool's chase. "Bibliographies" are often the veriest shams, appended to give a show of erudition, and their indefinitenesses and imperfections are self-confessions of the fact. When possible, every reference should be veri-

fied by one who transcribes it. If this cannot be done a reference to the former transcriber of the reference should be given. Much of this kind of error is occasioned by the different methods which authors and publishers have of designating volumes, numbers, etc., and by the varieties of the kinds, editions, and time of publications. It is therefore advisable to give both the number and volume, as well as the full dates of a reference. In some cases also the publisher and place of publication may be advisable. References should always be given in the original language in which the article or title was written. The full title of an article is necessary instead of none at all, or of one or two words in it, in order to give help in index-hunting. Another great aid and saver of time would be the addition of the page-number to a reference. In a word, there are three good rules as to references: 1. Accuracy; 2. *Accuracy;* 3. ACCURACY!

THE MANUSCRIPT.—A little attention to several seemingly unimportant matters on the part of medical writers would be helpful in many ways and to quite a number of people. Do not, for example, write on paper less in size than "congress-letter" (which is about 8 by 10 inches), and leave at least one inch of blank space at the left-hand side. Good paper is the cheapest, and a moral man always uses ink and pen not pencil. Do not write upon both sides of the paper; number each page. Let the lines be so widely separated that if necessary there is space to insert words or sentences between them. It is advisable to typewrite manuscript when it is possible. Be doubly sure that proper names (of which the type-setter may know nothing) are written so plainly that there is no doubt as to their proper spelling. Do not paragraph your manuscript; leave that to the editor, although, if you prefer to do so, indicate your choice of paragraphs by the sign (¶) in the blank space at the left side. For fear our meaning may not be clear we will put this in another way: Commence every

line at the same relative position, leave no blank ends or beginnings of lines, nor any blank spaces. There are several good reasons for this rule. Do not put footnotes at the bottom of the page (or, worse still, upon another page), but run them in "solid" with the principal writing, indicating them by two upright lines before, after, and at the side. A single underscoring indicates italics, double underscoring, small capitals, like the headings of these sections, triple underscoring, full capitals. Unless you hate the man to whom you send a manuscript do not roll it. The greater your fame and your literary and scientific ability, the more you may ignore these little suggestions, because all journals and publishers are glad to get literary gold however disguised in deceptive quartz; but if you are a kind-hearted man you will consider the editor, typesetter, and proofreader by attention to such seemingly trivial things. Moreover, your work will more surely appear correctly and to your satisfaction by a little forethought. Surely the poor editor is biased in favor of a clean, tidy, and presentable manuscript, and he is much inclined to think that clear thinking will lead to a writing that requires the least work to read and to prepare for the printer.

How to Make Temperature-Charts for Illustrations of Articles.—The temperature-chart as made for clinical purposes cannot usually be used by the photographer and engraver. A new one is required for illustration of a printed article. This causes possible errors, and certain delays and expenses to the journal publishing the article, so that we would advise writers to redraw the chart in such a way as to economize space, to give a better artistic as well as scientific effect, and to aid clearness and ease of understanding, and legibility in reading. There are several things to be kept in mind:

1. Cut off the unimportant and blank parts of the paper, the headings, etc., so as to crowd the temperature line and other necessary details as closely together as possible.

Many things often written in the chart are much better expressed in the "legend" (*i. e.*, the explanation in fine type below the cut) or in the body of the text itself.

2. Use charts ruled only with black ink, and ruled clearly and sharply. Some manufacturers of blank charts use colored inks in some of the horizontal or vertical lines. Use black ink also in all writing, lines, or figures made upon the chart. Draw the temperature-line, the essential feature of the chart, exceptionally heavy and clear.

3. Make all writing and figures required two or three times the usual size of letters and figures in ordinary writing. This allows the photographer to reduce the whole chart uniformly to one-half or one-fourth the size, and still all details will be clear. Do not use the "running" or cursive style of writing (as in letter-writing); but separate each letter and "print" them, as the children say, in Roman fashion.

4. When more than one line is required, as, *e. g.*, to record the respirations, pulse-rate, or other synchronous phenomena, do not use differently-colored inks, but different kinds of interrupted lines in black ink, as, *e. g.*, one continuous, one of dashes, one of hyphens, one of dots, or combinations of dots, dashes, stars, etc.

5. It is better not to use any of the blank clinical charts in common use for redrawing, but to take a large sheet of unruled paper, and rule it horizontally and vertically in squares of about $\frac{3}{16}$ of an inch. The changes or angles in the direction of the temperature-line may be indicated by pin-pricks through the paper before the line itself is drawn.

6. Get some enterprising publisher to advise and place on sale blank charts corresponding to the foregoing suggestions, not for clinical purposes, but for writers who wish to reproduce charts with printed articles, or to show to audiences at medical society meetings, etc.

ILLUSTRATIONS are perhaps often useless, but are sometimes necessary, and may even tell more than text as to

the condition,—but not if they tell lies. If, for instance, the cut is upside down it may not help the reader very much. And it is not always the fault of the proofreader or printer if this reversal is found in the printed page. Sometimes only the author can know. When not self-evident it would, therefore, be well for him always to indicate the top, bottom, and right side of the cut. Occasionally the scientific value of illustrations depends upon the size or relative sizes of the pictures, but authors forget that in reproducing or adapting originals for the printer's use the cuts usually have to be reduced in size. When of importance, instructions as to this detail should accompany the MS., and in the legend the reader should be notified concerning it. And there should be a legend! It should also accompany the original. It can then be properly inserted in the galley-proofs sent the author, who will thus know if it is correct. Correspondence, trouble, and possible accident may thus be spared. The legend should also be full and clear. All illustrations should be numbered in regular order and every one should be referred to, by the number, in the text. It is altogether too common that authors fail to number cuts, to explain them in legends, and more than once we have known illustrations to be wholly ignored in the text. It is also strange that so many do not understand that the smudgy proof of the illustration in the galleys is not as it will appear when properly printed; it is sent to furnish the author with an opportunity to indicate where it is to be placed, to verify or insert the legends, to see if it is right side up, etc., etc. Despite this, letters will appear with maledictions upon engravers, and savage irony as to our art department, ordering non-insertion, etc. We have known one tired, but not altogether disingenuous editor who made it his custom in such instances to send the wrathful contributor a courteous letter saying that a new cut would be made to replace the bad one he justly criticised, and that this would be guaranteed all right. A last item refers to changes in cuts once made. Authors

often ask that details of cuts shall be made different, something inserted here or taken out there, as if it were a matter like changes in type. These things, of course, should have been ordered in the original of the illustration. When the photographer, engraver and etcher send the block to us for the printer's use, little or nothing can be done in the way of modifications.

CHAPTER III.

ORTHOGRAPHY, PUNCTUATION, PRONUNCIATION.

As to Spelling.—Over 200 years ago a sensible man, William de Bretaine, wrote as follows:

> Neither will it become you to quarrel pedantically about the orthography of a word; as whether to write Felix with a diphthong or an *e* simple; but rather do you attend to the sense and meaning of the things. What is it to us how many knobs Hercules has on his club, or whether Penelope was faithful or false. Let every man mind his own business and do his own duty. A wise man will employ his thoughts upon things substantial and useful. It is not meet for a man of the world, or even for a man of letters, to pester his brains with idle punctilios and disputed trifles; that superfine curious sort of learning amounts to little more than intellectual foppery, and serves no practical purpose. Common sense is the treasure of the mind, and judgment is the key to its storehouse. It mixes well with all other gifts; even as diamonds enhance the hue of rubies or emeralds.

This holds good to-day, of course, but with certain qualifications. Those who in spelling advocate thoroughgoing acceptance of the general custom will upon careful reading find that the words of the astute William do not justify their sort of laissez-faireism, but rather that of those who spell as they please. Davy Crockett, when ridiculed in Congress for his incorrect spelling, is said to have replied: "He must be a very ignorant man who cannot spell a word in more than one way."

Many seem to think the "spelling-reform" movement beneath their dignity, and that they are attending to "the sense and meaning of things," leaving such trivialities to children and minds of small caliber. But in the specialization of function of civilization, the tremendous amount of

printing done, and the number of bothered printers, type-readers, and editors in the world, trifles become highly important matters by mere addition. The age is microscopic, and its problems are hitherto unconsidered but momentous little things. Those who petulantly exclaim against botheration with "the diphthong or an 'e' simple," usually mean thereby that the e-simple faddists should not bother with the diphthong-sensible folk. And as a rule they are right. It is only necessary also to add the rider that the diphthongers must not scold the e-simplers. A good rule proverbially works both ways.

But why not accept the rule of the world? Why not spell English as the English do? There are two or three Yankeelike answers to such quetions: Why not, *e. g.*, govern, enact laws, raise, and cut and thresh wheat, manage railways, medical associations, and do everything else on the English models? Well, we do not and, frankly, we will not; nor in spelling will we abjectly imitate. "We are the people of King Shakespere!" cry the uniformists—and in the five autographs we have of the King, he spelled his own name five different ways! The truth is that not even the deadening and crystallizing influence of conservatism and custom can prevent the continuous change and growth in spelling and language. The German scientists have almost revolutionized the spelling of their language in the past few years, the England of Shakespere is but little less careless than he as to orthography, and even France is in pain over the laughable crystallization of her language. Change in language simply will not stop. Then why not go over body and soul to the fonetik fok? Solely because Anglosaxons are not revolutionizers but evolutionizers. The method of nature and of our civilization is by changes always slow and slight in the existing thing. Upon this ground we deprecate violent changes in the forms of our words in the direction of phonetic absoluteness, and we advise the slow advance according to the spirit of genuine Americanism and philo-

logic progress. Three-fourths of the æ's and œ's have already been dropped, and their place supplanted by the common-sense e. Let us do the same with the rest of the lot. The greatest of historians 100 years ago wrote *œconomic, æra, musick, democratical.* What smallest of historians would so spell now.

Neither will the curtailing process be stopped by authority. Boswell says of Johnson: "I hope the authority of the great master of our language will stop that curtailing innovation by which we see *critic, public,* etc., frequently written instead of *critick, publick,* etc." At this time, too, one almost invariably spelled *authour, errour, inferiour, honour, domestical,* etc., as here written. What stickler would do so now? But he fights the plan of carrying the same law of change into the spelling of similar words. We have deleted a full half of the useless *-al's* at the end of our scientifical adjectives; let us, with some proper exceptions, lop off a lot more. Let us philogicly and rightly change *-our* into *-or,* and *-re* to *-er.* Let us in a hundred small ways shorten, concentrate, Anglicize and Americanize our language!

The greatest English philologist has said that "any one who is utterly ignorant of the facts of the formation of the English language has a much better chance of being listened to than those who have studied the subject. I have not been able to find, during 20 years' search, that there is any other subject in which ignorance is commonly regarded as a primary qualification for being chosen to write upon it." We are reminded of this by the appearance of articles even in medical journals sneering at "spelling reform" and "reformers," and advising against the elision of the final *e* in such words as *bromid, quinin,* etc. The writers seem to know nothing of the history of the threshing of this old straw; for example, of the four years' investigation of the American Association for the Advancement of Science, and its unanimous recommendation as to these *e's,* etc. We assure our readers that they may spell *chlorin, chlorid,*

etc., without the unnecessary and absurd *e*, and with perfect philologic and scientific correctness. Some "reformers" are so hard-pressed that they feel impelled to reform genuine reform. Nothing is more ridiculous than conservatism and dogmatism in philology—nothing except the arguments used in their support.

There are two good things that have resulted from the work of the reformers. The conservatives formerly built the critical breastwork of their camp with what they thought the indestructible masonry of etymology. It was soon in ruins. Not one stone lies upon another. Philologically the idea that antique spelling was necessary to tell the etymologic history of a word was not magnificent nor was it war. Then as a last resort the conservatives retreated behind the hastily thrown up earthworks that all change in language is unconscious, and could no more be brought about by willed design than could any unconscious tendency of cosmic evolution. The Dons were routed out of the rifle-pits by the statement of the simple fact, the absolute reverse of what had been alleged, that every change in the form of words brought about since the invention of printing had been purely a matter of conscious design and purposive intention.

THE SPELLING AND PRONUNCIATION OF CHEMIC TERMS. —We have received so many requests for a succinct statement of the recommendations of the American Association for the Advancement of Science, as to the spelling of certain chemic terms, that we copy from the "Stylebook of the Chicago Society of Proofreaders" its account of the matter. We trust that in the forthcoming revision of the U. S. Pharmacopeia these recommendations may be adopted, and thus end the sorry conservatism which still clings to an antiquated nomenclature.

In 1887 a committee was appointed by the American Association for the Advancement of Science to consider the question of attaining uniformity in the spelling and pronunciation of chemical

terms. The work of this committee extended through the following four years. As a result of widespread correspondence and detailed discussion at the annual meetings of the Chemical Section of the American Association, the accompanying rules were formulated and adopted by the Association:

General Principles of Pronunciation.—1. The pronunciation is as much in accord with the analogy of the English language as possible.

2. Derivatives retain as far as possible the accent and pronunciation of the root word.

3. Distinctly chemical compound words retain the accent and pronunciation of each portion.

4. Similarly sounding endings for dissimilar compounds are avoided (hence *-id*, *-ite*).

Accent.—In pollysyllabic chemical words the accent is generally on the antepenult, in words in which the vowel of the penult is followed by two consonants, and in all words ending in *-ic*, the accent is on the penult.

Prefixes.—All prefixes in strictly chemical words are regarded as parts of compound words, and retain their own pronunciation unchanged (as ac′eto-, am′ido-, az′o-, hy′dro-, i′so-, ni′tro-, nitro′so-).

Elements.—In words ending in *-ium*, the vowel of the antepenult is short *i* (as irid′ium) or *y* (as didym′ium), or if before two consonants (as cal′cium), but long otherwise (as tita′nium, sele′nium, chro′mium).

In the spelling of sulfur *f* is used in the place of *ph*, and in all derivatives (as sulfuric, sulfite, sulfo-, etc.).

Termination in -ic.—The vowel of the penult in polysyllables is short (as cyan′ic, fumar′ic, arsen′ic, silic′ic, rod′ic, butyr′ic), except (1) *u* when not used before two consonants (as mercur′ic, prus′sic), and (2) when the penult ends in a vowel (as benzo′ic, ole′ic); in dissyllables it is long, except before two consonants (as bo′ric, ci′tric). Exceptions: ace′tic or acet′ic.

The termination *-ic* is used for metals only, when necessary to contrast with *-ous* (thus avoid aluminic, ammonic, etc.).

Terminations in -ous.—The accent follows the general rule (as plat′inous, sul′furous, phos′phorous, cobaltous). Exception: ace′tous.

Terminations in -ate and -ite.—The accent follows the general

rule (as ac′etate, van′adate); in the following words the accent is thrown back: ab′letate, al′cholate, ac′etonate, an′timinite.

Terminations in -id (*formerly -ide*).—The final *e* is dropped in every case and the syllable pronounced *id* (as chlo′rid, i′odid, anhy′drid, ox′id, hydrox′id, sul′fid, am′id, an′ilid, murex′id).

Terminations in -ane, -ene, -ine, and -one.—The vowel of these syllables is invariably long (as meth′ane, eth′ene, naph′thalene, an′thracene, pro′pine, quin′one, ac′etone, ke′tone).

A few dissyllables have no distinct accent (as benzene, xylene, cetene).

The termination *-ine* is used only in the case of doubly unsaturated hydrocarbons, according to Hofmann's grouping (as propine).

Terminations in -in.—In names of chemical elements and compounds of this class, which includes all those formerly ending in *-ine* (except doubly unsaturated hydrocarbons), the final *e* is dropped and the syllables pronounced *in* (as chlo′rin, bro′min, etc., am′in, an′ilin, mor′phin, quin′in (kwin′in), vanil′lin, alloxan′tin, emul′sin, caf′fein, co′chin).

Terminations in -ol.—This termination, in the case of specific chemical compounds, is used *exclusively* for alcohols, and when so used is never followed by a final *e*. The last syllable is pronounced *-ol* (as gly′col, phe′nol, cre′sol, thy′mol (ti), gly′cerol, qui′nol.) Exceptions: al′cohol, argol.

Terminations in -ole.— This termination is always pronounced *-ole*, and its use is limited to compounds which are not alcohols (as in′dole).

Terminations in -yl.—No final *e* is used; the syllable is pronounced *yl* (as ac′etyl, am′yl, ce′rotyl, ce′tyl, eth′yl).

Terminations in -yde.—The *y* is long (as al′dehyde).

Terminations in -meter.—The accent follows the general rule (as hydrom′eter, barom′eter, lactom′eter). Exception: words of this class used in the metric system are regarded as compound words, and each portion retains its own accent (cen′time′ter, mil′lime″ter, kil′ome″ter).

The *endless-confusion argument as to spelling chemical words* will hardly avail, but those who oppose rational (and we might add, *national*) progress in these things are themselves the greatest creators of the confusion they appear

to detest. In fact this contention as to the spelling of alkaloids and glucosids is old straw long ago thoroughly threshed out. In 1891 the American Association for the Advancement of Science, after a four years' investigation, advised that the *e* be dropped from all such words as *bromide, chloride, quinine*, etc., and the logical reasons for the advice have never been successfully met by the conservatives. The latest and most thorough-going and scholarly dictionary of the English language, *The Standard*, adopted the recommendations of the Association and spells *bromid, chlorid, quinin*, etc., and such journals as the *Journal of Analytical and Applied Chemistry*, such chemists as Professors Caldwell, of Cornell University; Witthaus (in his *Manual of Chemistry*); Leffmann, of Philadelphia; T. Sterry Hunt (*Systematic Mineralogy*), and many others, use and advocate the simpler spelling. The pharmacopeia itself is unable to be consistent, as e. g., *lupulin, naphthalin*, etc. The argument that in such small things we must follow the antiquated usage of the pharmacopeia is a boomerang emphatically asking why it perpetuates the *endless confusion* by not catching up with the accepted advances of progressive chemical and general science, and of wide-awake men who do not think that philology is the single branch of science untouched by change and progress. The pharmacopeia always follows, never leads. If we should await its orders, we should never have any progress of any kind. Hundreds, we had almost written thousands, of words ending with *-in* or *-ine* are being forced into the language regardless of glucosidal or suicidal logic, so that any attempt to establish a distinction between glucosids and alkaloids by a terminal *e* is—well, let us say, simply laughable. The naming of a drug is solely to differentiate it from any other drug, and this is effectually done without the terminal *e* contended for. We have no desire to constrain contributors in their spelling, because, among other reasons, progress is helped by such a parade of their inconsistencies and redundancies. Those who do not like

railway trains are privileged to employ stage coaches, and they should not be too openly smiled at or frowned upon, but we advise our readers that in this affair they may trust and follow the advice of the Association for the Advancement of Science. With hundreds of progressive scientists and philologists, they may safely order *quinin sulfate* without endangering their patients' lives by the terrible change of getting a dose of a "glucoside" from the druggist. May we not beg contributors to allow this useless and wornout controversy to die, or rather to be buried?

ANOTHER SPELLING DIFFICULTY.—A correspondent writes a follows:

What good reason can be given for the cumbersome common spelling of the word *Pharmacopœia?* Here we have an English word ending in a diphthong and two vowels (frequently rendered with four separate vowels, however), but only two sounds are made out of them. It is true that the Greek is *Pharmakapoiia*, but *poi-yah* is understandable, while *pe-ah* for *pœiah* is not. In your dictionary you go one step to the good and spell the word *Pharmacopeia*, and pronounce it *far-mak-o-pe'-eh*, but even your spelling does not truly fit your pronunciation. Now your English ancestors seem to have had no great difficulty in deriving *poem*, *poet*, etc., from the same origin—the Greek ποιειν, therefore what necessity of lexicography requires any spelling but *Pharmacopea*, whose pronunciation would be self-evident, whose etymology would be found in the dictionary the same as that of *poet* is now, and whose spelling would be really comprehensible to an English-speaking individual. Perhaps your reply to this may succeed in clearing up one more bad spot in medical spelling.

To which we assent, and can only say that the sole objection to adopting the suggestion is that a few objectors would raise a fuss. Logic has nothing whatever to do with English spelling or pronunciation, and nobody cares less for etymology than the pernickety sticklers who talk and make much of it. We remember to have had a very amusing correspondence with one such, who was apparently deeply grieved because one poor editor omitted

diereses and hyphens in spelling *zoology*, *cooperation*, *intrauterine*, etc. But, in the very letter of the critic he spelled *dieresis* without the precious dots or hyphen, and this word *pharmacopea* should have been adduced as an additional instance. A still more striking one would have been such words as *diiodid*, *diiodoform*, which would require a very pepper-box of dots to satisfy demands. Diacritic marks of all kinds are against the genius of our language and people; they should, and will be, abolished. The only reason we fear to recommend *pharmacopea* is that every rival, envier, and hater on other than etymologic grounds will seize the occasion to belabor and to write scornful letters and editorials green with rage.

HYPHENATED COMPOUNDS, OR SEPARATE WORDS?—The use of any sign or mark in printing must be to express meaning, and consequently the hyphen in compound words should be used only when it is necessary to prevent misunderstanding or confusion of thought. When no such confusion is likely or possible, we should not uselessly pepper our pages with it. Some writers (as *e. g.*, Herbert Spencer, with his "literally-descriptive," "apparently-artificial," "increasingly-important," etc.) are overfond of the hyphen; this may be due to the self-flattery of supposed accuracy, when omission would not in the least change the meaning of the words. Sometimes the insertion of the hyphen may increase confusion, and, often also, a comma is preferable or does exactly as well. The trend of good English usage is to abolish the hyphen except when it is positively needed to make meaning clear. "Alligator forceps," as Teall contends, naturally suggests "forceps to be used on alligators." Medical writers are much given to turning a noun into an adjective, and atoning for the sin by means of a scapegoat hyphen,—as e.g., *head-injury*, *heart-disease*, and all the rest. Perhaps we shall in time have *gut cut*, *face-smash*, *gastro-intestino-omentum-perforation*, *belly opening*, etc. But, as a rule, the hyphen does

not atone, it only doubles the blunder, for *foot injury* can confuse no reader, and is just as definite in significance as *foot-injury*. Brevity and conciseness are excellent qualities in medical writing, and within certain limitations are to be commended, but life is not yet so short that we cannot take time to say *wound of the foot, cardiac murmur, renal stone, vesical disease*, etc., instead of the barbaric bunching together of two nouns.

It is almost impossible to make lists of terms in which the hyphen is needlessly or rightfully used, and we wish only to emphasize the principle involved. Let us decide to use or not to use the hyphen by attention in each special case, asking only the question: "Is it necessary in this instance to clarify understanding, or to prevent confusion on the part of the reader?" The famous advertisement, "Mrs. Smithers has left off clothing and invites inspection" is, of course, in dire need of a hyphen; and to facilitate clearness, or to avoid misunderstanding, it must occasionally be inserted between words printed without it, as in the notice we have seen, "We have for adoption a dark skinned baby."

The working of the child's mind on the subject is shown by the story told by Mr. Augustus C. Hare, of a little girl who, on being asked to illustrate a certain hymn, brought a sketch representing a little bear, under which were written the lines:

> "Can a woman's tender cares
> Cease towards the child she bears?"

Generally, however, the hyphen is used without any sufficient reason. Those who wish more help than is to be got from the foregoing, may consult Teall's *The Compounding of English Words*.

SOLID-WORD COMPOUNDS—The dictionary-makers have been able to reach no uniformity in their recommendations concerning the compounding of words, and have seemed to pride themselves upon their differences. There is thus the most lamentable confusion and contradiction in the

usage even of the best writers. A thousand rules are jeered at by the makers of another thousand, and everyone is left to follow the promptings of whim and caprice. In this state of affairs medical literature must show the same confusion, and he would be a brave man who would attempt dogmatically to formulate a set of unyielding laws and rules. In general, however, it may be said that the tendency of custom and the dictates of common sense are more and more uniting to run words together in solid form when there is fusion of idea or thought to be conveyed, and especially when either of the two components cannot stand alone as a separate English word. Thus, *ilio-* and *broncho-* are not separable English words and the hyphen is expunged in *iliostomy, iliofemoral, bronchorrhea, bronchopneumonia*, etc. There is no more need of the hyphen in *anti-toxin* than there is in *anti-pathy*. The function, indeed, of the hyphen, seems very often to be that of a sort of stopgap, or a kind of sop thrown to the Cerberus of conservatism which will not allow the complete fusion of two etymologic elements, and "to save its face," conservatism holds for a few years to the hyphen. It is a good rule to kill a hyphen whenever seen, unless thereby clearness of meaning is also killed. In the following illustrative list we advise that these and words similarly conjoined be spelled as given,—*i. e.*, without hyphenation or space:

adenosarcoma
afterbirth
afterbrain
almshouse
angioneurosis
angiosarcoma
antemortem
antialbumin
antisyphilitic
antitoxin
armpit
arthroempyesis
backache
backbone
backset
backslide
balneotherapy
basioglossus
bedbug
bedridden
bedroom
bedside
beefsteak
biconcave
biconvex
bimanual
bloodworm
bloodwort
blowpipe
blowsy
bluestone
boneblack
boneset
boroglycerid
breadstuff
breakbone (fever)
breakdown
bricklayer's (itch)
brickmaker's (anemia)
bronchopneumonia
buttermilk

bellyache
birthmark
bittersweet
blackberry
bleareye
blepharophimosis
blindworm
bloodletting
bloodroot
bloodshot
bloodstream
bloodvessel
cardiopneumatic
careworn
catgut
cerebrospinal
cesspool
cheesecloth
chickenpox
childbed
childbirth
childlike
chorioretinitis
choroidoretinitis
chylopericardium
climatotherapy
clubfoot
clubhand
coltsfoot
cottonseed
counterextension
counterirritation
cowpox
crosseye
culdesac
dacryocystitis
dairyman
dayblindness
dermatoneurosis
dextrorotatory
earache
earthworm
eightfold
electrocautery
electromassage
enterocolitis
enterogastritis
eyebrow
eyelash
eyelid
eyepiece
eyesight
faceache
fibrocartilage
fingerbreadth
fireproof
flaxseed
fleabite
footnote
footprint
foregut
forebrain
forearm
forehead
foreskin
fourfold
frostbite
gallstone
galvanocautery
galvanopuncture
gastroenteritis
guineapig
guineaworm
gumboil
guncotton
gunshot
harelip
haircloth
hairpin
hamstring
handbook
handbreadth
headache
headlight
headpiece
heartburn
hemothorax
hipjoint (adj.)
horsehair
hourglass
humpback
hunchback
hysteroneurosis
ileomotor
ilecolic
iliofemoral
iliopectineal
incoordination
indoors
infraclavicular
infracostal
interparietal
intracapsular
ischiorectal
jejunoileostomy
kneecap
kneejerk
kneepan
laryngotracheotomy
levorotatory
lifetime
limestone
lockjaw
madhouse
madman
melanocarcinoma
microorganism
midwife
musculospiral
myxosarcoma
nearsightedness
neuroepithelium
neuroretinitis
nightblindness
nightclothes
nightdress
nightmare
nitromuriatic
northeast
oilcloth
onset

ophthalmoblennorrhea
osteoarthritis
outbreak
outbuilding
outdoor
outflow
outgo
overlay
pneumopericardium
portwine (adj.)
postmortem
poorhouse
pseudocyesis
pseudocroup
pseudoganglion
psychophysiology
puffball
quicklime
quicksilver
rainfall
ratsbane
rawhide
retropharyngeal
retrovaccination
ringworm
roundworm
runaround
scaldhead
scleroskeleton
seashore
seasick
seaside
seatangle
shotgun (prescription)
silkworm
skullcap
silkwormgut
smallpox
splayfoot
stavesacre
stiffneck
stomachache
sunburn
sunlight
sunshine
sunstroke
supravaginal
tablespoon
tapeworm
teaspoon
thermocautery
threadworm
threefold
thrombophlebitis
tonguetie
toothache
typhomalaria
typhomania
underclothes
underfed
uterogestation
uterovaginal
vulvovaginal
watercourse
waterway
wordblindness
worddeafness
wryneck
xanthocreatinin

As to writing Dates, the Stylebook of the Chicago Society of Proofreaders advises as follows:

When the year is given omit *d*, *th*, and *st*—as *May* 15, 1895.

Do not use *r* or *n* in dates, but *March 23d, 22d of June*, etc.

In giving a series of two or more years, express them thus: 1893–97; not 1893–7.

Do not shorten year, as '97 for 1897, excepting when referring to college classes, as "Class of '97."

The Capitalization of Scientific Terms.—It is now almost universally the custom to capitalize the names of the genus in the biologic sciences. There are some noteworthy exceptions to the rule to use lower case for the species. These exceptions to the rule relate especially to

those instances in which the name of the species is derived from that of the discoverer. But just as it seems advisable not to capitalize the words *joule*, *coulomb*, *sylvian*, *galenic*, etc., so we do not see the need of capitalizing the species-name of plants and animals whether or not these are derived from the proper names of men or of countries. The honor is not less because the initial letter is not a capital, and the fact that it is not capitalized helps toward the desirable discrimination between genus and species. We therefore advise the invariable capitalization of the genus, and as uniformly the lower case for the species. For example: *Ascaris lumbricoides*, *Strongylus douglassii*, *Papaver somniferum*, *Gadus morrhua*, etc.

ABBREVIATIONS OF TITLES OF MEDICAL PERIODICALS.—A valued correspondent asks for a list of the abbreviations of titles of medical journals, for use in references, foot-notes, etc., when writing medical articles or books. We regret that this is impossible. Our correspondent has not chanced upon the List published as an Appendix to Vol. XVI of the Index Catalog of the Library of the Surgeon-General's office. This volume makes 382 pages, and subsequent lists would swell it considerably. We append lists of individual letter and separate word contractions, to show the general principles governing the construction of abbreviations, and in a general way, in the interests of a desirable uniformity, we advise acceptance of the rules and practice of the Index Catalog.

The abbreviations are prepared as far as possible in accordance with the following principles:

1. To follow the exact order of the words of the title.

2. To make them as brief as is consistent with clearness to those who are familiar with medical literature.

3. To follow strictly the orthographic usages of each language. This disposes of the question of capitalization.

4. To attain uniformity.

Some exceptions to this last rule have been found ex-

pedient. An abbreviation which is quite intelligible in the body of a title is not always suitable as the first word, and the context may make an abbreviation sufficiently clear in a long title which in a short one would appear obscure. The convenience of the reader is regarded as of more importance than a rigid adherence to uniformity. The following minor details, with the list of single-letter abbreviations, will assist in the comprehension of the scheme:

The article with which a title commences is omitted.

Prepositions as well as articles are entirely omitted in English titles, and in other languages when their elision would not lead to obscurity.

The place of publication is not added when it forms an integral part of the title; in such cases it is given without abbreviation, except in instances of constant recurrence, as London, Paris, Berlin, etc., which are condensed into Lond., Par., Berl., etc., on all occasions. Nor is it added to the titles of Transactions or journals the places of publication of which have been changed from time to time, as the references in each instance furnish the locality.

SINGLE-LETTER ABBREVIATIONS.

a. aan, alla, auf, aus, aux, etc.
b. bei.
d. das, degli, dei, del, della, der, des, det, die, din, etc.
E. East.
e. ein, eine, einer.
F. Folge.
f. för, for, fra, für.
J. Jahr, Jahres, Jahreszahl, Jornal, Journal.
k. kaiserlich, königlich, koninklijke.
k. k. kaiserlich königlich.
l. las, les, los, etc.
M. Medical, Medicine, Medico, etc.
m. mit.
N. North.
n. neue, neueste, new, nouveau, nuova, nya, etc.
n. F. neue Folge.
n. p., n. d. no place, no date.
o. och, oder, over.

p. par, pel, per, pour, pri.
Q. Quarterly.
r. real, reale.
S. Surgery, Surgical.
s. seinem, series; *e. g.*, **1. s.**, **2. s.**, **n. s.**, new series.
u. und.
ü. über.
v. van, vid, von, voor, vor.
v. p. various places.
v. s. various sizes.
W. West.
z. zu, zur.

Sundry Word-Abbreviations.

Abhandl.	Abhandlungen.
Abstr.	Abstract.
Acad.	Academy.
Aerztl.	Aerztliche.
Allg.	Allgemeine.
Am	American.
Amtl.	Amtliche.
An.	Anales.
Anat.	Anatomisch. / Anatomy, etc.
Ann.	Annales. / Annals.
Arb.	Arbeiten.
Arch.	Archiv, Archives, etc.
Assoc.	Association.
Austral.	Australian.
Bacteriol.	Bacteriology, etc.
Balt.	Baltimore.
Beitr.	Beiträge.
Ber.	Bericht.
Berl.	Berlin, Berliner, etc.
Biblioth.	Bibliothéque.
Biol.	Biology, etc.
Bl.	Blätter.
Bol.	Bollettino.
Brit.	British.
Bull.	Bulletin.
Calif.	California.
Canad	Canadian.
Centralbl.	Centralblatt.

Chem.	Chemistry, etc.
Chir.	Chirurgical, etc.
Clin.	Clinical, etc.
Coll.	College, etc.
Compt.-rend.	Compte-rendu.
Cong.	Congress, etc.
Cor.-Bl.	Correspondenzblatt.
Deutsch.	Deutsche, etc.
Edinb.	Edinburgh.
Gaz.	Gazette.
Gior.	Giornale.
Handb.	Handbuch.
Hosp.	Hospital.
Indian.	(spell in full)
Indiana.	(spell in full)
Internat.	International.
J.	Journal.
Jahresb.	Jahresbericht.
Klin.	Klinisch, etc.
Lond.	London.
M. & S. J.	Medical and Surgical Journal.
Mag.	Magazine.
Mass.	Massachusetts.
Med.	Medical, etc.
Mém.	Mémoires.
Mem.	Memoirs.
Misc.	Miscellaneous, etc.
Mitth.	Mittheilungen.
Month.	Monthly.
N. Am.	North American.
N. Eng.	New England.
N. Orl.	New Orleans.
N. York.	New York.
Nachr.	Nachrichten.
Nat.	National.
Northwest.	Northwestern.
Nouv.	Nouveaux.
Obstet.	Obstetric, etc.
Ophth.	Ophthalmic, etc.
Pharm.	Pharmaceutic, etc.
Phil.	Philosophic, etc.
Phila.	Philadelphia.
Physiol.	Physiology, etc.
Pop.	Popular, etc.

Prag.	Prager.
Proc.	Proceedings.
Pub.	Public.
Quart.	Quarterly.
Rap.	Rapport.
Rec.	Recueil.
Rep.	Report, etc.
Rev.	Revue, etc.
Riv.	Rivista.
Roy.	Royal.
San.	Sanitary.
Schweiz.	Schweizerisch, etc.
Soc.	Society, etc.
South.	Southern.
St.	Saint.
Stud.	Studies.
Syst.	System.
Therap.	Therapeutic, etc.
Tr.	Transactions.
Univ.	University, etc.
Untersuch.	Untersuchungen.
Ver.	Verein.
Verhandl.	Verhandlungen.
West.	Western.
Wien.	Wiener.
Ztschr.	Zeitschrift.

A QUESTION AS TO AN ADVERBIAL TERMINAL is asked us by an esteemed correspondent: If *biologic* and *scientific*, etc., instead of *biological*, *scientifical*, why, then, not *biologicly*, *scientificly?* We are not quite sure that the question is not asked in derision, as there are people who delight to urge the ridiculousness of certain lacks of analogies, or of some philologic illogic, upon an adversary, forgetful that the beams in their own linguistic eyes are of enormous size and innumerable. That sort of sarcasm has no hurting or shaming power whatsoever. It seems a *reductio absurdum*, and hence "a poser"—this question—but is it so? We have not yet advised the formation of the adverb in this way, but we should not think a man fit for the Inferno who dared the awful thing. Indeed, won-

derful to relate, it is done every day by the sticklers themselves, in the words *publicly*, and *scientificly*. If instead of *scientifical* and *scientifically*, of *publical* and *publically*, *scientific* and *scientificly*, *public* and *publicly* are allowed to go about thus publicly exposing themselves, something must surely be ordered to prevent it. Is it politicly done? Is it not, indeed, unscientifical, and positively scan'lous!

As to Pronunciation.—In modern psychologic works one will find on almost every page the words, *neuropsychology*, *psychophysiology*, *psychophysics*, etc.; in reading these and similar words one would not pronounce them, *nu-rop-si-kol'-o-je*, *si-kop-hiz-e-ol'-o-je*, *si-kop-hiz'-iks*, etc. But there are a number of words in the medical dictionaries, concerning which a similar barbarism of pronunciation is laid down as lawful and proper. Of these words, *apneumatosis*, *iliopsoas*, *hysteropsychosis*, *uropsammus*, *enteroptosis*, *gastroptosis*, *trichoptilosis*, *uroxanthin*, and *metapneumonic* occur to us as examples. We are ordered to pronounce them *ap-nu-mat-o'-sis*, *il-e-op-so'-as*, *his-ter-op-si-ko'-sis*, *u-rop-sam'-mus*, *en ter-op-to'-sis*, *gas-trop-to'-sis*, *trik-op ti-lo'-sis*, and *met-ap-nu-mon'-ik*. In all other words the *p*, as in *pterygoid*, *ptilosis*, *pneumonia*, *psoas*, *ptosis*, *psychology*, etc., has never been sounded in English. What, therefore, is the reason that when placed after other stems in compounds the fact revives the spirits of the letters silent and dead for thousands of years? Let us, therefore, disobey the dictionaries and pronounce, *ptosis*, *ptilosis*, *psychopterygoid*, etc., without the initial silent letters, whether in the beginning or in the middle of a word. Let us say, *ah-nu-mat-o'-sis*, *il-e-o-so'-as*, *met-ah-nu-mon'-ik*, *en-ter-o-to'-sis*, *gas-tro-to'-sis*, *trik-o-ti-lo'-sis*, *si-ko-fiz'-iks*, *nu-ro-si-kol'-o-je*, *sfen-o-ter-e-goid*, etc.

Punctuation is a modern invention, and "overpunctuation" of still more recent discovery. We fear that printers are somewhat too prone to this hyperpunctiliousness. In obedience to the sensible law that the tool is

made for man, not man for the sake of the tool, it must be admitted that the use of punctuation marks is to aid in the expression of thought or to obviate doubtfulness of meaning. When the absence of these marks confuses, or when their presence makes meaning more doubtful they are certainly to be condemned. It is said that at Ramessa once lived a hospitable prior who placed above his door this inscription:

Be open evermore
O thou my door!
To none be shut,—to honest or to poor.

A more selfish successor indicated his feelings merely by changes in the punctuation, as follows:

Be open evermore
O thou my door
To none! Be shut to honest or to poor.

Many such printers' stories illustrate the power of punctuation both for good and ill. In this as in most doubtful cases the best plan is to read aloud what one has written and see if the punctuation follows the inflections of the voice. Thus the church notice, "A sailor going to sea, his wife desires the prayers of the congregation." should have been so punctuated and spoken as to avoid, "A sailor going to see his wife, desires the prayers of the congregation." If the compositor had heard the toast given, "Woman—without her, man would be a savage," he would not, as the story goes have set it up, "Woman without her man would be a savage."

There are two methods of punctuation, called the open and the closed; in the former as few stops or marks are used as possible, and in the latter as many,—this seems to be pretty near an accurate statement of the matter. The latter extreme, for extreme we believe it, is altogether too common, and is often the fault of fussy printers and proof-readers. But often it is not the least their fault, but that of a slovenly, slipshod writer who sputters his sentences

out with endless subordinate clauses, inversions, interjected and interrupted odds and ends of sentences, etc., into which sorry jumble the printer tries to bring some light by a plentiful peppering of commas and dashes and the like. Strangely enough this choppy, jerky style of sentence-making is more habitual with English than with American writers. It requires a multitude of commas and dashes to keep this epileptoid syntax from falling into grand mal convulsions. It would be good training for schoolboys if they were required to write long accounts or descriptions without a punctuation mark, and yet when these should be read aloud they should admit of no misconstruction or doubt as to the meaning. This would aid in teaching the art of building sentences so that they shall be clear and logical in and of themselves. The lawyers have found the plan a wise one and write their deeds in this way to obviate errors that would result from reliance upon the little points, subject as they are to misplacing or omission, hence to doubt as regards meaning with the passing of time. Perhaps as good a rule as one can frame is to shake the punctuation pepper-box as little as possible, and shape sentences so that they will require it as little as may be; but, one way or the other, leave no doubt as to the meaning of what is said. Everyone knows when a period is required, when an interrogation is demanded, and usually when a semicolon is of service. The difficulty lies when we come to commas, dashes, hyphens, and brackets. In such cases when in doubt do not follow Hoyle's rule to play trumps; "pass," and let the printer do the work for you.

CHAPTER IV.

THE USE OF WORDS.

ANATOMIC TERMS TO BE PREFERRED.—During the last ten years the Association of American Anatomists, the American Neurological Association, the American Association for the Advancement of Science, and the Anatomische Geseilschaft have adopted and published reports of special committees on Anatomic Nomenclature. The extent of the agreement already reached may be seen from the reports of the Anatomists for 1897 and 1898; the second was printed in full in the *Philadelphia Medical Journal* for February 25, 1899. From these two reports are selected the names of some parts not infrequently mentioned which are recommended for use in place of the less convenient and usually longer synonyms. When the distinctively Latin form differs from the English the latter is given; e.g., *precuneus* for *praecuneus*, *central fissure* for *fissura centralis*, *gyre* for *gyrus*, *peduncle* for *pedunculus*, *mesocele* for *mesocoelia*, *metapore* for *metaporus*, etc.; but in all these cases the national English form at once suggests the international Latin. The risk of ambiguity in a few cases is obviated by the context. The Anatomists have as yet passed only upon the bones, the muscles, and the central nervous system, including the bloodvessels of the brain. The cranial nerves have not yet been included, but there can be little doubt that *vagus* will be recommended rather than *pneumogastric*.

USE	INSTEAD OF
Alba	Substantia alba, or White matter
Arbor	Arbor vitae
Axis	Second cervical vertebra, or Epistropheus

USE	INSTEAD OF
Biceps	Biceps brachii
Calcar	Calcar avis, or Hippocampus minor
Callosal Fissure	Fissure of the corpus callosum
Callosum	Corpus callosum
Caudatum	Corpus caudatum
Central fissure	Fissure of Rolando
Chiasma	Optic chiasma
Cinerea	Substantia grisea, or Gray matter
Circulus	Circle of Willis
Clava	Processus clavatus
Coccyx	Os coccygis
Corona	Corona radiata
Cortex	Substantia corticalis
Crus	Crus cerebri
Dentatum	Corpus dentatum
Diencephalon*	Thalamencephalon, or 'Tween-brain
Dorsal (horn, or cornu, and nerve-root)	Posterior
Dura	Dura mater
Endyma	Ependyma
Epencephalon*	Hindbrain
Epiphysis	Conarium, Pineal body, or Pineal gland
Falcial sinus	Inferior longitudinal
Falx	Falx cerebri
Fimbria	Fimbria hippocampi, or Corpus fimbriatum
Fissure	Sulcus
Foramen magnum	Foramen occipitale magnum
Gyre, or Gyrus	Convolution
Habena	Habenula
Hemicerebrum	Cerebral hemisphere
Hemiseptum	Lamina septipellucidi
Hippocamp, or hippocampus	Hippocampus major, or Ammon's horn
Hippocampal fissure	Dentate
Hypophysis	Hypophysis cerebri, Pituitary body, or Pituitary gland

* After the analogy of *angel* and *organ* from *angelus* and *organum* these five names may be regularly anglicized as mesencephal, etc. The sanction of these compounds is no reason why on ordinary occasions *brain* should not be used instead of encephalon.

USE	INSTEAD OF
Ilium	Os ilium
Insula	Island of Reil
Intercalatum	Substantia nigra
Intercerebral fissure	Longitudinalis cerebri
Ischium	Os ischii
Isthmus	Transition convolution
Lateral sinus	Transverse
Latissimus	Latissimus dorsi
Lemniscus	Fillet
Lenticula	Nucleus lentiformis
Longitudinal sinus	Superior longitudinal
Malar bone	Zygomatic bone
Medicerebral artery	Middle cerebral
Medicommissure	Middle or Gray commissure, or Massa intermedia
Meditemporal gyre	Middle or Second temporal
Mesencephalon*	Midbrain
Mesocele, Mesocoele, or Mesocoelia	Aqueduct of Sylvius or Iter e tertio ad ventriculum quartum
Metaplexus	Choroid plexus of the fourth ventricle
Metapore	Foramen of Magendie, Apertura medialis ventriculi quarti
Metatela	Tela choroidea ventriculi quarti
Metencephalon*	Afterbrain
Myel, or Myelon	Spinal cord, or Medulla spinalis
Oblongata	Medulla oblongata
Occipital fissure	Parietooccipital, or occipitoparietal
Oliva	Olivary body
Paracentral fissure	Marginal portion of Callosomarginal
Paracentral gyre	Paracentral or Oval lobule
Parietal fissure	Parietal division of the intraparietal
Parietal gyre	Superior parietal lubule
Paroccipital fissure	Occipital portion of the intraparietal
Pia	Pia mater
Pons	Pons Varolii
Porta	Foramen of Monro
Postcentral gyre	Posterior central, or Ascending parietal

USE	INSTEAD OF
Postcerebral artery	Posterior cerebral artery
Postcommissure	Posterior commissure
Postcribrum	Posterior perforated space
Postgeminum	Posterior geminal body, or Posterior optic lobes
Postgeniculum	Posterior or Internal geniculate body
Postpeduncle, Prepeduncle, Medipeduncle	The three Peduncles of the cerebellum
Precentral gyre	Anterior central, or ascending frontal
Precerebral artery	Anterior cerebral
Precommissure	Anterior commissure
Precornu, Medicornu, Postcornu	The three "horns" of the lateral ventricle
Precribrum	Anterior perforated space
Precuneus	Quadrate lobule
Pregeminum	Anterior geminal body, or Anterior optic lobes
Pregeniculum	Anterior or External geniculate body
Presylvian fissure	Anterior ascending branch of the Sylvian
Prosencephalon*	Forebrain
Pseudocele or pseudocoelia	Ventriculus septi pellucidi, or Fifth ventricle
Quadrigeminum	Corpus quadrigeminum
Restis	Restiform body
Sacrum	Os sacrum
Septum lucidum	Septum pellucidum
Splenium, genu, and rostrum	Without the "Corporis callosi."
Sternomastoid	Sternocleidomastoid
Striatum	Corpus striatum
Subcalcarine gyre	Lingual
Subcollateral gyre	Fusiform
Subfrontal gyre	Inferior, or Third frontal, or Broca's convolution
Subparietal gyre	Inferior parietal lobule
Subtemporal gyre	Inferior, or Third temporal
Supercallosal fissure	Frontal portion of Callosomarginal

USE	INSTEAD OF
Supertemporal gyre	Superior, or First temporal
Tentorial sinus	Sinus rectus
Tentorium	Tentorium cerebelli
Terma	Lamina terminalis, or lamina cinerea
Thalamus	Optic thalamus
Thoracic vertebrae	Dorsal
Torcular	Torcular Herophili, or Confluens sinum
Trapezium	Corpus trapezoideum
Triceps	Triceps brachii
Tuber	Tuber cinereum
Tuber ischii	Tuber ischiadicum
Vadum	Gyrus profundus
Vallis	Vallecula cerebelli
Vulvula	Velum medullare anterius
Ventral (horn, or cornu, and nerve-root)	Anterior
Zygoma	Zygomatic arch

FOREIGN WORDS AND TERMS.—As to the use and anglicization of expressions from foreign languages it seems clear that we should accustom ourselves to habits that will lessen the mental labor of the reader and the printer. One might indeed include the editor were it not that somebody would cry, Selfishness! But, at all events, any unnecessary labor we put upon those who work for us is sure in some way or other to react upon the thoughtless one, even if it makes him only a little added expense, thus increasing an already expensive indifference It cannot be denied that we increase the mental friction of our readers when we use expressions not readily understood by most of them, or even when we break the easy flow of our thought by italicized passages. Foreign terms should, therefore, be anglicized when their use is at all common, and the taking them into the language, if at all, should be done frankly and quickly. The kindhearted lady's pity for the lobster, expressed by bringing the cold water in which it was placed slowly up to the boiling

point, instead of one quick plunge in the hot water, was, like much other kindness, very cruel in fact. There is, we think, no use whatever in still considering a thousand Latin anatomic terms as anything but thoroughly anglicized. They no longer need italicization, although many of them have far better English equivalents, as we have before contended. (Why also is not *by the mouth* as good as *per os*, *aged*, or *of age*, as *aetat*, etc.? Let us give the simple English equivalents of these and such others as *per vias naturales*, *sectio alta*, *sectio abdominalis*, *atresia ani*, *per uretham*, *per anum*, *sine exanthema*, *sine variola*, *pro and con*, *nil*, etc.) If, therefore, we prefer the bombastic terms, let us omit the botheration of italics. It is the same with many other visitors that are sufficiently familiar and at home to have taken out their naturalization papers. Among these are such words and terms as *post mortem*, *cul de sac*, *masseur*, *masseuse*, *milliampere*, *centimeter*, *curet*, *currettage*, *accoucheur*, *serre fine*, *felo de se*, *confrere*, *resume*, *enciente*, *clottage*, *rale*, *epitome*, *role*, *raphe*, *en masse*, *par excellence*, etc.

In this class of words it is a curious and interesting fact, that having disposed of their outlandish costumes as a whole, those who employ them like still to tag them with some mark of their "heathen origin" by a label or ticket. Most everybody seems to think it necessary to stick hyphens or accents into or about them, although they may never have had these strange marks in their native lands. Thus Mr. Robertson's name is Argyll Robertson, not Argyll-Robertson, and *ante mortem*, *felo de se*, *post mortem*, *cul de sac*, etc., are without hyphens in their own countries. (Indeed we can see no valid reason why many of these foreign compounds should not be fused into a single English word, as e.g., *postmortem*, *culdesac*, etc.). Let us also forego the accents in *rale*, *meter*, *role*, *raphe*, *employe*, *centimeter*, *resume*, etc., and, too, avoid pretence by giving the English terminals *-er* instead of

-re. Democracy is receptive and especially the American type, but if we cannot make the foreigner over after our own fashions, we would rather he had never immigrated. A similar logic would seem to make us stop using capitals in such words as *galvanism, faradism, farad, ohm, franklinism, volt, coulomb, ampere, joule, thebesian, eustachian, fallopian, cesarean, haversian, sylvian, meibomian,* etc.

The struggles with the French accents are often quite ludicrous. Thus one generally finds the grave placed for the acute, and the reverse, and not infrequently such a word as *epitome* gets the accent over the last *e*, but over the first none whatever, grave or acute. While seemingly quite grave, the disease of the sticklers is in reality extremely acute—at least in type. The patient is subject to delusions and seems, for example, to have some sort of a hazy idea that accents and diacritic marks can teach pronunciation. The fact is they do not serve that function, and by the very nature of the case cannot do it. Let us abolish them; except, of course, in proper names.

VERNACULARISMS AND NATIONALISMS.—In reference to the favoring of good German instead of bad Latin, by Virchow, a correspondent wisely calls attention to an important middle course which is not seldom possible, whereby we may combine the opposing tendencies of uniformity and nationality. This consists in employing the terms drawn etymologically from the classic languages, but so united as to bear the stamp of the national language. Vernacularism may run to mania and beget such absurd localistic heteronyms as *sea-horse, See-pferd,* and *cheval marin,* in place of the universal but locally-colored correspondents, *hippocamp, hippokamp,* and *hippocampe.* Heteronyms (difference of form and spelling for translating a term), as Wilder has long contended, should, when possible, be supplanted by paronyms in which the differences of form are slight and principally in the terminations,—"since each paronym suggests the original Latin name,

the latter forms a bone between writers and readers of different nationalities." Mononyms, of course, are also preferable to polynyms. Thus, instead of *pons Varolii*, we should use *pons*, and this word should be used instead of *pont*, *ponte*, *puente*, *Brücke* and *bridge* by the respective national writers. *Organ*, *organe*, *organo*, and *Organ* are advisable geographic varieties of one word.

Particularly must the tendency be reprobated which has, in speculative philosophy, created a jargon of German terms bundled bodily over into our English garden, and which in medicine is illustrated by the ludicrous terms *Anlage* and *Fundament*, both accurately represented by Wilder's fine word *Proton*, adopted from Aristotle, and used to designate the primitive undifferentiated mass or rudiment of a part.

Hybrid Words.—The reasonable view of hybrid terms seems to be embodied in the following remark of Barclay in 1803: "Notwithstanding the opprobrium attached by some to certain connections and intermarriages among harmless vocables, I should be inclined not to reject the cooperation of the languages (Greek and Latin) when experience shows it to be convenient, useful or necessary." Abstractly, we may all prefer horses to mules, but this need not hinder us from recognizing that, under certain circumstances, the latter are more efficient than the former, and that, in a given case, a horse may not be even so handsome as a mule.

Apparently, also, Professor Kolliker objects to hybrid words as *Barbarismen*. Yet the German list, adopted by a committee of which he was chairman, contains at least 14 compounds of Greek and Latin elements, viz., *epidurale*, *mesovaricus*, *parumbilicales*, *parolfactorius*, *perichorioidiale*, *suprachorioidea*, *choriocapillaris*, *zygomandibularis*, *phrenicocostalis*, *sphenopalatinum*, *sphenooccipitalis*, *occipitomastoidea*, and *squamosomastoidea*.

Was language made for man or man for language? Is

it a fetich or a useful tool? There can be nothing but contempt felt for the dilettanteism that would reject a good word because its roots are found in two languages. There are thousands of such existing words, and if this method of formation had been more frequently used we should have avoided many ridiculous examples of philologic "jewels that on the stretched forefinger of time sparkle forever."

A PROTEST AGAINST A BAD GERMAN HABIT.—There is a growing habit with English writers, adopted from the Germans, of carrying over to a subsequent compound term the unexpressed half of meaning of a previous compound, by the indication of the hyphen without the second part of the hyphenated term. A book has lately been issued with the astonishing title: *Letter-, Word- and Mind-Blindness.* In every medical journal one will see such barbarisms as *light- and color-blindness*, the *cocain- or morphin-habit*, *word- without color-blindness*, *soul- or mind-blindness*, etc. What physician has had *a case of word-?* A similar mistake is less noticeable when one writes, e. g., *cortical or soul-blindness.* Now, one might just as well say: *myo- and hyper opia*, *neur- and trach-oma*, *burs- and myos-itis.* It is well to avoid redundant words and verbosity when we do not sin against the very soul of English, but this "interrupted continuous suture" of meaning playing over and down along a sentence, however Saxonic it may be, is by no means Anglosaxonic.

AS TO EPONYMIC DESIGNATIONS.—It can scarcely be said with truth that the sense of tradition is wanting among medical men, and that the profession is not generous in tribute to the memory of distinguished members of its guild. With this admission there seems to be no reason for embarrassing our nomenclature with the innumerable eponymic designations that have crept into our literature. Exceptionally it may seem unavoidable to use

the discoverer's name for a disease whose nature is not known, but we are convinced that such a course is not always necessary and it should be avoided when possible as obstructive of true scientific progress. Names should, so far as selection permits, be descriptive, and, when given to diseases, should be based upon some characteristic or peculiarity, clinical or pathologic, so that they may have practical significance and be clearly fixed in mind and readily recalled to memory. These conditions are not fulfilled by eponymic designations, which conduce rather to confusion and uncertainty. To refer to a few concrete instances, one may at times be left in doubt as to which of the five affections described by Pott is meant when his name is used, or which of the three with which the names of Charcot, Cooper, Duchenne, Hebra, Paget, St. Anthony, and St. John respectively are associated. In the matter of operations and tests the conditions are somewhat different. Here it is often difficult to find a single word or two that will convey as much as the name of the deviser; and in instances in which one man has devised more than one operation ambiguity can be avoided by specifying the part or parts to which the procedure in question is applicable. Whenever possible, however, without sacrifice of directness and brevity, eponymic designations should be abjured and the employment preferred of those that convey in and of themselves an idea of the condition that they are intended to describe. He uses language best who makes the fewest words express clearly the fullest meaning. Let us, therefore, prefer *nephritis* to *Bright's disease*, *hereditary* to *Friedreich's ataxia*, *paramyoclonus* to *Friedreich's disease*, *paralysis agitans* to *Parkinson's disease*, *adrenal disease* to *Addison's disease*, *exophthalmic goiter* to *Parry's* or *Basedow's* or *Graves' disease*, *vertebral disease* to *Pott's disease*, *disseminated cerebrospinal sclerosis* or *amyotrophic lateral sclerosis* respectively to *Charcot's disease; osteitis deformans* or *psorospermiasis* respectively to *Paget's disease;* and so on, and so on.

PARONYMOUS PLURALS.—One wonders why it is considered better English to ape the language from which a word may have been derived by grafting upon the acclimatized word the foreign and illogic form of plural. Those who should be, or who pretend to be, concerned for the purity and logicality of our tongues are frequently the worst enemies of purity and simplicity, delighting in hodge podge and outlandishness. There are those who even now contend for *lentes*, *atlantes*, *animalia*, etc., instead of *lenses*, *atlases*, and *animals*, and they would certainly stickle for *irides*, *enemata*, *carcinomata*, *fasciæ*, etc., etc., instead of the shorter, more idiomatic, more natural, and in every way better, *irises*, *enemas*, *carcinomas*, *fascias*. It is the hypocrisy of culture, the ignoramuses' pretense of classicism, which keeps up the delusion that the straightforward English formation is less worthy than the transplanted variety. The regular English style of forming the plural is held to be good enough for $\frac{99}{100}$ of our nouns; why not also for the remaining $\frac{1}{100}$ of them?

CONTAGION AND INFECTION.—In connection with our discussion of the "contagiousness" of leprosy it seems not inopportune to make a plea for a more uniform and more intelligent use of the words *contagion* and *infection* and their derivatives. The Century Dictionary defines *infection* as:

> The communication of disease or of disease-germs, whether by contact with a diseased person or with morbid or noxious matter, contaminated clothing, etc., or by poisonous exhalations from any source.

The definition would be more in accord with present usage and modern notices if it read simply "the communication of disease through whatever means." The essential points are the transmission and the "development of the disease." The mere conveyance of germs is not infection, as their mere presence is not disease.

Contagion is thus defined by the Century Dictionary:

Infectious contact or communication; specifically and commonly, the communication of a disease from one person or brute to another. A distinction between contagion and infection is sometimes adopted, the former being limited to the transmission of disease by actual contact of the diseased part with a healthy absorbent or abraded surface, and the latter to transmission through the atmosphere by floating germs or miasmata. There are, however, cases of transmission which do not fall under either of these divisions, and there are some which fall under both. In common use no precise discrimination of the two words is attempted.

Thus, it will be seen that the definition here suggested of *infection* comprehends also that of *contagion.* With none of the diseases with which either or both of the terms are associated need the transmission assume any particular form. As we have already stated, the essential points are transmissibility and generation of disease. Such difference as at present may be conceived to exist between the two words is of degree and not of kind. We may here point out that an intoxication differs from an infection essentially in the matter of transmissibility. The infection is transmissible because it is dependent upon a propagable cause; the intoxication is not transmissible for the opposite reason. There are, further, certain diseases that, while transmissible, are not in the present acceptation of the term infectious. Among these are the parasitic diseases of skin, intestine, muscle, etc. Let us, therefore, end the contention that has been waged as to the distinctions between the words *infection* and *contagion* and their derivatives, and agree for uniformity's sake in their synonymity, making their essential characteristics the transmissibility of the diseases in connection with which they are employed.

A FEW VERBS give many people a great deal of trouble, and though physicians are not worse sinners in this respect than, e.g., lawyers, the frequency in medical writings and speakings of certain errors gives us warrant for a passing

allusion to them. Let us first take the two words, in the use of which there are probably more blunders made than in others :—*lie* and *lay*. In half of the clinics of the land, a patient will be told to *lay down*, and when the event is described it will be in this way—*he laid down*. Those thus speaking and writing may, and probably do, know perfectly the proper forms ; but habit asserts itself in unconscious usage, and in this way shows us the need of correct examples and usage during childhood. *Lie, lay, lain* are the "principal parts" of the intransitive verb, while *lay, laid, laid* are those of the transitive form. Hence, of course, we should say, *I lay, I laid, I have laid* (the patient or the book) *down*, but *I lie, I lay, I have lain*, down to sleep. In the same way one says, *he* (it, or she) *lays* (down the rules), *he lies, lay, has lain* (down to rest). It is unfortunate that in English a third verb, *lie*, to tell a falsehood, should exist, so like or similar in form as to be a source of confusion. *Sit* and *set* are also botherers, which few in all cases will use correctly if speaking quickly and unconsciously. After the hen lays or has laid the egg, the woman sets the hen, but the hen sits. The patient is asked to sit down and sat. When seated, or, having sitten, he set forth his symptoms. *Sit, sat, sitten ; set, set, set ; seat, seated, seated.*

Gotten is, perhaps, the more correct past participle of *get*, but we prefer the simple form *got*, and believe that it is fast taking the place of the longer word. We also fear that the proper imperfect *gat* is likewise being dispossessed by *got*. For the present we should say *get, got, got*. But let us make a desperate effort to drop the word when it is not needed, as it is not when we wish to indicate simple possession. In *I have got the forceps, he has got the sponges, you have got bronchitis*, etc., the speakers weaken their language by the redundant word. The word *get* is also misused and greatly overused in many other ways, as, e.g., in *to get left, to get rid of, to get hungry*, etc.

Many err in the use, especially of the imperfect, of *thrive, throve, thriven ; shake, shook, shaken ; drink, drank, drunken.*

THYROID, CHOROID, ETC., OR THYREOID, CHORIOID?—The dictionary-makers have hardly dared to advise *thyroid* instead of *thyreoid*, and so the world goes on doing one thing and the dictionaries advising another. Etymologically, of course, *thyreoid* is demanded, but when languages were made the makers neither knew nor cared for etymology, and of all languages in the world English cared and still cares less for it than any other. The word *wig* contains neither a letter nor a hair of the original *pilus* whence it came. And yet it is certainly true that not always is custom or usage to govern us in these things. In the case of *choroid* there seems no doubt that we may safely write the word thus, and not *chorioid*, or *choreoid*, when we mean the ocular structure. We need *choreoid* for the chorea-signification, and as *chorioid* when spoken has the same sound, good sense and good usage have combined to extinguish *chorioid*, and *chorioiditis*, leaving us the simple *choroid* and *choroiditis*, which have become so universal that the more etymologically accurate forms would smack of affectation should a writer try to introduce them. The similar word *hyoid* has definitely settled to that form and not, e. g., to *hyoeid*. We suspect that *thyreoid* is destined to lose its *e*, and become simple *thyroid*, as nine-tenths of medical men doubtless pronounce if not write it today. We should certainly not consider one a philologic sinner who did so, and would even excuse the lexicographer who should so set it down in his word-book. There is a noteworthy analogy in our word *dorsal* from *dorsualis*, in which the *u* has been chloroformed so silently that the conservatives are not aware of it.

CARCINOMA OR SARCOMA—NOT CANCER.—The dictionaries define *cancer* as (1) a crustacean, (2) a constellation and a sign of the zodiac, (3) a malignant tumor, (4) a plant. At a time when the several forms of malignant neoplasm were undifferentiable there was perhaps some

justification for the use of a single word to comprehend them all; but, as, with the development of histologic methods and knowledge, it became possible to discriminate a number of distinct varieties and give them appropriate names, the usefulness of such a term was largely lost. On this account we think it better, on grounds of precision and clearness, to discard the word *cancer* and use in its stead the name of the specific form of malignant disease under consideration, e. g., *carcinoma* or *sarcoma*.

THE WORD APOPLEXY is derived from a Greek root meaning "to strike with violence," and it was originally employed to designate sudden loss of consciousness, with which often were associated stertorous breathing, turgidity or cyanosis, and other symptoms; sometimes there was sudden loss of power, without derangement of consciousness and other phenomena. As these conditions were found in many instances to be dependent upon rupture of a cerebral bloodvessel, with extravasation of blood into the brain, the word *apoplexy* came to be used as a synonym for interstitial hemorrhage wherever it occurred. As, however, it became evident that the so-called apoplectic symptoms resulted also from blocking of cerebral vessels either by thrombus or embolus, these conditions also became comprehended in the term. It has, further, been learned that identical phenomena may develop in connection with chronic nephritis and uremia. It would, therefore, appear necessary to recast our conceptions of the word apoplexy if it is deemed necessary to retain it; but as the significance and the usefulness of the word seem to have been lost, we can get along better without it than with it. It would certainly be preferable to use the term *cerebral hemorrhage*, or *thrombosis*, or *embolism*, for other forms of interstitial hemorrhage or uremia, as the case may be, to indicate the existing condition, rather than to ignore the differentiation by

using a term of such vague and uncertain significance as apoplexy, which has been employed to designate a number of unlike conditions.

TUBERCULOSIS—NOT CONSUMPTION, NOT PHTHISIS.—Tissue-destruction, breaking down and wasting, whether in lung, in gland, in bone, in skin, in bowel, or elsewhere, may result from various causes, sometimes determinable, sometimes not. The process is itself not a distinctive disease or even condition. When, however, we know its origin we may appropriately and correctly employ the specific designation. It is thus more exact and more scientific to speak of *syphilis*, or *actinomycosis*, or *anthrax*, or *suppuration*, or *tuberculosis*, respectively, when the condition is recognized, than to use such a general term as *consumption* or *phthisis* for any or all. Further, both of these terms are most commonly used synonymously with tuberculosis, especially of the lungs, and are associated in the lay mind with the notion of progressive aggravation and incurability, and sometimes the professional mind is not entirely free from the same bias. For the foregoing reasons, we think it would be well if the words *consumption* and *phthisis* were expunged from our nomenclature as unnecessary and ambiguous and replaced by the appropriate specific designation, such as *tuberculosis*, when this is really meant, or other word that describes the disease present in so far as this is determinable.

EXOPHTHALMIC GOITER.—Let us intermediate between those who would say *Basedow's disease* and those who would say *Graves' disease*, at the same time considering those who would say *Parry's disease*, and agree for the present upon *exophthalmic goiter* as the designation for the well-known symptom-complex, until perhaps we have learned all there is to know about the disorder, or there is reason for substituting another name.

CONFUSION IN THE USE OF THE TERM "SKIASCOPY."—A correspondent writes us as follows: *The Philadelphia Monthly Medical Journal* (March number) accepts and employs the word "*skiascopy*" as meaning examination by either skiagraph or fluoroscope, or by both. The word was coined by M. Egger, and introduced 15 years ago to designate the examination of the refraction of the eye by the movements of the light and shadow in the pupil, giving in a single word an equivalent for "*shadow test, fantascopie retienne,*" etc. With this meaning the word has been adopted in every European language, and has for years been more generally used than any other to designate this important method of diagnosis. It may have been suggested in connection with the examination by means of the x-rays, in ignorance of its previous meaning. But if such use of it has your approval as an editor and lexicographer, I wish you would state the reasons that to your mind justify the introduction of such confusion into the language, especially in the matter of indexes, catalogs and bibliographies. We had a specimen of such confusion when the same procedure was called "keratoscopy"; and the *Index Medicus* classed it under "Diseases of the Cornea."

We do not quite agree that we accepted and used the word *skiascopy* in the criticised manner. One of our contributors did so, and we can be blamed only in permitting it. But we heartily assent to the criticism. One word cannot be used for two such different things as this word is now made to cover. We suggest that as *skiagram* and *skiagraph* are used for the finished printed picture made by means of the x-rays, why should not the examination either by the skiagraph or the fluoroscope be called *skiagraphy* or *fluoroscopy*, respectively? *Skiascopy* would thus remain for the original and proper purpose. If the x-ray folks refuse to give up their stolen word the ophthalmologists may have to get on with *retinoscopy*. The acceptance of words by the public, even of science, is not always a matter of law or of logic. It is often largely a matter of whim and luck.

REFRACT AS A TRANSITIVE VERB.—A critic recently took us to task, and most savagely, for using the word *refract* in speaking of eyes and patients. We had dared the barbarisms, *I refracted the patient*, or *his eyes were refracted.* Although punished we are still as refractory as ever, for we have no sort of patience with the folk who think man was made for language, instead of language for man. Why do languages, so many of them, exist, instead of a single tongue? The test of usefulness is supreme in all such cases. From our ironic correspondent's tone one would suppose that his own letter and language, indeed all dictionaries, were not filled with proofs that words acquire new meanings, and that intransitive verbs are made to serve transitive functions. The word-fetich man, the sneerers at change and progress in philology, are amusing people, at least until dogmatism and silliness become monomanias. To refract a person, or his eyes, are terms used thousands of times every day by all oculists, and aid us so much in expressing facts that if they were as illogical and absurd as the pernickety sticklers themselves, they could not be killed, nor can they be kept from the written language when so habitual in colloquial use. The ocular structures refract the rays of entering light. The oculist uses lenses to measure and correct the abnormalities of the refraction; he therefore himself refracts by means of these tools. What or whom does he refract? Only the light? Primarily of course, yes; but has the act no effect upon the eyes or upon the patient? We think it has. How then name the effect? As is done with thousands of other words, by the use of primary terms, extended so as to include the secondary effects. You do not spank a child or castigate a philologic prude. In the first instance you only spank the child's skin, as in the second you only irritate the tympanum of the egotist's ear. It is fortunate if any mental change whatever results.

DILATATION OR DILATION?—A good deal of confusion exists between medical writers as to the use of the words

dilatation and *dilation*. As it always preferable to use those words with the fewest possible syllables, because the energy wasted in writing, speaking and reading redundant words and syllables could be put to better use, the shorter form is preferable. It is true that the dictionaries give both forms without comment. However, when it is discovered that etymology furnishes at least one good reason for using the shorter form, it certainly seems that there should be no question about its more general use. For instance, it is found that *dilation* is derived from the good old Latin word *dilatare*, whose past participle is plain *dilatus*. On the other hand, *dilatation* is derived from the later Latin of the scholastics and monks of the Middle Ages who made it *dilatatio* and *dilatatus*. There is no reason for preferring the Latin of the monks to the original article as a source of English word-formation. As euphony is also better served by the use of the shorter form, we advise every one to employ it by preference.—*Cleveland Journal of Medicine.*

SYMPATHECTOMY is a word which appears in a recent editorial of an esteemed contemporary. Whether coined by the writer or borrowed, we cannot say. It is altogether new to us, and, we may add, hideous. The word is intended to designate the operation of excision of the superior cervical sympathetic ganglion, or briefly, sympathetic-excision, but it cannot etymologically cover more than sympathy-excision and even this coinage would be not a venial philologic sin. Συμπάθεια means *sympathy*, and from συμπαθητικὸς is derived the designation of the sympathetic nerve or system. "Sympatheticectomy" might be admissible, but why not be satisfied with *excision of the sympathetic?* We see no possible reason why the poor epileptic should be deprived of *his* sympathy—or of *ours!*

THE ADJECTIVE OF PONS.—The use of *pontine* in recent articles in the *Journal*, and of *pontal* in the new translation of Edinger's *Nervous System*, has led to a considera-

tion of the whole question. If the Romans had derived no adjective from *pons* it might be necessary for us to decide between the analogies of *montanus* or *montensis* from *mons*, of *dentatus* from *dens;* and of *mentalis* from *mens*. But *pontilis*, although postclassic, was the regular adjective from *pons*, and its English form (Anglo-paronym) is *pontile*. *Ponticus* (English *pontic*) is the adjective of *pontus*, the sea. *Pontinus* (English *pontine*) was originally *Pomptinus*, and refers to a district of Italy. In short *pontilis* and *pontile* are legitimate and sufficient, and the use of any other adjective tends to cause confusion and bring discredit upon medical and anatomic scholarship.

"It is to Be."—There is hardly a page of any newspaper that does not offer examples of an expression, the origin or meaning of which is beyond human understanding. Perhaps medical journals also sin in this way. *It is to be hoped that, the plan is to be commended, the procedure is to be endorsed and advocated*, etc., are some of the forms of this strange method of expression. If we mean that the plan should be commended, that the proposal should be adopted, etc., then why in all simplicity and directness not say so? If we mean that *we hope*, why make use of the highfalutin, silly and meaningless circumlocution, *it is to be hoped?* Man, it is said, takes infinite trouble in hunting up trouble; surely some writers give themselves great pain to make a simple, short statement obscure and long-winded.

Pecilonymy or Terminologic Inconsistency.—A common and undesirable literary habit is the use in one and the same article of different names for the same part, structure or tissue. In a certain article of five pages recently reviewed, *pituitary body* occurs 12 times, and *pituitary* 5 times in conjunction with other words. *Hypophysis* is used twice, and its adjective, *hypophyseal*, once. *Gland* alone occurs once. The replacement of *corpus pituitarium* and *glandula pituitaria* by *hypophysis* is one of the points

upon which there is agreement between the American Neurological Association, the Association of American Anatomists and the Anatomische Gesellschaft. Why not, then, use *hypophysis* throughout, adding the synonym, *pituitary body*, in parenthesis, at the beginning?

TUBERCULAR OR TUBERCULOUS?—At the recent meeting of a National Medical Society one essayist used the term *tuberculized* to express the meaning usually served by other words. It was plain that he did so with "malice aforethought." When asked why not *tuberculosed*, *tuberculotic*, *tuberculous*, *tubercular*, *tuberculated*, *tuberculate*, etc., he said *tuberculized* was the more correct word. The controversy that has been raging on this subject in the columns of the *Lancet* during the last year (1899) is most amusing, although the correspondents are in fighting earnest and do not wish to make us laugh. All the philologists, however, differ from the writers who would have it *tuberculized* or *tuberculosed*, etc.; they resemble the Irishman; it is not *nither* nor is it *nether*—it is *nather*, bedad!

The correspondents, like ancient Gaul, are divisible into three parts: (1) Those who would use *tubercular* always; (2) those equally dogmatic for *tuberculous;* (3) those who use both terms. The first two classes are outnumbered by the third, and the members of this third class differ each from another absolutely and eternally as to the proper meanings or applications of the two words. The "fun at the fair" comes out in these astonishing differences. The *Lancet* started the dance by the attempt to limit the term *tubercular* to anatomic significance, whilst restricting *tuberculous* to pathology. The first shillaly that came down upon this microcephalic head was that no such usage had ever been customary with medical writers, but that instead, *tuberculous* has been restricted to "concrete objects," while *tubercular* has been used with both abstract and concrete nouns. This writer is opposed to

all who will not conform to such a usage, and in a subsequent letter he brings etymology and Dr. Murray to his support. The meanings of the terminations *-ous*, and *-ar*, are shouted with each repetitive whack of the blackthorn upon our poor heads, being emphasized by "*granular, granulous; nebular, nebulous; nodular, nodulous; tubular, tubulous*, etc." After much soreheadedness and frolic, a wise correspondent whispers "Pedantry," and the headcrackers vanish to bind up their own scalps.

What egregious silliness! Suppose one attempts to limit these words to the significance expressed in the terminals: *-ous, fulness* or *abundance of*, and *-ar* (or *-al*, which is the same thing), *of the nature of, having the quality of*. he would at once, unless he were a philologic fop, or an ignorant pedant, run up against the fact that even in general English no such distinctions exist—that numberless words are used regardless of such finicky fussiness. Then when he turns to medical English he will be unable to find another word to illustrate and bolster up the contention. Most adjectives used to indicate pathologic or anatomic significations end in *-ic*, and in *-ic* alone, and will not even think of *-ar*, or *-ous*, as e.g., *pneumonic, syphilitic, necrotic, pelvic, albuminuric, phlebitic, nephritic, pleuritic, choleraic*, and a thousand more. Possibly the *-al* sticklers, e.g., the *Medical Record*, the *Medical Mirror*, and the *Medical Press and Circular*, would say *pneumonical, choleraical, syphilitical, necrotical, pelvical, albuminurical, nephritical, pleuritical, phlebitical*, etc., but the argument holds just as well, even then! Others will not have any adjectival terminal except *-al*, e.g., *malarial, gonorrheal, typhoidal, arterial, catarrhal, vaccinal, pharyngeal, brachial*, etc. There are many that will not submit to any other caudalization than *-ous*; as, for instance, *gangrenous, morbillous, leprous, osseous, eczematous*, etc. There is a small class that will have only *-ary*, as *bacillary, urinary*; another that objects to any but *-y*, or *-ly*, as *measly*; and a considerable

number of nouns, such as *measles*, *smallpox*, *whoopingcough*, *cerebrospinal meningitis*, *acne*, *forehead*, etc., that aristocratically flock all by themselves, despising all adjectival and democratic invitations.

In a word, if the distinction sought in *tuberculous* and *tubercular* were worth making, it should be possible in all the other adjectives, whereas it never has been made, the thousands of such other words refusing to be so dealt with. It is not, moreover, recognized or practised by the medical writers of today. Who would know unless told, and who would care after the telling, that in the Report of the Royal Commission on Tuberculosis published last year *tubercular* is used to qualify disease, and *tuberculous* to qualify animals or carcases? Who follows this fashion? If the etymologic significance of the terminals is preserved this is a foolish distinction, and if usage is the guide it is one flying in the face of every writer. There are not two scientific treatises in the world on the subject of tuberculosis that make the same distinctions as to the meanings of the two forms of the adjective. The dictionaries do not even attempt to make them, and we doubt if a single writer is logical and uniform in his use of them, even admitting the validity of the premises he may have clutched out of the air as his laws.

Conciseness and accuracy of meaning in the use of words is desirable, but this is far from the pride of ignorant erudition, and the fussiness of the finics. Indeed, the distinctions attempted in the two words are destructive of all accuracy and conciseness. If a man or an animal has a single tubercle-bacillus pathogenetically at work in his tissues, he is tuberculous, tubercular, tuberculized, tuberculate, tuberculosed, tuberculotic, tuberculic, tubercular, tuberculary, tuberculy, or whatever other form of the word chance or whim may select. All the rules of all the rulers will not change the pathologic fact, nor will they be able to render the degrees, or the locations of the process distinguishable by forms of the word. Any adjective must

be held to mean, *of the nature of, pertaining to, afflicted with, infected by, having the quality or character of, full of,* etc., indiscriminately, and any attempt to classify adjectives or to delimit adjectival significations is as ridiculous as the famous plan of John Phoenix to use numbers from 1 to 100 to make their degrees precise. The terminals, *-osus, -ose, -ous,* denoting fulness or abundance, or others with different meanings, do not signify when the pathogenic process is instigated by living germs. In a little while one germ will beget a million, and these will travel from lung to intestine, or to knee joint, or from man to animal, and vice-versa. If it is not true tuberculosis, but only resembles, then we have *tuberculoid,* if you please, but this "abstract and concrete" distinction is—well, let us say, it is in truth both abstract and concrete; and let us bid the pernickities good-morning, with a resolution to use the form of the word we please, and with the certainty that each means exactly the same thing, and that every reader will understand precisely what we mean. We prefer the single word tuberculous. If we use both, and if we seek to draw any distinction whatever between them, we shall not be understood, and we shall distinctly differ from every other distinguisher. *Quieta non movere.*

Misuse of the Word "Case."—According to the dictionaries and common usage, *a case* is the instance or history of a disease, the series of symptoms, circumstances and treatment constituting the special occurrence of a disease. Plainly and undoubtedly therefore the *case* is very different from the *patient.* And yet in every page of medical writings one sees an utter disregard of the distinction, a usage not only inelegant and incorrect, but often misleading and ludicrous. How in the world can a case "be taken ill," "put to bed," "have a fever," or "die"? The patient may thus be spoken of, but it is absurd to speak of the case having a pulse-rate, or temperature, of being comatose, or delirious, dead, or posted. "A case" thus reported is quite likely to suffer cremation.

THE NEED OF EXACTNESS AND PROPER TERMS IN DESCRIPTIONS is illustrated in one way or another in almost ever contribution to medical journals. "As big as a walnut," or as "a fist," "an orange," a "croquet ball," etc., are terms used of tumors, cysts, etc., instead of inches or centimeters. Every man has an approximate inch measure in his thumb, and inches divided by 0.4 give centimeters near enough for practical purposes in many cases. The descriptions of the feces, of pus, and of sputum often seem calculated to make even doctors disgusted with food, and to banish forever pea-soup, rice and sago, starch puddings, prunes, egg-sauce, and other such things from the dining table, and the dietary of sick and well. Surely these things need not be if clinicians are not color-blind. In a recent article the motion of a wheel in a machine-shop was described as "revolving with the hands of a watch." Was the plane of revolution horizontal?—one is compelled to ask. If so, of a watch face down, or face up? In describing anything we should ask ourselves if all others will surely understand the terms we use. All fists, oranges, pecans, walnuts, finger-breadths, etc., are not of the same size, all ordinary colors have accurate names, and the various degrees of fluidity, viscosity, and solidity may be appropriately designated without making the gorge rise in rebellion. A color chart and a pocket-rule should be included in every physician's outfit.

CHAPTER V.

MEDICAL PALEOGRAPHY.

MEDICINE is a forward-looking, not a backward-looking science, and hence the study of the origins and evolution of our guild and of its beliefs and customs are little thought of by our earnest members. Our indifference to the history of medicine was curiously and strikingly brought home to me recently, when I began hunting for data concerning the embryology of the signs used every day by physicians in prescription-writing. I discovered that as the peasant does not know what his "bow and scrape" mean, evolutionally-speaking,[1] and as the young mother does not understand why she dresses her infant in a skirt two or three feet longer than the baby itself,[2] so the physician has no suspicion of the origins of the signs used every day for drams, ounces, scruples, etc. After consulting two or three dozen cyclopedias, dictionaries, and technical handbooks, I found that nobody knew, and that these signs are written in the United States a million or several million times every day, and by highly educated men without the slightest suspicion or comprehension of their history.[3]

Their origin can be understood only by a general comprehension of the principal facts of the history of punctuation and of general paleography. As to general paleography, the best encyclopedias contain epitomes of the subject which need not be reproduced here, except, perhaps, to mention the roles played, 1. by the expensive-

[1] Spencer explains them as the initial movements of the captive, throwing himself under the conqueror's feet.

[2] The mother's skirt used for the newcomer, until this became a universal custom.

[3] I thought I should find the revelation of the mystery in a book I stumbled upon on medical symbolism, but it does not even mention the existence of the mysteries with which I was concerned.

ness of material upon which medieval writing was done:—whether upon leaf, wood, bark, vellum, or other material, there was a dire necessity for economy that resulted in small writing, narrow spaces, and many contractions. 2. To this necessity was added the constantly acting factor of human laziness, which by a thousand devices tried to shorten hours and lessen work by such labor-saving things as abbreviations and signs. 3. As everything biologic has its life-history of ambitious and plastic youth, adult strength, weakening old age and death, so do all styles and systems of handwriting. The development and decay of majuscule, minuscule, uncial, cursive, and calligraphic handwritings is of abundant interest psychologicly as well as paleographicly. The increasing carelessness by the fourteenth century finally led to such a degradation that many of these contractions inaccurately applied became the excuse for meaningless flourishes.

As a consequence we find these three factors working together most powerfully as the middle ages advanced toward the age of printing, to produce a vast and ludicrously complicated system of contractions, abbreviations and signs the object of which was to spare writers labor, and bookbuyers expense. It has been calculated that in the French MSS. there were as many as 5,000 distinct kinds of these artificial contractions. In England the number did not rise above 1,000—though even this is no warrant for great congratulation except when viewed relatively.

In English manuscripts according to Morris, a stroke over a vowel signifies *m* or *n;* as in *sū*, *hī*, *hoūd*, meaning su*m*, hi*m*, hou*n*d.

An upward curl, above the line, signifies *er;* as in *man*$^{\circ}$, *s*$^{\circ}$*ue*, for man*er*, s*er*ue (serve). But if this symbol follows the letter *p*, it means *re;* as in *p*$^{\circ}$*che* for p*re*che. It arose from a roughly written *e*, the letter *r* being *understood*.

A small undotted *i* above the line means *ri*, the letter *r* being *understood*, as before; hence *p'nce*, *c'st*, for p*ri*nce, c*ri*st (Christ).

A roughly written *a* (ª) in like manner stands for *ra;* as in *gªce, pªy*, for g*ra*ce, p*ra*y.

A curl, of a form which arose from a roughly written *v* (for *u*), signifies *ur;* as in *t̃ne, õ*, for t*ur*ne, o*ur*.

The reason for the upward curl after *þ* being used for *re*, arose from the fact that there was already a way of writing p*er*, viz. by drawing a stroke through the tail of the *þ:* as in *þil*, for p*er*il. Sometimes this sign stood for p*ar;* as in *þty* for p*ar*ty.

A similar stroke, but curling, enabled the scribe to abbreviate p*ro*. Thus we have *þfit, þue*, for p*ro*fit, p*ro*ue (prove).

At the end of a word, the mark ꝓ signifies *es* or *is*; and the mark ⁹ signifies *us;* as in *wordꝓ* for word*es* or word*is*, and þ⁹ for þ*us*.

A rare mark of contraction is ɔ̃, for *com* or *con;* as in *ɔ̃fort, ɔ̃seil*, for *com*fort, *con*seil (counsel).

Other examples of contraction are *q* or *qd* for q*uod* or q*uo*d, i. e. quoth; þᵗ for þ*at;* þᵘ for þ*ou*; ȝ for *and*[4]; ðfor ð*at;* and þ̄ for þ*at*. Also *ihc, ihm*, for i*esus*, i*esum* (Jesus, Jesum), where the *h* came from the Greek H (long *e*), and the *c* from the Greek C (Σ, *s*).

Sometimes a word is merely indicated by its initial letter or by a few letters.

The nature and methods of making these contractions, abbreviations and signs will become clearer as we proceed, but it is only study of the reproductions or of the originals of medieval books and MSS. that will make the matter plain. A careful comparison of the forms of our own printed capital letters as modified in the small or "lower case" letters, and then as further transformed in the cursive or script style, will give one a glimpse into the agencies of change made necessary first by the reduction in size, and second by the desire in writing to avoid taking the pen from the paper in making a new letter. That this last object is still a factor in chirography is shown in almost

[4] Sometimes *ant*, according to the dialect.

all writings; for example by the frequent failure to dot the letter i, and either by noncrossing the t, or doing so by long loops and swirls.

PUNCTUATION, properly speaking, began about the eighth century A.D., but was not fixed until after the invention of printing. Points of various kinds were used after each word so far back as the oldest inscriptions. These dots were sometimes single, sometimes double or triple (in the form of a triangle) or quadruple (in the form of a square, though also occasionally placed in the form of a circle, diamond, etc., etc.). But the object was to separate words, not parts or entire sentences, and hence it was not punctuation. One author, Aristophanes of Byzantium, in the second century B.C., used a dot at the top of the end of a complete sentence; for an incomplete sentence, corresponding to our own semicolon or colon, he placed the point as we place our period; corresponding to our comma he placed the dot at the middle of the space. The example of Aristophanes, however, was little followed —a commentary upon the intelligence and conservatism of the copyists—and most of the manuscripts of the middle ages are poorly or not at all punctuated. In Caxton's Mallory's *Le morte darthur* the sole punctuation sign is a slanting line, and an occasional reversed capital D, or paragraph sign.

THE ORIGIN OF MODERN PUNCTUATION MARKS is strangely omitted in the treatises and cyclopedias. Only in the last edition of Chambers have I been able to find anything approximating an explanation of, or even suggesting, their evolution. It thus transpires that students of evolution, history, and embryology, while spending their lives in studying the origin of worlds or organisms, are indifferent to the origins of the letters, punctuation marks, signs, and symbols they make use of every time pen is placed on paper. The fact seems to be that our modern

punctuation marks are the conventionalized relics of some of the most used contractions of the medieval copyists. With the increasing demand for books, as I have before

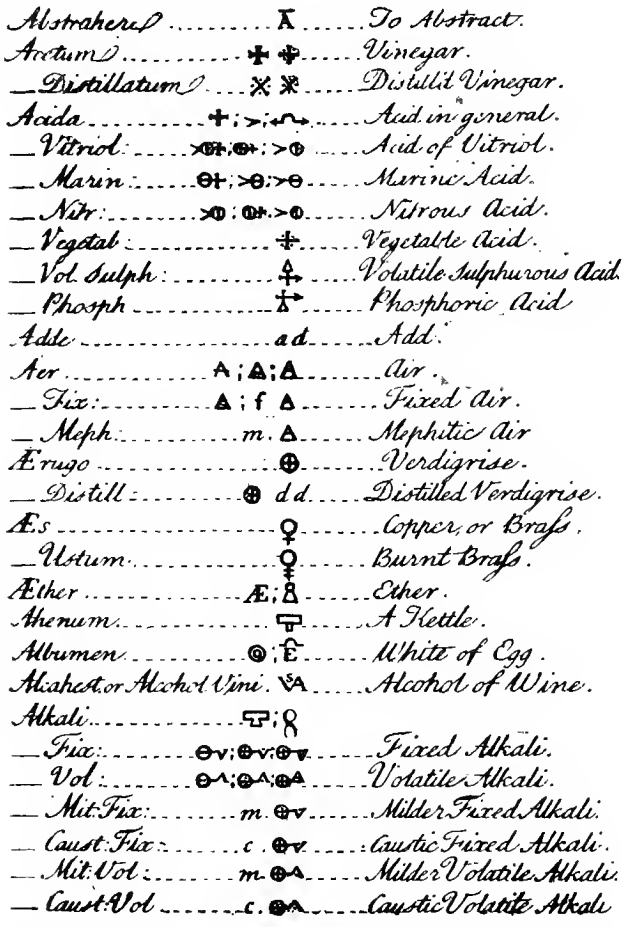


FIG. 1.

said, the necessity of lessening the cost of material and of labor, united with laziness to develop crowded writing and the tremendous system of contractions. The signs

of some of these contractions finally developed into our modern punctuation marks. Just as every letter of the alphabet is the conventionalized simplification of the picture of an object, so the period, comma, semicolon, etc., are similar remains of pictures of omitted syllables and letters. This may be illustrated as follows:

THE LIGATURE, DIERESIS, UMLAUT, CIRCUMFLEX, ETC. —The horizontal line above was an early sign of omission of letters, as *e.g.*, *c̄* for *cum*, *āūt* for *autem*, *ā* for *annos*, etc. It probably arose from an earlier custom of the scribes of placing such a line above an erroneous letter, syllable, or word, to be erased later. To avoid the writing of the second one of a double letter, this line was drawn over the first, and the second was omitted—*e.g.*, *sūma* for *summa*, etc. The line in case of *m* first, and then of *n*, was but a rapid and cursive way of making the uncial *m* or *n* above the preceding letter; at first it was a waving line, our circumflex,[5] and then it became straight as a typical sign. This line was also used as a ligature of *æ* and *œ*, at present still used, and which was a mere picture of the linking or binding of the two letters. We still use the line above vowels to indicate their long sound, the modern significance not being essentially different from that of the elder. At a later date the scribes also used the line, which is only a hastily-written ligature, or letter *m*, over the last letter of many contracted words, *e.g.*, *qm̄* for *quoniam*, *qūō* for *quomodo* (or *quoniam*), etc. The two dots of the dieresis and umlaut, which were but hurried and habitually-shortened ligatures, finally came to denote the separate pronunciation of the shortened and contracted syllables, in which a letter or syllable (as in zoölogy, coöperation, etc.) was omitted. In our medical sign, *āā*, the omitted *n* is indicated by the straight lines above.

[5] The circumflex, or straight line, was not always written horizontally. For instance, *suoy* was the contraction for *suorum*, in which *y* represented the letter *r*, and *u*, crossed by cursive *m*, passed through the ⌢, or circumflex and straight line to the vertical line.

THE PERIOD AND THE COLON.—The Latin scribes had a large number of words to copy, ending in *-mus* and *-nus*. To save labor and space, they began the contraction-process by

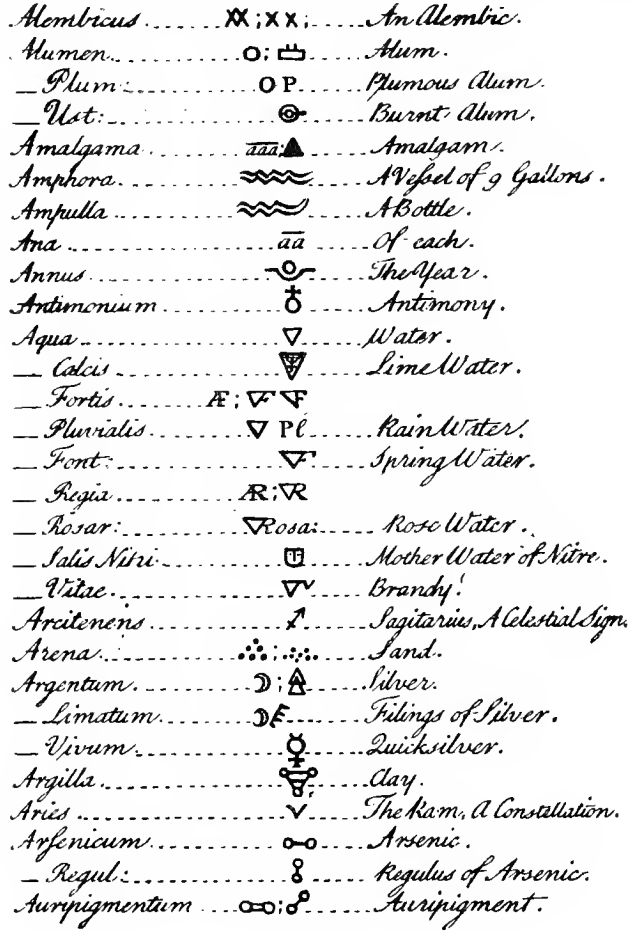


FIG. 2.

writing these terminals thus: ꝰ, ꝯ, in which the *u* was half made and crossed with the long *s*, or *f*. It was not long, of course, before the last trace of the *u* disappeared, and the

long *ſ* was reduced to the two dots of its head and tail, that is, our colon, so that *m :* stood for *-mus*, *b :* for *bus*, etc. It

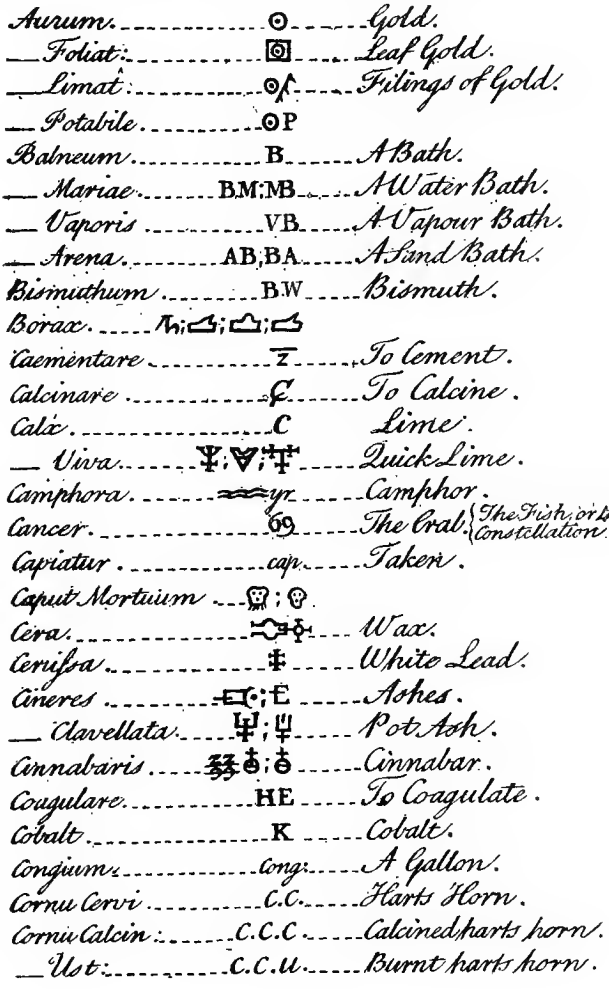


FIG. 3.

was at last seen that the upper dot was useless, and its omission left us our modern period, which finally was limited to

indicate the completed sentence. It is interesting to observe the incompleted sentence is still indicated by the colon, which is also the half-way stage of the development of the ⁊ into the period.

THE SEMICOLON is what remains to us of the elision of *-ue* and *-et* at the end of many Latin words. It was originally written thus, ⸵ or with the comma reversed, in which the reversed comma is the hurried and conventionalized form of *u* and the dot above is that of *e*. This form of the reversed comma was finally replaced by the form as we now have it, which was derived from the suppressed ending *·et*, of many Latin words, the excised letters being indicated, *e.g.*, in this way: *hab ;* for *habet*, in which the dot is the relic of the *e*, and the comma is the trace of the *t*. For a long time this semicolon was confined by the scribes to words ending in *ue*, or *et*, as, *e.g.*, *qu ;* for *quandoque*, *quo ;* for *quoque*, *a ;* for *apparet*, *o ;* for *oportet*, *l ;* for *licet*, *t ;* for *tenet*, *h ;* for *habet*, *s ;* for *scilicet*, etc. It was afterwards generalized to signify the omission of any final syllable, and when printing came into existence and the whole huge clumsy system of contractions was done away with, the semicolon was given its present function.

THE ZODIACAL SIGNS illustrate the conventionalizing of pictures. They are thus explained by Taylor:

☿ The caduceus of *Mercury* entwined by two serpents.

♀ The mirror of *Venus*, with its handle.

♂ The shield and spear of *Mars*.

♃ The arm of *Jupiter* grasping the thunderbolt.

♄ The mower's scythe of *Saturn*.

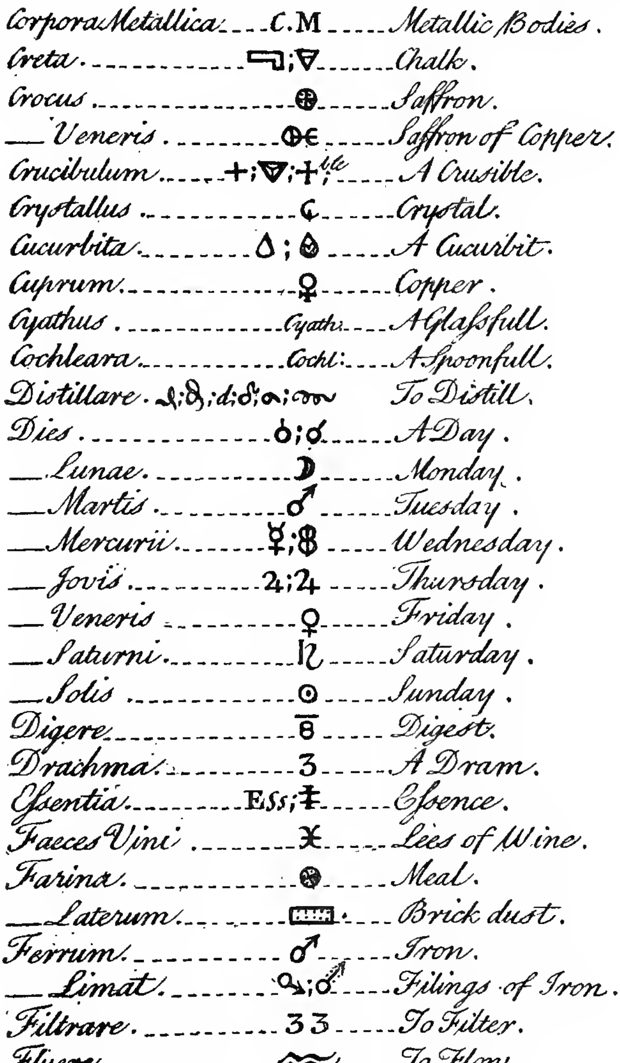
♈ The curved horns of the ram, *Aries*.

♉ The head and horns of *Taurus*, the bull.

♐ The arrow and a portion of the bow of *Sagittarius*.

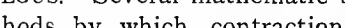
♑ The circle is the head of the goat, the forelegs are below, the body and tail are to the left,—the sign of *Capricornus*.

THE DIGITS, as the name implies, are mere pictures of the fingers. I is the first finger; II, III, IIII, respectively


Corpora Metallica — C.M — Metallic Bodies.
Creta — Chalk.
Crocus — Saffron.
— Veneris — Saffron of Copper.
Crucibulum — A Crusible.
Crystallus — Crystal.
Cucurbita — A Cucurbit.
Cuprum — ♀ — Copper.
Cyathus — Cyath: — A Glassfull.
Cochleara — Cochl: — A Spoonfull.
Distillare — To Distill.
Dies — A Day.
— Lunae — ☽ — Monday.
— Martis — ♂ — Tuesday.
— Mercurii — ☿ — Wednesday.
— Jovis — ♃ — Thursday.
— Veneris — ♀ — Friday.
— Saturni — ♄ — Saturday.
— Solis — ☉ — Sunday.
Digere — Digest.
Drachma — ʒ — A Dram.
Essentia — Ess; — Essence.
Faeces Vini — Lees of Wine.
Farina — Meal.
— Laterum — Brick dust.
Ferrum — ♂ — Iron.
— Limat: — Filings of Iron.
Filtrare — To Filter.
Fluere — To Flow.
FIG. 4.

the second, third, and fourth fingers. V is the fork of the hand, IV and VI with I subtracted or added. VV (or X) represents the two forks or the crossed thumbs. In the Orient, reckoning by means of the positions and arrangements of the fingers is carried on as high as to 10,000. Our denary system is itself due to the fact of counting by means of our *ten* fingers. Our so-called Arabic numerals are not of Arabic origin, but came from India to Bagdad about the eighth century, and were fixed and uniform by the fourteenth century. There is some doubt as to the origin of the forms, but the same principles of contraction and conventionalization probably hold here as in other signs.

MISCELLANEOUS.—Several mathematic signs also illustrate the methods by which contractions are conventionalized. In many large commercial signboards the *&* of *Brown & Co.* will show plainly the original Latin conjunction Et, the *t* being somewhat shortened. The steps by which the sign +, or *plus*, came from *et*, are shown by the series :



In the Domesday Book *et* was made thus,  , and older forms were  ,  , etc.

THE COMMA.—The professional writers had a special sign for the omission of the final syllable *-us*, so common in Latin. In the earliest MSS. this was made thus, , in which is still plainly visible the concavity of the *u*, and the long *s* tailed to it. In writing this hastily, the open concavity became closed, resulting in the sign,  . Thus,  stood for *ejus*,  for *omnibus*, etc. This sign is so similar to our comma, that the suggestion seems irresistible that our comma was adapted from this conventionalized  or  . This sign was also used for *-er*, as *e.g.*, in the sign for *cancer*, in the table appended. It is possible that our comma may have arisen by cutting off the upper

part of the semicolon, as our period came from leaving off the upper part of the colon, but the first suggestion seems the more probable.

THE EXCLAMATION POINT is said to be a conventionalistic use of the Greek *Io !*, the *o*, or dot being placed beneath the *I*.

THE INTERROGATION MARK is a contraction of *Qy*, (query) the mark representing the *y* below *Q*.

THE APOSTROPHE was at first a small letter, the cursive *r*, written above the space or previous letter, to denote the omission of *r*, or a syllable with *r* in it, such as *er*, or *re*. The slovenliness of the writers is exhibited in the fact that they did not take the pen from paper to make the apostrophe, but made a scrawling line up to the sign, and again back to the next letter in order. That the semicolon was sometimes used to indicate the omission of *er*, is shown in the words, *aer*, *æther*, etc., of the old table reproduced.

Just as the circumflex accent, derived originally from the letter *m*, passed into a wave-line, and then into a horizontal bar, so the initial letter *m* of the word *minus* became such a bar, and is called by us *minus*.

It seems probable that the sign ÷ (divided by) was taken (with no very logical nexus) from the contraction of the medieval scribes for *est*, in which the dot above the line represented the *e*, and that below the *t*, while the long *f*, made horizontal, was straightened into a dash.

Esse was at first written in this way: ·≈·, in which two dots represent each an *e*, and the two wave-lines each a long *s*. This became ·=· by straightening the curving *s* lines, and finally the two dots were eliminated, leaving our sign =, *equal to*. Other similar forms were =s for *esses*, =t for *esset*, and =mꝯ for *essemus*.

In ℔, for *libra*, pounds, the horizontal line, denoting a

contraction or omission, is made across the *l*, and in £, the two bars denote the double omission. The letter *s*, for

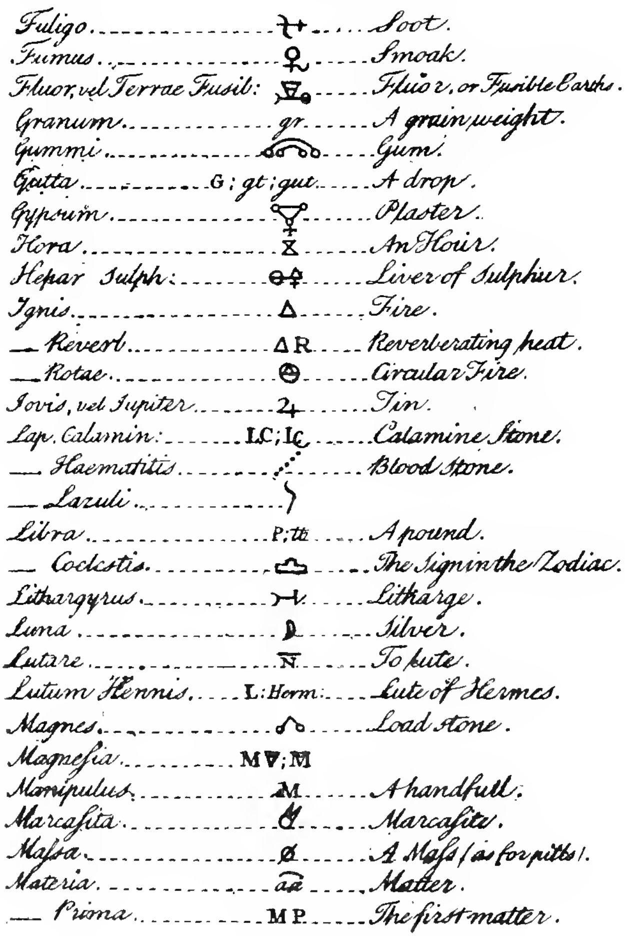


FIG. 5.

shillings (solidi), formerly had a bar over it, $\bar{s}$, and the *d* of pence (denarii), had its cross, đ, both now economically omitted.

THE "DOTTING" OF DIGITS, I, and J, AND THE "TAILING" OF THE J, ETC.—With the compression of writing,

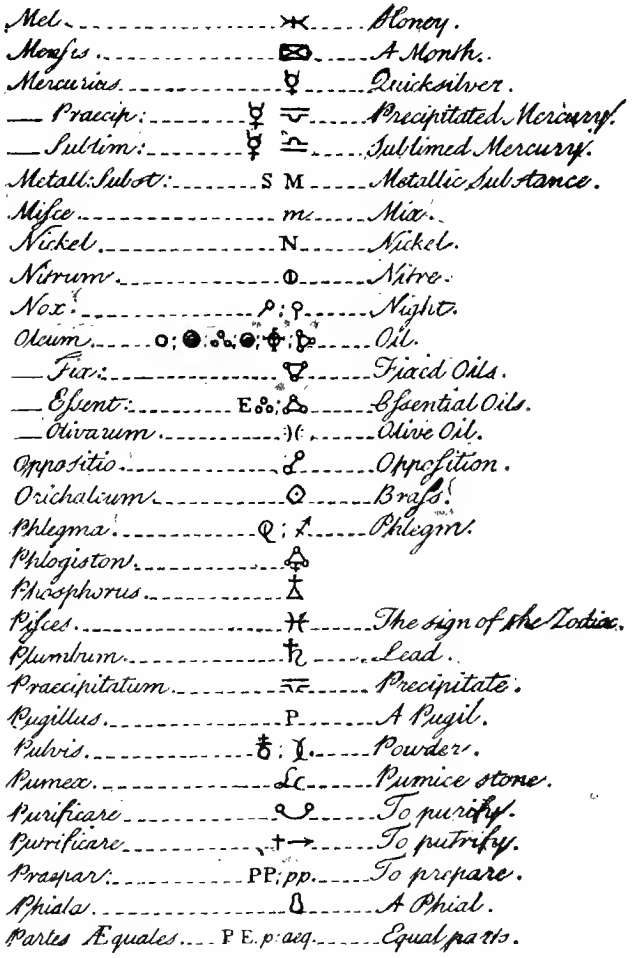


FIG. 6.

confusion would arise, the letter *i* not being easily distinguishable from the upright strokes of other letters. To

prevent this the *i's* were dotted. The dotting of the digits in prescriptions is probably due to the same necessity of avoiding mistakes, and was made doubly emphatic by counting aloud as the digits were dotted. The force of conservatism is shown by the continuance of the habit of dotting the *J*, when the tailing of the *I* made it into a *J*. Although by this tailing the dot became unnecessary the dotting was kept up. I suppose the tailing of the last of more than one digit in prescriptions was due to the natural desire of a "flourish" at the end of a word, combined with the distinction and clearness gained by thus differentiating the last figure of a number.

THE Z IN VIZ., AND IN OZ., has puzzled a great many people. It is simply the rapidly cursive manner of making the semicolon (whose origin has been explained) without removing the pen from the paper. It is not accurately pictured by the letter *z* used by modern printers, who save a font of type by using the letter which comes nearest the written conventionalism. In the old table of "Chymical Signs" I have reproduced, the sign of uncia shows the original manner of making the semicolon, which was doubtless ⁊, *i.e.*, the dot and comma connected by a curved line, and the tail to the comma not so long as with our cheap paper is customary. In old MSS., *quz* stood for *quandoque*, *quoz* for *quoque*, *az* for *apparet*, *hz* for *habet*, etc. We thus understand why *viz.* stands for *videlicet*, and *oz* for *ounce* (or *uncia*), although there is no z in the words themselves.

PRESCRIPTION SIGNS.—The paragraphs preceding the last one prepared the mind to understand the origin of viz., and oz., and the explanations of these two contractions were necessary to understand the signs used by physicians for drams and ounces. The first stroke of the sign, ℥ is the straightened out *u* of *uncia*, and the remainder of the figure is simply our old, now well-understood, slurred, cursive semicolon. In the sign for drachma the *d* has

entirely disappeared and the sign of the contraction has become the sign of the whole word,—the Cheshire cat has vanished, leaving only its grin!

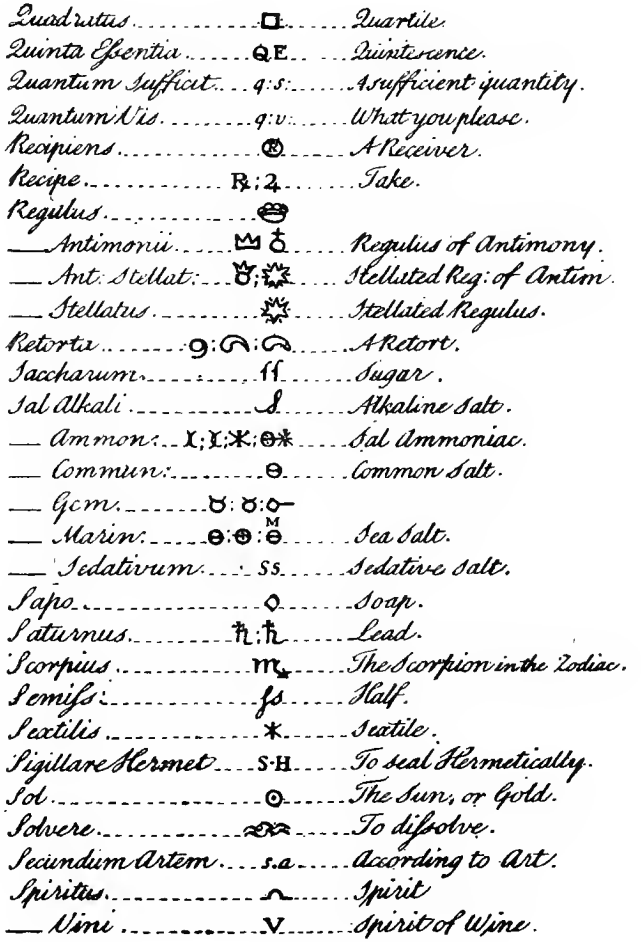


FIG. 7.

The sign gr., used for grain, has not suffered, but in that for scruple (℈), the long *ſ* is crossed by the cursive r, and

the whole conventionalized beyond the recognition of those indifferent to evolution. The sign for *one-half*, ß, is, of

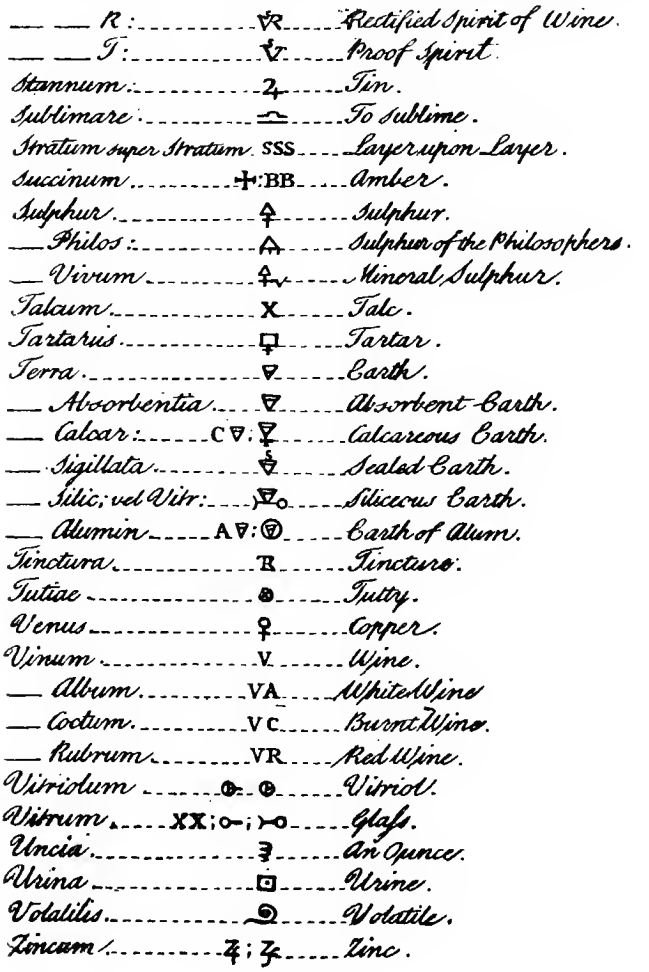


FIG. 8.

course, the contraction of *semisiss*, composed of the long and the short *s*.

By observing the sign in the appended table for *Recipe*, it will be noticed that the first given, ℞, is made cursive and conventional in the second, ℥. This indicates what is undoubtedly true, that the sign with which we head our prescriptions is not the symbol of Jupiter representing an invocation to that deity, but is simply the initial letter of *Recipe* crossed with the ligature denoting a shortening or contraction.

From an old medical dictionary (Motherby's), I have extracted two quarto pages of "Chymical Signs," which make eight pages of ordinary duodecimo size. I have reproduced these here in order to illustrate the methods and objects in the sign-making which was so popular in the middle ages. In the first place one gets a glimpse of the desire to keep from patients the nature of the remedy being used, and to illustrate the proverb *omne ignotum pro magnifico*. To stimulate the belief in the mystery and efficacy of the science, so-called, was a method of increasing the respect of the people for claptrap, or at best for the crudest empiricism. The fact is commended to those who contend for the retention of Latin in our prescription-writing.

A study of the table will throw not a little light on the principles and methods of making contractions, and of the evolution of signs.

CHAPTER VI.

STYLE.

STYLE.—We are often asked how one may acquire a correct and cogent style of writing, and naturally and rightly every young writer wishes to know if this can be done. There are a few instances of persons, Cicero and Voltaire, for example, able to say a commonplace in a way to command attention,—who had style apart from matter, but for the vast mass of writers this would be not only undesirable, but also dangerous. In the final analysis it must be confessed that as a rule style is not to be acquired by any amount of conscious study, because it ultimately depends upon a man's originality and the character, if one may so speak, of his mentality. According to Buffon's classic maxim, style is the man himself. The matter at last resolves itself into the old discussion as to form and content in art, and a judicial mind can have no tolerance for the sillies who argue that form is everything; for, according to that longeared dictum, a painter could expend the technic acquired in a lifetime of industry in painting rotten eggs, or a poet could waste the utmost metric and linguistic skill in lilting elegancies and meaningless mellifluousness. Unless the poet think great thoughts and quiver with feeling his verses will never become poetry. In precisely the same way, the ability to write perspicuous and convincing prose will primarily and ultimately depend upon the mental energy, the clearness of thought, and the reality of emotion, of the writer.

But just as poetic sensibility must learn the art of poetic expression, just as the painter must learn drawing, color-blending, etc., so one who would best convey to

another his experience and opinion by means of prose-writing and printing, must learn the necessary and intermediating art. For an art there is, although in acquiring it many a poor man, forgetful of *Le style c'est l'homme*, has lost his way in the labyrinths of dilettanteism. At least there are hundreds of mistakes and wrong ways that he may avoid by a little patient study. With much aptness it has been said that "a great commander must know how to pick his recruits, to drill them, and to handle them when drilled, but he must still have something more, —generalship; and what generalship is in a commander, that clearness of thought and of expression is in a writer." He would indeed be a brave man who would attempt to teach the higher qualities of generalship or of literary mastery, but in the picking and drilling and handling, either of recruits or of words, much may be learned by those who have neither the ability nor the wish to become great generals or great writers.

We are attempting in these suggestions to writers to give a few hints of the worst things to be avoided, and of the best to be encouraged, but at last, to be sure, these have nothing to do with style, they only caution about some of the more striking blunders. They also need to be supplemented by the study and often the memorization of parts of a few manuals that any good bookseller can supply, such as Roget's *Thesaurus*, the *Stylebook of the Chicago Society of Proofreaders*, Hodgson's *Errors in the Use of English*, White's *Words and their Uses*, and his *Every-day English*, *The Verbalist*, and *Cobbett's English Grammar*, by Ayres, etc.

Nearly all physicians are under the obligation of giving to their profession the results of their experience. This can be done only by the written and the printed page. Deprived of leisure, engrossed with the facts and the work of life, frequently with insufficient literary training, physicians often betray an excusable but lamentable inability to write even correct English. Because of this fact

conscientious editors grow prematurely gray, and the files of the conscienceless sort are inexhaustible mines of fun for the jester and of irony for the cynic. It is when there exists no need for writing except the need of conjoined vanity and ignorance, doubled perhaps with the cunning of the advertiser, that we get things that give shame to gods and men and are fit to arouse the cacchinations of the imps of hell.

Some of the general rules for writing are as follows:

1. *Do not put pen to paper*, or at least do not set the typesetter at work, *unless you have something to tell* that will probably prove of value to the profession or to the science of medicine. Do not write to advertise yourself, or for vanity's sake.

2. *Think out in advance and clearly* what you wish to write; so far as you are able, find what others have written on the subject; arrange the order or sequence of what you will say.

3. *Avoid exordiums*, introductions, and prefatory explanations, plunging at once *in medias res*, and striking out straight for your essential point with clear and strong strokes, and without detours or tiresome indirections.

4. *Use the fewest words possible to express the fact.*—The mistake of not doing so has been called perissology. The following example of needless amplification occurs in a special article by a distinguished neurologist in a leading metropolitan medical journal: "The anterior column of gray matter extends throughout the spinal cord, and the upper enlarged intracranial end of the spinal cord, which is known as the oblong cord or medulla (medulla oblongata)." The information contained in these 32 words might have been given in 15.

5. *Avoid highfalutin.*—The employment of bombastic, lengthy, or ponderous terms, when briefer would suffice, is not an uncommon literary sin. This is simply one form of what may be illustratively called anatomic esotery. Now that the choice is offered, the anatomist who deliberately

says, e. g., *aponeurosis* for fascia, *anfractuosity* for fissure, and *convolution* for gyre, thereby arrays himself with the village orator, in whose turgid discourse a fire is always a conflagration. Choose simple words arranged in short though not in choppy and staccato sentences. Profound interest in what you have to say, singleness of desire to give to others what you have learned, will make you write better English than all the grammars and rhetorics ever compiled.

6. *Stop when done.*—If you have not made the matter clear you will only befog it by explanations and variations. Go back rather and rewrite what you have said. Have no perorations, or long-drawn "clap-trap fortissimos in g," like an opera singer hungry for applause.

Using Fine Tools Without Having Learned the Trade.—A most interesting volume might be compiled of the humorous blunders made by writers in the use of a language they do not understand. "Translators, traitors" (*Traduttori traditori*), is an old saw, to be exemplified, probably, while there are two languages left in the world. *La dernière chemise de l'amour*, for *Love's last shift; La Perruque Indépendante*, for *The Independent Whig; God defends adultery* for *Dieu défend l'adultère; Great is truth, and it will prevail a bit*, for *Magna est veritas et prevalabit*, etc., are well-known instances. There is an Arabic translation of the Bible which translates "Judge not, that ye be not judged," by, *Be not just to others, lest others should be just to you*, and the traitorousness of our own English translators is illustrated by the fact that in the original of Job the words, *Oh that mine adversary had written a book*, are (alas, that it is so!) badly misrepresented by the King James' version. The mistranslation of *tellurische Magnetismus*, as the *magnetic qualities of tellurium*, it is said, made an eminent chemist much trouble in testing tellurium for the magnetism. Every literary physician could probably add a dozen words to Skeats' list of ghost-words.

This bastard imperialism of ours is on the road to the production of a bastard English, and among the first offerings in proof we are glad to give our readers to-day an instance from medicine not without instructiveness in a number of phases. There lies before us a pamphlet entitled, *Extrat of my Original Work of the Grease in Yellow Fever Urine*, by a physician of one of our 1200 newly-acquired islands. We copy verbatim :

Afterwards the war, now in the peace, when Cuba nid to go rspidly to arrive the 15 or 20 million of white men, that she can support; and the agriculture go to reach the place that she deserv, and owe to be, in this richer ground. I think it is necessary, to open all the door to all the men of good will.

They are in Cuba two dangerous illnes, the malaria fever, and the yellow fever. We know that the padudic manifestatión is owe to one protozoos, that is an ameba that had flagelas in number of one to four for each one ; that tad not envelop of quitinous substance, that tad a voluminous nucleus, that can be see when we add acetic acid; the membrane that envelop the amebe is rich in albumen, and in another substance vegetable, insomerum of the vegetable filotum, the flagelas had not in its end cupping glass.

The form of the paludic ameba is spherical when it is big and strong, its reproduces by gems and by segmentation, they lives in the waters richer in organic vegetables substances and in alkaline medium, we can make by this way artificial and sterile swampy, with ten part of boullon alkaline for 100 part of sterile water.

They dont not belong to the gregarinas, nor to the coccideus, they are not gregarinas because they have not quitinous in its composition, and they are not coccideus, because they have not its ovular phase. They are not simple ameba because they have flagelas and nucleus.

Its breathing and its circulation is owe to the capillarity and osmosis laws, its food itself by a hole. The writters have present to the Academy of medicine in this town, several cases belong to the reconcentrados, thad had present the two forms of beri-beri illness, the atrophic and the swell forms. I have proved their that beri-beri, is the product of famish and paludic intoxication The

blood of all they for famish was-analyze by me, all have had the paludic ameba.

For me the paludic access, is the result of the fight between two amebas, the leucosyts, this probo ameba in the normal blood and the paludic ameba; ours owe as a doctor is to aid the leucosyts, so that its can win the paludic ameba. Both the leucocyts and the plasmodic has the same compositión, life, etc.

In yellow fever we all think that they are one germs in its cause, but ours means of dye and of culture can not put out at our sight it.—Freire's cocus, Finlay's tetrageneus, Gibiei's cormogenous, Stenberg's X and sanarelli' baccilus, has not full us, as the cause of yellow fever.—The histological works of this illness is make much times ago. The clinical study is all in yellow fever. Dr. Laine Mayor of Sanity of the American Army has address one questionary to the Doctors in Havana, one of the cuestion put their was that.—Are their one symptom that can be pathologilical in yellow fever? Yes sir can I ausuer and in the urine you can always faind it; it is the grease, you know perfectly well that yellow faver has a quickly evolution in 3 or 4 days; the fever and all the symptoms fall down and the infection of the body has finish.—The terminical periodic begin and by the urine you can make by surefy yours diagnossis, by the methodical examination of the urine you can see in it the fatness degeneracy of the kidney, and say suretly the prognostic.

That is the pathological symptoms in yellow fever and you can see it always in the urine. It is certainly that the kidney is the entrails more affect The apparition of grease in the urine, that I am the first in see and saying, show clear the fatness process that is characteristical in yellow fever always urine is acid in yelloow fever. And the colour is in direct relation witk the serious of the case. Yellow fever is one serious infection, that every one can take by the water, or by breathing in contagious atmosphere, its evolution is in 3 or 4 day and give immunity, afterwards of the remition of all the symptoms, the last periodic beginning and it can finisched by two modes by cure or by death: in the urine you can by the microscopical examination follow the illness and make a certainly prognostic.

In proof of this I am going to refer you two case, one is cure, the other is death.—Both taking bed in Angeles Hospital, in the 5 days of its illness afterwards of the characteristics remission.

Both have had the same thermometer and pulse curve line, one of they have and incoercibles vomit, insomnious near 48 hours and cure hersself; the other one rest quiet in his bed and only have had furious delirium a few hours before his death. The frist one, that is to say that, that cure had not jaundice; the other one that, that dead have had a pronounce jaundice.

Let us see now the urine, that of the woman, had a yellow colour, reactión acid, specific weig h, 1,018 Albumin enough,' at the microscope a great deal of grease and also epitelic cellule in fatness degenaracy leucosy, kidney cellule and kidney cylinder, in fatness degeneracy. In the man the urine had one brown yellow, reaction acid, albumen 3 grames by 1.000, á great deal of pigment and bile acid. By the microscope you can see a great deal of kiduey cellule in fatuess degeneracy. The analysis of the irune show us the march of the kidney fatness degeneracy: in the woman we can see the restitution ad integrum of the kidney tissue, till the point to desappear all abnormal in the nrine an she leave the hospital in the ten days of ters illnes, because she was cure. The examinatton of the urine in the man let see that the dead is the natural end of the fatness degenerancy that go in.increase every day. In 120 grames of urine obtain by the sound, afterwards of 24 hours of anurie. I have faund so great deal of kidney cellule that I doubt very much that one can faind more that in this nefritis parenquimatous acute, afterwards of this the pacient had been taken by a complete anurie. This urine greasy belong ouly to the yellow fever. Yellow fever-Histologie We have make the following, post mortem examination.

Frist case belong to one spanish man-Corujosegoud case belong to one spanish man-Quintela Third case belong to one American man Henry Smith. Fonr cases, has not deads of yellow fever. Patrick Smith.—For proves the grease we have put the histological cuts of the liver and kidney into the accion of osmic acid 1 by 100, and to Marchi method that showing very well the fatness degenerancy because its dyers the grease in black colonrs. In Patrick Smith case the reaction of the grease, have not had place notwiths.tanding that the entrails cuts has put into osmic acid solution for 4 hours.

In the liver of the 3 first case we can see the degenerancy and infiltration of the grease in all the organ, the livers cellules was full of grease and the same happen in the intercellular espace.

In Patrick Smith case his liver have not farness degeneracy, but he had very much melanich pigment. Patrick Smith have not lesions in Peyer's plates and his blood examination before of deads by Coronado and Kramer have show us the Leveran's plasmodie, we can affirm that he death of a paludic fever, and have not give his blood the Widal's serum reaction I am going now to refer the lesión of the kinneys we have observe two state, the first congestion, that can go to the apoplexy of the glomerul; and in last and second state the fatness degeneracy that can be following by the destruction of the kidney parenquima, we see also the hemorrhage focus, that go to transform in purulent abcess, and the necrosis of the Malpigio glomerul. We cannot see this lession in Patrick Smith case.

As you can see the first organ that in yellow fever put out first the fatness degeneracy is the kidney since the first day the urine accuse mucine, s nce the second ó third days the albumen appear and the grease como sooner and vacillate like the illness fluctuate, and by the microscopice examination we can make snrely the diagnossis and the pronostic, and follow the kidney destruction by the fatness process day by day and steps by steps. In the five day of the illness jaundice appear and the pace of the bile by the kidney filter add more elements to the destruction of the cellules of this orgam, that had been before lessioned.—The bacterioogic is for making in yellow fever we have employeed Sanarelley's method and we have faund the baccillus in case that dont not belong to yellow fever and in truly case of yellow fever we have not been able in faind it.

I think that I can now affirm that we possess now one sing that always we can faind in yellow fever urine, that is the grease, that put out the general degenerancy by the grease in yellow fever, and that I am first to speak and to make appear.

———— ————

————'s originales works.

1°. Is the drarrhoa with our withot fever the porter and propagator of the contagion?

2°. Is beri-ber iilness the result of famish and paludic intoxication?

3°. Hysterical grils.

4°. Phisiological destrut produce by the first evolution of teeth.

5° Antidifteric serum in the serious ulceration y mauth.

6°. One case of esphalum of the feet and anurie belong to one boy of the reconcentrado that have beri-beri.

7°. Diarrhoa of blood in the childhood

8°. One case of Pott illness, cure.

9°. Paludic (marshy) dispeptic.

10. Biology of Laveran's parasite.

11. Is the marshy (paludic) accee the result of fight between two amebas, and is the leucosity [the white globul of blood] one ameba?

12. Is phosphoirc loss the consecuence of the destruction of the organism?

13. Differential diagnossis between yellow fever and bilious malaria fever.

14. Clinical, histoligical and bacteriollogical diagnossis in yellow fever.

15. The grease in yellow fever urine.

16. The yellow fever germs.

17. It is enough only see in blood serum the mee melanic pigment for making the diagnossis of malaria.

All this works has been read at the Academy of Medicine in Havana city.

We should in justice to the author add that a full page of errata is appended, in which we are told for *protologilical*, read *protological*, for *ausuer* read *ausuer*, for *weih h*, read *weigth*, for *fatuess*, read *fatnes*, for *seguod*, read *segond*, for *drarrhoa*, read *drarrhœa*, for *destrut*, read *destrub*, etc.

We have not the remotest desire to raise a smile at the expense of our serious-minded coworker, but only to illustrate several valuable lessons or psychologic laws. We can use our own native tongue so grotesquely as to traduce our meaning, and unconsciously tell a sorry tale of our past history and present ideals. But when we try to use a foreign language we must be doubly on our guard. The troubles of our author with his -als, and -icals, *terminical*, *bacteriollogical*, *protologilical*, etc., will bring him the tear of sympathy of the sticklers for all the -als. There are printed every week millions of pages of quack medical literature, as

sincere, innocent, and bunglesome as this letter. As much more is printed in which the ignorance is spurred, not by egotism, but by grocer's bills. For example, why should a self-styled scientist have the recklessness to print the nonsense that one set of nerves transmits faradic electricity, another galvanic electricity? Scientific medical knowledge is also at last itself only a tool, and when vanity or ignorance uses this tool, that an accident may have put into its inexpert hands, the result is not mirth-provoking pseudo-Spanish-English, but may be the health and life of patients. Fine tools (and what finer or more marvelous instrument is there than language and science?) should not be used by clumsy hands and unskilled brains without some least attempt having been made to learn the rudiments of the technic. As well pretend to be a bacteriologist without ever having peeped through a microscope.

STRABISMIC CONSTRUCTION.—By this term we mean the fact that words are so misplaced in a sentence or so badly chosen that they either fail to convey the meaning intended, or positively mean the reverse of that desired. They do not tell the story exactly. The Associated Press despatches from Europe should be properly worded, because of the gravity of the news transmitted so far and by such an expensive method as the cable, and yet in the report of the Dreyfus trial the prisoner was asked if at one time he was possessed of certain information. The reply was thus translated: *I only had incomplete information.* By these words we are undoubtedly to understand that it was only incomplete information that he had, whereas the words themselves tell us that the speaker was the only person who had incomplete information. This word, *only*, and another, *alone*, are frequently out of place, and, according to the license of some writers, may walk about in a sentence quite unrestrained, or sit down wheresoever the whim may dictate, and often in the most incongruous place. But the exact writer may

exclaim, "Me this unchartered freedom tires." Sometimes the two words are interchangeable, but, as a rule, each has its appropriate function and position. There is often a lurking contempt in expressions with *only*, especially if this word is misplaced. "He is only fitted for this" has a different meaning from "He only is fitted for this" (or "He alone is fitted for this"). It is a good plan to look at these words closely when we use them, and in general to keep them in contact with the words to which they refer. There are other and innumerable ways in which writers fail in accuracy through this *construction louche*, as the French call it. A frequent method is such indefiniteness in the use of *he*, *her*, *him*, *it*, *they*, etc., that the reader is unable to know to what the squinting pronouns refer. This has been caricatured a hundred times, —the following examples not being much more ridiculous than many occurring in otherwise good medical essays. This is said to have been the wording of a sign placed in the field of a much pestered person: "If any mans or womans cow or ox gets into this here corn his or her tail will be cut off as the case may be." And this is the copy of a genuine note: "Mr. A. presents his compliments to Mr. B. I have got a hat which is not his; if he have got a hat which is not yours, no doubt they are the missing one." Here is an instance in medical writing: "No one as yet had exhibited the structure of the human kidneys, Vesalius having only examined them in dogs." (To what does *them* refer?) *Which* is a word, too frequently used in any sense, but especially when it is popped down too far from the word to which it points—a result which has been called "the sin of whichcraft."

SENTENCES THAT SUFFER FROM SPASTIC PARAPLEGIA are altogether too common even in the writings of good thinkers and scientists. Let us choose the last sentence that we tried to make stand steadily on its feet:

"Examination with the endoscope has, in a number of cases, demonstrated that the inflammatory process, even after long du-

ration, may not extend, and, in the majority of cases does not, deeper in this disease than to the mucous membrane, although, in some chronic cases, especially if following the history of stone, the muscular tissue, in some parts, and irregularly, may, more or less, be also implicated."

It is such sentences as this that drive editors to drink or to suicide. Shall one let them go, or endeavor to cure their sorry disease? One way for authors to correct this paraplegic syntax is to attempt to transpose the modifying, explanatory, and subordinate clauses, and to place them so that the reader's mind is not every second brought up with a jerk. One often feels as if he were being driven slowly over a bad corduroy road. So far as possible a good writer will enable his reader's attention to flow as uninterruptedly as possible, or with a slow rhythm that is very different from the "bumpetybump" of the foregoing citation. In the first place all sentences should be of a length that between periods and semicolons they can be read aloud during a single expiration. Then, if we throw the qualifying and adjectival clauses in front we are able to get a flow, instead of spurts, of meaning. For example: "In a number of cases examination with the endoscope has demonstrated that the inflammatory process does not usually extend deeper than the mucous membrane. Under certain conditions, such as chronicity, or the history of stone, some portions of the muscular tissue may be more or less implicated."

LET US STOP THE USE OF THE SUBJUNCTIVE MOOD!—The extraordinary simplicity of construction of the English language, like every other product of civilization, has flowed naturally from qualities of mind in the originators. It has led to the designation of English as the grammarless language. However this may be, it is undoubtedly of all the languages of the world the freest from hard and fast grammarial formalism. Almost every adjective can be used unchanged as a noun, and almost every noun as an adjec-

tive, and there is the greatest liberty in the placings and functions of all words. These free and uncomplicated qualities have been and are potent factors in making English the world language it is certainly destined to become. But in its evolution, like every other organism, it must bear with it remnants and tags of old atrophied and useless organs, wholly or partially outgrown. Our wonderful but incurable spelling is one. Another is the subjunctive. We have turned it over to the poets and other dealers in the antique, but still, dilettantelike, one occasionally writes, *If the artery be not found, In case it be not so*, etc. It may be confidently said that in English the subjunctive is opposed to the genius of the language and of its speakers, that this subjunctive is rapidly becoming archaic, and the sooner it is entirely disused the better. We are active-minded people, will not submit, and so in grammar we have no passive voice. We are positive and indicative-mooded in our characters, and so we have, or are wisely hastening to have, no subjunctive. If one says (not, *if one say*) *if*, it it is only a passing supposition, neutralized by *if it is so, if it is not so*, etc., in which all the doubtfulness necessary to be conveyed, all the contingency admissible, resides in the little supposition *if*, and is not incorporated in the very heart of the sentence, the verb. Let us abolish the use of the subjunctive!

Badly Chosen Words.—It is somewhat dangerous to advise against the use of even the most foolishly chosen words, because no one can foresee with what illogicality Lord Demos may be pleased. If it suits his whim he will pick up the most arrantly nonsensical word and use it in the most whimsical way until even the aristocrats of linguistics are compelled to fall into the habit; the word thus becomes perfectly legitimized and "received into the best society." But at worst one may in the meantime give his language strength and perspicuity by using the right words in the right places, or at least by avoiding their employ-

ment in the wrong places. We purpose listing a few of the words most frequently misused in medical literature:

Apt, instead of **liable, likely,** or **probably.** Apt refers to an inherent tendency, the having an aptitude, and should not be applied to conditions in which we mean likelihood or probability. "The tissues may be apt to heal," but the leg is not "apt to be broken."

Where, instead of **when.** If we mean a time-relation, it is manifestly absurd to use an adverb of place. Not *where*, but **when** the stomach is perforated, etc.

Where, instead of **in which.** *The case where* instead of *the case in which.*

Alike; two, or both things, cannot be **alike.**

Couple, instead of **two.** Two things may be coupled, *i. e.*, bound together, but not necessarily or generally.

Get, instead of, or in addition to **have.** Get and got, commonly used, are superfluous.

Expect, for **think, suppose,** etc.

Observe, for **say.**

Notable, for **noteworthy.**

Reliable, for **trustworthy.**

Section, or *quarter*, instead of **place, country, neighborhood,** etc.

Witness, for **see,** is one of a hundred examples of newspaper English, or highfalutin.

Recuperate, instead of **recover.**

Extend an invitation, instead of **ask,** or **invite.**

Above and *below*, instead of **foregoing, following.** When printed, *above* may prove to be **below,** etc.

Bad cold, for **severe** cold.

Beside, instead of **besides.** The first means **by the side of,** the second **moreover, in addition to,** etc.

I do not doubt but that, for **I do not doubt that.**

Each other is said of two, **one another** of many.

Bad health, instead of **feeble,** or **delicate health.**

Had I have known, instead of **had I known.**

Ought to, instead of **should,**—a very common error.

Healthy, for **wholesome,** or **healthful.** Exercise is healthful, food is wholesome, a person healthy.

In respect of } instead of **in respect to.**
In regard of }

Nicely for **well.** *I am nicely* has been called "the quintessence of popinjay vulgarity."

As far as } instead of **so far as.**
As soon as }

Whether or no, instead of **whether or not.**

No fewer than, instead of **not fewer than.**

No one of them, instead of **not one of them.**

I propose, for **I purpose.**

Previous to, instead of **previously to.**

Those who, instead of **they that.**

En passant, for **in passing.**

Avocation, for **vocation, calling,** or **business.**

Accident, instead of **wound** or **injury.** We have seen the expression "the accident was cured."

Once in a while, instead of **occasionally, sometimes,** etc.

Aetat, for **of age, old,** etc.

Can, instead of **may,** an irritating and common error. "The specimen can be seen in the laboratory," "the operation can be performed in the private room," and similar ones may be found in every page of medical writing.

Met with, instead of **met, found,** etc., is another exasperating expression, requiring the poor editor's blue pencil about 100 times a day. "Such accidents are often met with and the operator can expect," contains three most common errors. "Begin with," is analogous blundering.

Arrived at, instead of **reached, concluded,** etc. In "The following are the conclusions arrived at," the last two words are useless.

As to the Use of Certain Words.—The world seems determined to use *where*, when often it really means and should use the words *in which* or *when*. It would be better to use the former word when it is a question of place, position, or location, and the last word when the indication of time is desired; and it is certainly better to speak of a case *in which* than a case *where*. There is a habit quite as inveterate of misusing the word *apt*, when one means *likely* or *liable*. The subservient dictionaries in chronicling the fact of this misuse seem to justify it. Indeed one

can find warrant for almost any wrong usage in the word-books or in all but the few very best writers. When we wish to imply a *tendency* and mean *suitable, adapted, expert, inclined, prone*, etc., we may correctly use the word *apt*, but if we mean to express *probability, the result of a calculation of chances*, etc., other words are more proper. *Frequent* is often incorrectly used for *common*, and *vice versa*, and the same may be said of *since* and *as*. *That* serves the purpose in nine-tenths of the places wherein *who* and *which* are used, and as regards *among*, we would suggest *out of*, or simply *of*, as often better,—*e. g., of* 100 *patients* 20 *were over* 10 *years of age*, etc. The *Richmond Journal of Practice* correctly urges the use of the term *surgical intervention*, instead of *surgical interference*. We should avoid the "split infinitive," *i. e.*, the insertion of words between *to* and the infinitive, *e. g., to intelligently act, to thus operate*, etc. Some writers are overfond of the word *very*, and of *people* instead of *persons*. We think it bad taste for one to write *the author*, or *the writer*, when speaking of himself. It is the prudery of egotism. A great physician recently wrote concerning *phlebitis of the veins of the leg*, and not seldom one will see such expressions as *osteitis of a bone, neuritis of a nerve*, etc. *Right side of the chest* seems preferable to right chest, right heart, etc., as applicable to mammals. As *pneumonia* is used to mean *inflammation of the lung*, it is redundant to speak of *pneumonia* of a given part *of the lung*. It is often possible to distinguish between *hemorrhage, thrombosis, embolism*, etc., when writing *apoplexy*. *Oviduct* is preferable to *fallopian tube*, and we could wish never again *to meet* the constantly recurring expression *met with*. Prepositions at the end of sentences are common with persons who wish to know "where they are at." *No* and *none* are singular, but are not rarely conjoined with improperly plural nouns and verbs. Too commonly the statement appears that "the secretions were negative," or "the examination was negative," when it is meant that the results of examination were negative. Let us not talk or write about *doing* operations, but of *performing* them.

CONCERNING LOGICAL ORDER IN COMPOSITION.—Many writers forget that there is a gain to be derived from the arrangement of the parts of their article in a logical order. One may not be able to make clear what logical order is in a general way, but in a special article its want may frequently be observed. In a sentence there is a strong and a weak method of placing the component words; in a paragraph there is one best manner of marshalling the sentences, and in the entire article there is one proper plan of ordering the paragraphs. One method will unfold the thought or information, making it easy for the reader to follow, and giving a cumulative and convincing effect to the whole. Whether the propositions summarizing an article are printed or not, it is advisable to make them, as thereby an inversion or failure in the logical concatenation may be detected.

"IMMUNE TO," "IMMUNE FROM," ETC.—We have been asked as to the proper preposition to use with *immune;* should it be *from*, *to*, or *against?* The original significance of the word *immunis* was, *exempt from public service or charge*, the thought being one of a release from a common duty or obligation. In applying the term in a medical sense, the essential idea of exemption is preserved. It is a matter of indifference whether the condition is of natural or acquired (artificial) origin. Replace the word by its nearest synonym, *exempt*, and the preposition *from* is required.

THE BRYANT INDEX EXPURGATORIUS was a word blacklist devised by the poet-editor to try, by its aid, to withstand the onrush of philologic depravity, whereby the ignorant newspaper reporter and editor endeavored to hide their ignorance and some other qualities worse than ignorance. The newspaper men even of today still feel the sting of Bryant's irony and do not lose an opportunity to jibe at the failure (what they call failure) of the attempt to teach them some degree of literary manners, and they think

because they are more numerous, more unabashed and powerful than they were in Bryant's day that their banalization of English is therefore correct and a great success, and that Bryant was a "failure." It would be just as true and as sensible to say that laws against theft and murder are failures because these crimes abound, or that boorishness is beautiful if the majority turn boors. The famous list was in large part made up of examples of highfalutin, and of that indescribable combination of bad slang, worse impertinence, and worst inaccuracy which can only be fittingly designated as newspaper English. Of this class of terms we might cite from the list of disapprovals: *Artiste*, for **artist**; *casket*, for **coffin**; *cortege*, for **procession**; *darkey*, for **negro**; *devouring element*, for **fire**; *gents*, for **gentlemen**; *inaugurate*, for **begin**; *lady*, for **wife**; *lengthy*, for **long**; *Mrs. Governor*, *Mrs. President*, etc.; *pants*, for **trousers**; *party* or *parties*, for **person, persons**; *state*, for **say**; *would seem*, for **seems**; *settle*, for **pay**; *locate*, for **settle**; *in our midst*, for **among us**. Such a list would include hundreds of similar terms, if some later Bryant were to remake it today.

The newspaper man who sneers at "the Bryant Index" has a confused jumble of an idea in his head that the index failed because it sought to banish slang. This error arises from a natural and ineradicable inability on his part to distinguish between slang and the banal. The one is the lusty living brat of properly married intelligence and recklessness, the other the bastard of stupidity and vanity. Many slang words make excellent citizens when they grow up and find their place in the world's work; but the cant of idealess conceit never gets into better literary society than that of the "Knights of the Quill."

Bryant erred in including in his list some terms that were not inherently wrong or vulgar, and which needed only usage to make them proper and serviceable tools. The error is one that the "pernickety stickler" is very likely to make. It is a dangerous, even a fatal thing, this

"art for art's sake"—the thinking more of how one says it than of the thing said. In English, too, it is peculiarly dangerful to prescribe or proscribe. It is, indeed, "a grammarless tongue," and of all languages it responds most sensitively to the shaping mind of its makers, who, in their vitalizing democracy, will not allow any habit of tool or of tool-using to hinder them from realizing their ideals.

THE SPLIT INFINITIVE.—At a recent medical meeting one speaker's scientific statements were criticised because in the very act of stating them he had committed the literary crime of the split infinitive. There is, indeed, a certain truth in the proposition that the correctness of a writer's language is an indication of the correctness of his science; because if a man is an accurate observer of facts and a logical reasoner concerning them, he will also naturally be a correct observer of the facts of words, their meanings and uses. Humbug and quackery and medical criminality, when expressing itself in print, creates a new linguistic never before seen by gods or men. But this inference may be drawn too absolutely, and hard and fast logic is not often permissible as regards matters philologic, especially if of the English variety. The London *Academy* recently hit off the split-infinitive sticklers in a delightful skit, of which we can spare space for the last paragraph only:

> There was one critic who seemed rather tired, and him I took aside. "Does it really pain you all so very much?" I asked, He glanced round to see that he was not overheard: "Well, it is like this," he said, frankly, "suppose you have to criticise style. You may not know what style is, or you may not have time to look for it. So you just glance at the infinitives. If they are split. the man has no style; if they are not split, he has, and your work is all done without any trouble. That is what it seems to me to really amount to." All unconsciously he had committed the terrible offence: Everybody does.

This, of course, is a humorous exaggeration, designed to say that it is absurd to go daft over the matter. As a

rule we agree that it is best to avoid throwing the adverb into the infinitive in this way, because generally it weakens the sentence, and by placing it elsewhere we can more accurately express what we wish. The last words of the foregoing sentence are, from one point of view, criticisable upon the same grounds as the split infinitive, and were written to bring out this point. "We can more accurately express," strikes us as less forceful than, "We can express what we wish with greater accuracy." Take the two sentences brought in as the best examples the London *Academy* chaffer can find: "We have agreed to unanimously think it wrong;" the critic hastily corrected himself and said, "We have agreed to think it unanimously wrong," thus making matters worse, of course. "We have unanimously agreed, etc.," was naturally omitted by the caricaturist. "This is what it seems to me to really amount to," is a poor justification. There are a dozen more happy ways of writing the sentence. Not alone with those who have occasionally used the split infinitive will the grammarian's purgatory be filled, and yet those who have sinned least in this way will probably be more speedily prayed out.

In Figures, or Spelled Out?—Writers of equally good judgment differ in their custom and advice in reference to spelling out numbers, or putting them in figures. All agree, however, in advising that numbers above 100 should be given in figures. In medical writings we are inclined to place the dividing line (under which to be spelled out), at 10 instead of 100. When giving statistical data so that other figures are collated in the same paragraph we would advise figures in all cases whatsoever. When but one or two items referred to, and requiring the numerical terminology, occur in a paragraph, it is as well to spell out even in condensed scientific reports, especially numbers smaller than ten. But good taste and judgment must decide in all these matters, concerning which we do not believe in rigid rules. We would in certain cases think it

perfectly right to break the old rule that figures should never begin a sentence. It would in the great majority of cases be in bad taste, but sometimes it would be just as ridiculous not to break the rule. A large majority of people desire to be bound by, or to bind themselves with, exceptionless rules. They have missed the best part of education, which is to have learned that the best rule in all cases is to make or to break rules according to reason, taste, and good common sense.

CHAPTER VII.

RULES FOR EDITORS AND PUBLISHERS OF MEDICAL JOURNALS.[1]

By H. O. HALL,

Library, Surgeon-General's Office, U. S. A.

IT is well known to all writers for periodicals that certain rules are laid down by editors and publishers, which must be observed by authors if they expect to have their contributions accepted and published. These rules are very just and proper, and no one questions the right of the editor to reject manuscripts which do not conform to the rules laid down. I am not aware, however, that any one has ever had the temerity to suggest the importance of laying down certain rules for the government of the editors and publishers themselves. They have a happy-go-lucky way of editing and publishing their journals according to the dictates of their own consciences, and no one dares to say them nay. That there is very great need for the establishment of some good, wholesome and uniform rules for the government of this independent and aristocratic class of public benefactors, I think I can clearly demonstrate. The sins which they commit are numerous, and yet I am sure they are more the result of thoughtlessness and carelessness than of pure viciousness. They have a great deal to answer for, however, and if they do not repent and turn from their evil ways I am afraid that in the world to come they will have ample cause to regret their misdeeds in the society of librarians whose hopes of future happiness they were the means of wrecking, unconsciously no doubt, but none the less surely.

[1] Republished by the courtesy of the Author from the *Philadelphia Medical Journal* of December 30, 1899.

To the librarian and the indexer of periodic medical literature the necessity for a reformation among publishers and editors is more apparent than to the regular or casual reader. To the ordinary reader or subscriber of a monthly medical journal, for example, it is more agreeable than otherwise to receive a nice fat anniversary number of his favorite journal, twice the size of the regular issue, but to the librarian and the bookbinder such a monstrosity is a nightmare. The regular size of the journal, we will say, is octavo; for years it has been of that size, and the library shelf on which the entire series is filed is adjusted to accommodate volumes of octavo size. But, in celebrating some anniversary occasion, the publisher, to please his patrons, issues an "anniversary number" with great flourish of trumpets. This number he enlarges to a royal octavo, quarto or even a folio in size. When it reaches the library it becomes a "white elephant." It will not fit in on the shelf with its fellow numbers among the unbound periodicals, and when it is sent to the bindery with the rest of the volume, the bookbinder is at his wit's ends to know what to do with it. He may cut down the margin till there is nothing left, and still it is too large to bind in with the other numbers. It is too thick, even if he eliminates the advertisements, to fold down into an octavo. What shall he do with it? He will either have to make the entire volume of uniform size with the anniversary number or else bind it separately. In neither case will it fit in its place with the other volumes of the set. He may possibly lay it on its side, or squeeze it in on top of the other volumes if there is room, or stand it on its edge, letting it stick out beyond all the other volumes, or file it in another part of the library among the quartos, to be searched for whenever wanted. Any way you fix it it is a nuisance and will be a nuisance to the end of time, or till the library is destroyed. How much better would it have been if the publisher had adhered to the regular size of his journal, and found vent for his exuberance in the addi-

tions of any number of "anniversary" pages of uniform size with the journal.

This same difficulty arises when either by reason of prosperity or adversity a journal changes its size—to a larger or a smaller—in the middle of a volume, or in fact at any time. It destroys the uniformity of the set and makes trouble all along the line in every library where it is kept on file. If it becomes imperative to change the size of a journal it should always be done at the beginning of a volume or a series, and at no other time.

CHANGE OF TITLE.—What has been said in regard to changing the size of a journal, may be said with greater emphasis in regard to changes of title. This is another source of endless annoyance and trouble to the librarian. With very few exceptions there is not a medical journal in the entire list on file in the great library of the Surgeon-General's office, which has reached the age of puberty, that has not changed its title more or less frequently since the day of its birth. No one outside of a library has any conception of the annoyance and perplexity caused by these changes. One single instance out of hundreds of the same character will illustrate what I mean. Without desiring to make any invidious distinction, I will give as an example the very latest change of title which has come under my notice, that of the *North American Medical Review*, which changed title in October last to the *Medicus*. The *North American Medical Review* was the successor to the *Missouri Valley Medical Journal*. Now to give a complete history of the *Medicus*, showing all the changes of title, requires no less than eight different entries in the catalog. Were it not for the amount of space it would take, it would be quite interesting, if not instructive, to give here a list of all these changes of titles. But the matter of so many different entries to describe one journal is only a small part of the trouble caused by these frequent changes.

It extends to the binder and the indexer of the journal

under its various titles. The *North American Medical Review* ended with No. 9 of Volume VII, and the *Medicus* begins at No. 10 of Volume VII. How shall these journals be bound is the question that puzzles the librarian. There are nine numbers of Volume VII of the journal under the old title, and three numbers of Volume VII under the new title. It would not do to bind Nos. 10, 11 and 12 of Volume VII (*The Medicus*) with Nos. 1—9 of Volume VII (*North American Medical Review*). If you bind Nos. 10, 11 and 12 in one thin volume it would not be correct to call it Volume VII of the *Medicus*, and if these three numbers are bound in with the twelve numbers of Volume VIII (supposing it completes Volume VIII without another change of title and volume), it could not be called Volumes VII and VIII. So the librarian is perplexed to know what to do.

But the trouble does not end here. The indexer has also a problem to solve. An article which began in No. 9 of Volume VII of the *North American Medical Review* is continued in No. 10 of Volume VII of the *Medicus*. How is he to index an article which began in one journal and continues with consecutive pagination, number and volume of another journal? This same difficulty is liable to occur, and does often occur, when the title of any journal is changed. But, to complicate the matter still further, as if there was a studied effort to try to dethrone the reason of the poor librarian, No. 11 of the *Medicus*, the second under the new title, comes out as Volume VIII, No. 11. The preceding number was No. 10, Volume VII, and all reference to its being a successor to the *North American Medical Review* is religiously omitted. So any one not acquainted with its previous erratic history will not be able to tell whence it came or whither it goeth, or why it should be called Volume VII or VIII.

I have gone rather fully into the details of this one case, and it is by no means an extreme one, to show the great annoyance and trouble caused by the careless and flippant

manner in which publishers change the titles of their journals without a moment's thought of the consequences to others.

Another constant source of trouble is the mistakes made in numbering the volumes and pages of journals. These are generally the blunders of the printer in making up the forms. But there is no excuse for them and they should never occur. Sometimes the volume is not changed at all at the beginning of a new year, and the old volume is allowed to run on perhaps through the year, thus making two volumes with the same serial number, or a volume is skipped. Volume XI, for example, to give an instance now in mind, is by mistake changed to Volume XIII, instead of XII, and the following volumes are numbered XIV, XV, etc. So that Volume XII seems to be omitted from the set as it appears on the library shelf, when in reality there is no gap. In one journal which has been running many years, the volume has been changed every month for the past year and a half. The printer has merely mistaken the volume for the running number, notwithstanding the fact that the running number is given also in its proper sequence.

January,	1898,	is called	Volume	LVI,	No.	1
February,	1898,	"	"	LVII,	"	2
March,	1898,	"	"	LVIII,	"	3

and so on for 20 consecutive months. Sometimes the mistake is discovered after several numbers have been printed bearing the wrong volume, but the indexer of the single numbers has no means of telling till the volume is completed, whether the volume will be changed or not, so he either has to leave the volume blank, or put on his index-card the volume given on each number, right or wrong. Mistakes in pagination give similar trouble to the indexer. As the Apostle says: "These things ought not so to be." A little care and a little forethought would save a deal of trouble and perplexity.

So I think there should be laid down a series of rules for the guidance of editors and publishers, and I give herewith a few that suggest themselves to me without attempting to cover the entire ground, for "there are others" which might be added.

Rules for Publishers.

1. Never change the title of a journal if it can be avoided.
2. If a change of title is necessary, let it be made at the beginning of a volume.
3. Whenever possible let the change of title be made as a *subtitle.*
4. Never change the size of a journal in the midst of a volume—always at the beginning, and avoid such changes as much as possible.
5. Never publish a special number or a supplement of a size differing from the regular issue.
6. Before going to press be sure that the *volume*, the *number* and the *pagination* is correct, and in proper sequence.
7. Whenever possible, begin and end a volume with the calendar year.
8. All journals which do not begin with the calendar year should state the period to be covered by the volume, *i. e.*, when the volume will end, so that the indexer will know whether to use the compound year or not. A journal begun in March, for example, may end its first volume in December, or it may run on until February, but this fact is never known until the volume is completed. Every number should state the volume and year covered, viz: 1899–1900, Volume I; or 1899, Volume I.
9. The volume, running number, monthly number, place of publication, name and address of publisher and editor, should appear conspicuously upon every number of a journal. This would save a great deal of time in a library.
10. Advertisements should not be permitted among the reading matter in a medical journal. Many of the journals devote so much space to advertisements that it becomes necessary to omit them when the volume is bound to avoid unwieldiness and expense in binding.

11. Begin each volume with a new set of paginations. Continuous pagination from one volume to another, or separate pagination for each single number, is objectionable. When each number is paged separately there is difficulty in finding a given page, for each number of the twelve has the same set of pagination. In such cases the journal has to be indexed by number as well as by page.
12. Every medical journal should issue an index with the last number of each volume. If no index is to be published, or if it is to be issued later, it should be so stated in the last number of the volume. Journals sometimes have to keep on the unbound shelves one or more years, waiting for an index which may never come; and not infrequently an index comes after the volume is bound.

Of course, if medical journals are published merely to be read and then thrown in the waste basket, all these suggestions go for nothing. But such is not the case. They are bound and preserved, and by many libraries and physicians are indexed; hence the need of some uniform system governing their publication.

CHAPTER VIII.

DIFFICULTIES OF MEDICAL REPORTING.[1]

By FRANCIS E. WESSELS,

of Philadelphia.

Official Stenographer.

SINCE medical reporting within the last decade has become a distinct, progressive, and important science in itself, and since precise adaptability of stenographic writing to medical terminology has become a permanent necessity among medical men, in scientific debates, expert medical testimony, etc., it is quite evident that the position of the official medical stenographer is one of especial responsibility and dignity. It is on a plane with that of the official court reporter in the essential requirements of accuracy and official record. In fact, from a standpoint of education and nomenclature, the work of the official medical stenographer must of necessity be intellectually higher and require greater skill in execution, in point of mental acuity, tenacity, and extended vocabulary.

There are practically no "bugbears" to judicial reporting as compared with the reporting of scientific debates, for the reason that in taking sworn testimony, the court reporter is empowered to interrupt the witness, if his remarks are not intelligible or if they are inaudible. Why should not the same prerogative be extended to the official medical reporter when the speech of the medical man is not clear? This is necessary in order to secure a perfect pen-picture of the proceedings.

It may be conservatively estimated that one-third of the

[1] Reprinted with the kind consent of the author from the *Philadelphia Medical Journal* of February 24, 1900.

medical men who speak in public are ignorant of the factors which combine to make their remarks sometimes impossible of intelligent interpretation. The day has come when the medical man and the medical stenographer must work hand in hand, in order to conserve to scientific literature a truthful record of progress and discovery. I, therefore, venture to point out the difficulties under which the official medical stenographer labors in endeavoring to take down scientific debates.

There are many types of indistinct speakers, the most pronounced being of that class who have poor enunciation; there is another class whose members, while they have no oral defects, lack essential carrying-power of voice. These gentlemen, knowing their weaknesses, would materially add to the correctness of a report by speaking within "ear-shot distance" of the stenographer, or, at least, in tones loud enough to be unmistakably heard at the stenographer's table. Rarely the speaker will get too close to the stenographer. He has, however, been known deliberately to stand with his back turned, place two hands upon the table, or with one hand resting on the table or on the stenographer's chair, impart a friendly to and-fro motion of the body, much to the chagrin of the scribe. This has been known to produce symptoms simulating paralysis agitans or agraphia—sometimes even resulting in an upsetting of the ink bottle! I remember on several occasions being "rocked in the cradle" of deep despair by such a procedure. A reliable *stenographic* report cannot be made when the speaker stands with his back to the stenographer.

Sometimes a noted professor, seated at the back of the auditorium, will address a national assembly and the presiding officer will request him to step forward, so that his remarks may be accurately reported. But with that modest bashfulness only known to those who have already won their laurels, in his still small voice, he will decline to come forward, stating, "Mr. President—I really have not much to add to the very interesting paper of Dr. ——," but never-

theless he will talk inaudibly for perhaps a half hour and then look for a verbatim report of his speech. The stenographer, the while, with eyes, nose, ears, mouth, and eustachian tubes open, endeavors to jot down unheard things! The country practitioner, however, who is unused to testing his vocal powers more often assumes this role. Hon. Thomas B. Reed, in his book on "Parliamentary Rules," in speaking of qualifications of a certain official, says:

"Either he or his assistant should be a good reader, with a clear voice, capable of being heard in all parts of the place of meeting, even where there is considerable confusion. *Too much stress cannot be laid upon this qualification, since bad reading, ill understood, breeds confusion, disorder, and misunderstanding.*"

This obviously applies to all classes of public speakers.

Mention might briefly be made of the fact that not infrequently one will hear a 300-word-a-minute talker. It is very interesting to listen to a rapid speaker when he comes in contact with a long word, for instance, *monotrichloracetyledimethylphenylpyrazalon* (hypnol)! The speech of the average rapid talker is likely to be incoherent, testing, to the utmost, the mental capacity of the *auditor*, as well as the stenographer.

Perhaps the most annoying custom which unfortunately prevails in some well-regulated societies is a conversation carried on at or near the stenographer's table between the secretary and a member, or perhaps between two members seated near-by on an extraneous subject, while an important discussion is in progress. Sometimes the stenographer is directly interrupted by a question from a thoughtless member or newspaper reporter, thus rendering a report defective. This is inexcusable and should be prohibited. The stenographer has but *one* ear under these circumstances and that is for the speaker.

The informality of several persons talking at once, each presuming the other has obtained the floor, is another unparliamentary feature of many meetings. "Wherever

there is an assembly there is need of parliamentary law, so that the assembly may proceed in orderly fashion, with as little jar and discord as possible, and accomplish the work to be performed. . . ."[2]

The drowning of a speaker's voice by the hum of a trolley-car heard through an open window, or by the coughing or sneezing of a member, or by the scraping of chairs, or banging of doors, etc., should be noted. If the subject, perhaps an important noun in a sentence, is smothered by such noise, the word is irreparably lost. The remedy consists in a proper location of reporter's table, rubber-tips placed on chairs, etc., and members should be required to do all coughing, sneezing, and banging of doors before the meeting begins!

Just in proportion as the careful surgeon in planning and carrying out a major operation observes every detail in the procedure, the stenographer likewise requires, in taking a scientific report, the best location and all facilities at hand —a table, distinct and separate from any other, a light on the table, not reflected from chandeliers above, as this often insures the annoyance of writing each penstroke in a shadow three inches long and two inches wide. Notes under those conditions are often made illegibly, and are, therefore, not official nor reliable.

Finally, a most unparliamentary form of procedure that is admitted in many national, State, and local medical organizations in the country, is the nonobservance, strictly speaking, by the presiding officer of requesting—and if not complied with, then demanding—that each speaker, always and in every instance, shall, upon rising, announce his name and the city from which he comes. In a moderate debate this is dismissed from the minds of chairman and speakers, and never even thought of in the heat of debate, when the stenographer has no chance of correctly verifying, mentally or verbally, any method he may devise of *numbering* speakers or *denoting* them as, *e.g.*, "red whiskers, 1;"

[2] Honorable Thomas B. Reed, "Parliamentary Rules."

"black hair, 2;" "long nose, 4;" "shorty, 5;" "lengthy, 6." Here is the authoritative statement of ex-Speaker of the House of Representatives, Hon. Thomas B. Reed:

"Whenever a member desires to introduce business, he rises in his place and addresses the presiding officer by his title as 'Mr. Chairman,' 'Mr. Moderator.' *The Chair thereupon recognizes the member and says, 'Mr. A. has the floor,' or simply, 'Mr. A.'* . . . It will be seen by the proceedings just described that the member, in order to introduce business, must first obtain the floor, and *in order to obtain the floor must first be recognized by the Chair.*"

Undoubtedly the value of a speaker's remarks is dependent upon the record of his name. His remarks might be strikingly brilliant or brimful of research and scientific investigation, yet their value would be an unknown quantity in the absence of authority, *i. e.*, the name of the speaker. To insure accuracy the name and city should also be written upon the blackboard by the Secretary. The inability to get speakers' names, or the responsibility imposed upon the stenographer to get them himself the best way he can, undoubtedly has a deteriorating effect upon note-taking. Parliamentary law, as above intimated, requires that each speaker shall be recognized by the Chairman before he is allowed to speak, which means not only that he may have the floor, but, in addition, that he must be recognized by name, and this recognition is not to be made in one or two instances, but throughout the entire meeting, when any speaker addresses the Chair. The presiding officer is not expected always to know by name every one present; therefore, a duty devolves upon each member to announce his own name. In judicial proceedings the full name of the witness is required to be announced before he is sworn so that the stenographer may make due note of the same. The testimony of a medical man in scientific debate is often as important as the testimony of a witness in a legal case, and his name should invariably precede his remarks. There is

no rule so uniformly perfect and reliable as that parliamentary mandate which requires the name of the speaker to be announced. This is particularly noticeable in reporting the proceedings of a body composed of foreign delegates. I had the honor to be the official stenographer to the International Commercial Congress of 1899, and, anticipating, as usual, the lapses of the various chairmen in parliamentary etiquet who from day to day were appointed, I devised the scheme of circulating among the delegates cards to the effect that the speaker should kindly step forward to a convenient place near the stenographer and hand him his card or announce his name. This plan was a failure, simply because it was not heeded. Telegraph messengers were likewise employed to watch the speakers and get their names as they finished speaking. This plan could not be relied on, because, owing to the complexities arising during a heated discussion, the boys would become utterly bewildered. So that in many important debates two stenographers were compelled to "take" simultaneously, not only for the purpose of check-noting speakers whose remarks were partly inaudible, but also for the purpose of assisting each other in obtaining the long foreign names and titles. The time has arrived when public speakers everywhere must recognize the *minutiæ* that the stenographer is required to observe, in order to do his work properly.

I remember superseding a recognized competent stenographer in a certain medical society, because it was claimed that he did not "get all"—not even names! The stenographer's just excuse was that the majority of the speakers were inaudible, owing to the fact that they occupied seats in the rear. I said that I could not do any better than the other stenographer *under the conditions described.* The meeting came off at the appointed time, with these prefatory remarks from the chair: "I would suggest that members desirous of indulging in discussion occupy the front seats, so that the stenographer can hear." The result was a

satisfactory and full report of the proceedings, due entirely to that one feature.

Distinct pronunciation of polysyllabic words is a prerequisite to intelligent comprehension of phonetic sounds and, therefore, a precise recognition of spoken words. Especial attention should likewise be given to the pronunciation of *materia medica terms* and persons' *names*. The past tense of verbs, adjectives, etc., should be decidedly expressed, as in *trustèd*, *blessèd*. The *-ing* should never be slurred over to sound like a *en* or *in*. The stenographer is ever on the alert for the most delicate inflection or accentuation, and opportunity should always be given him for the accomplishment of his responsible task.

CHAPTER IX.

SOME ETHICAL QUESTIONS.

THE IMAGE IN THE MIRROR.—There is a story of a bird that was cured of "the mopes" by means of a mirror placed by the side of its perch. The image of itself was held to be a real mate, and before it there was much strutting, and in cuddling up next to it there was secured the greatest and most satisfactory happiness. The incident is psychologically analogous to the method whereby a certain class of writers and even of physicians find their satisfactions in life. Almost the whole tribe of novel-writers, many so-called "artists" and poets, placing their center of gravity in others, are nothing more than popularity-hunters, posing before the vanity images of themselves in the mirrors of other peoples' minds. And the fact that no poem thus produced, no novel, or work of art, is enduring, commands the attention after image and imaged are gone, and proves of how little value is the method. If created with the image in mind and for the purpose of pleasing the image, it is not an enduring work,—it is mere pose and strut and self-satisfaction. One whom even Carlyle called the greatest critic of his century, found nothing of value in the poetry of Wordsworth, and even belabored it with contempt and ridicule. When the world came to a very different conclusion, the great critic set himself to a rereview of Wordsworth, and after a careful study he reached the same conclusion as before. And yet Wordsworth is more precious to the English race than the combined authors praised by Jeffrey. His age agreed with Jeffrey, Wordsworth never having received $700.00 during his life from the sale of his poems. The fact is a lesson as to the

trustworthiness of the most expert contemporary criticism, but it is of infinitely more significance as regards the methods and ideals of literary production. Wordsworth was oblivious of the method of the parrot and the looking-glass, and hence he created hundreds of single lines each worth more than the million books of the mirror-folk of the last or of any year. The reason that the image-literature is of no value is because the souls of the parrots are of no value. Only slaves and toadies and sycophants wheedle a master, and to choose the populace as a millionfold master is not a proof of lessened but of increased stupidity and cringingness on the part of the image worshipper.

All this is beside the mark as regards physicians? By no means! First, as to medical literature it is entirely as apropos as to the lay variety. Take our medical journals; what large proportion of writing and of editorials may not properly be called image-literature, posing of authors before their own images in the glass? If not exactly this, how much of it is not slyly looking out of the corner of the eye at the success of the journal? In our books, what a number are created with the authorial eye on the image—for vanity's sake rather than in forgetfulness of self and the image, and with sole attention to pure scientific and sanitary progress? The profession shares the universal habit of ignoring the great and unselfish work, and is too prone to let its earnest, image-ignoring writers and delvers go unthanked, and to wear their lives out unhonored. The keen-eyed editor of the *Practitioner* recently wrote:

> It is, of course, in accordance with the general way of this best of all possible worlds that the one officer of the Association who has no share in the butyraceous honors so freely bestowed is the Editor of the *British Medical Journal*. He is the Atlas on whose shoulders rests the world of the Association. But one notes with regret, though hardly with surprise, that there are no compliments for him, and he must be thankful if he escapes a vote of reduction of salary for refusing to turn the *Journal* into a literary dustheap where cranks may shoot their rubbish. The whole

thing is a pleasing illustration of what Mr. Pecksniff called "human nature."

There is often fully as much heroism and purity of ideal in the renouncing of clap-trap, posing, and popularity-hunting, on the part of many book-makers, editors, and writers as in soldier or operating-surgeon. To say the true, the needed, and the right thing when it is so easy to say the pleasing thing is a noble though often a thankless task. In our medical societies how frequently is the mirror-strutter in evidence? Certain men come to talk or read papers, apparently only to air themselves and their personal conceits. In our medical science, how much effort is wasted on the thing the mirror-parrot has devised, discovered, or first advocated? How many operations have been for the sake of the image in the mirror rather than for the single good of the patient? How accurate are the statistics compiled with an eye on the personal mirror-reflex? Personal ambition and the desire for the respect of one's fellows may be useful things, but they are not the highest ideals, and may so easily degenerate into parrot-satisfactions that they are to be kept in proper place and well in hand. And, like mirror-literature, mirror-science has no enduring quality. When the undiscriminating have wasted their breath, the beggar for their applause finds himself and his fads forgotten. The world will not long honor those who fawn for its honoring. This is the irony of egotism.

LITERARY INTOLERANCE.—Every editor, and this includes even medical editors, occasionally receives angry letters from subscribers concerning some article admitted to his columns. It not seldom happens that the same mail brings other letters expressing pleasure from the same articles. The complainants may be right in their criticisms and the praisers wrong in their pleasure, because even the best of editors may occasionally err in selective judgment, and the most of us may make altogether too many mis-

takes. But whether right or wrong, the critics usually proceed upon one or more of several erroneous assumptions. The first pertains to the right of an editor to expunge a sentence or paragraph with which he disagrees in an otherwise acceptable article. That he has no such right is shown by the fact that the critics would be the first to deny it in the case of their own contributed letters or articles. The second faulty assumption is that an article contributed—and the same usually applies to reports, news-items and quotations—receives a half endorsement, if not a whole one, by the editor from the mere fact of insertion in his journal. It seems stupid to republish in every number the old stereotyped notice, "This Journal does not hold itself responsible for the views or statements made in its columns except those in the editorial department," and yet the letters of occasional correspondents make one sometimes feel as if this were advisable. One may even have recalled to mind the stanza of a great poet:

> "There was an old man of Thermopylæ,
> Who never did anything properly;
> But they said, If you choose to boil eggs in your shoes,
> You shall never remain in Thermopylæ."

Again, it may be suspected that local feeling and even a personal animus, indirectly at least, may have rarely stimulated a passionate protest. If such is ever the case the fact that editors are not omniscient may perhaps be a sufficient reason for partial pardoning on the part of others, although not by any means authorizing an overkind leniency toward himself on the part of the editor. "Not guilty, but don't do it again," may perhaps be the verdict in both cases.

The facts suggest a thought as to the value and praiseworthiness of toleration. The crudest way to put it would be to say, too ungraciously it is true, that for the subscription price no reader acquires the right to grumble when displeased, nor in accepting it does a journal guarantee to

please always and absolutely. An editor, indeed, may be considered fortunate if he pleases thrice while displeasing twice. Alas, that the single negative sticks in the memory more persistently than four positives! In a larger way it might be urged that culture and civilization consist in great part of the ability to listen to and observe things at variance with and even repugnant to one's private belief and to do so without acrimony. Magnanimity is one of the rarest and most noble of human characteristics, and it should not be forgotten that magnanimity is neither indifference, egotism, cynicism, nor pity—but something far higher than any or all of these. It is so fearfully easy to convince oneself of one's own personal superiority that the nobler virtue always insensibly tends to become the lesser. Is it not true that every political partisan needs to read a representative journal of the opposite party? What a deplorable narrowness does it show when readers demand that their journals shall voice their own peculiar views, and when a disagreeing or opposing view rouses anger! All of this is ultra medical, and extremes of party feeling do not of course occur in the medical profession, but glimpses and relics of old-time prejudices occasionally appear at the editorial desk—although we protest that none have done so at ours for some three months! These atavistic remains, as we have hinted, consist in most emphatic reprobation of what some luckless contributor has said. Might one definitively reply: Why not blame the author instead of the editor or publisher, and also why demand the uttermost agreement on the part of one's fellows in matters either of science, ethics, or esthetics? Equanimity is a far more lovable virtue than unanimity.

PROFESSIONAL CONTROL, OWNERSHIP, AND USE OF PROFESSIONAL LITERATURE is a matter of most serious concern to our guild as a whole, and individually to every physician. The question at issue is simply this: Does the literature of our profession belong to us or to the lay

publishers whom we have allowed to publish it without remuneration to us? When a publisher pays a physician for literary work the matter is on a different footing; but when the physician gives scientific articles or lends them, without compensation, to be published in a journal, it is plain that these articles are still the property of the author or of the profession, not of the lay publisher. To cite an illustration, we epitomize from a letter to the editor of the *Journal of the American Medical Association*, published March 6, 1897, an instance there set forth in detail, for which we cannot of course vouch, and for the truthfulness and accuracy of which the name of the writer of the letter is the only proof we have, except we believe that the charges there made were never answered. Who does not deny the truth of a charge, by his silence admits its truthfulness—is, we have heard, an old rule of evidence.

According to this letter, the lay publishers of two medical journals refused the editor and publisher of the *American Year-Book of Medicine and Surgery* the courtesy or right to abstract or make quotations from the articles published in the journals belonging to said lay publisher, or to reproduce the illustrative cuts of these articles. This refusal was intentionally made more insulting by the fact that the editors and publishers who thus denied, accompanied the denial with the statement that they "had always allowed the free use of the original matter contributed to it for all reputable purposes, provided that due credit, etc." Moreover, it was expressly denied that this course (or refusal) was "characteristic of our general policy," and it was said that this "one instance" was absolutely exceptional, etc. The editor of the *American Year-Book* at once proved that there were other instances in which the free use had been refused (*e. g.* to *Sajous' Annual*), and expressed his thanks for the insult that the *Year-Book*, *Sajous' Annual*, etc., were not serials to be classed as published for "reputable purposes."

As every scholarly physician knowns, the *Jahrbücher*

and other epitomes of medical science published in Germany have been of inestimable service to the profession. In the two serious attempts made in the United States to do such work, this powerful lay publisher and his obedient medical editor refused the use in any way of the medical articles given or lent them gratis by members of the profession, and then wrote of themselves the following astounding, Pecksniffian, disgusting words: That they would be the "last to countenance any action which might interfere in the slightest degree with the fullest and freest dissemination of medical knowledge." Thus to misjudge the acumen of their readers was as wonderful an error of intellect as the deed was an error of morals. The lesson to be gathered is that the profession should own and control its journals, and, especially, that being offered a number of excellent ones thus controled and owned, it should support them rather than journals whose lay owners have always used them for purposes of unadulterated financial selfishness, and for creating a monopoly of medical literature for which they have not paid the producer a cent. A slavery so absolute and extreme as this was never before illustrated in the history of the world, and it is a disgrace of which we should make all haste to purge ourselves.

BIG BOOKS, OR LITTLE BOOKS?—In a general way, and particularly as to certain things, the authors of medical books and the buyers should be the judges as to the style in which their volumes are made. They have heretofore left this matter almost entirely to publishers. In the highly important matter of the size of books the financial advantage of the publisher may run squarely counter to the best interests, not only of the author, but also of our profession, and of the dissemination of knowledge. There are certain exceptions, but we believe they are few, to the rule that small books are by all odds preferable to big ones. Books of reference, which are used only a few moments at a time, may be large (when it is impossible to make them

small), but almost every other kind of book should be made as small as possible. The reasons are sufficiently evident:—

1. The smaller the volume the less will be its expense, and the terrible and continuous tax laid upon every member of our profession for books should be made as light as possible by every legitimate means in our power. We have before us a volume containing more words and costing only one-sixth as much as another on the same subject. The first is "handy," and small, and easy to read; the expensive one is heavy, big, and hard to read.

2. The smaller the volume the more it will be read, because the reader will not so soon tire in holding it. Many large books are frequently not consulted because, unconsciously or not, one shrinks from the labor of taking them down and holding them.

3. The necessity of condensing material into a smaller number of words is, as a rule, of positive and decided benefit to books, both in style and in clarifying the knowledge conveyed. There are limits, to be sure, beyond which epitomization should not go, but few authors have ever reached them, and most of the volumes on the market could have been made up of one-third or one-half the number of words with manifest profit to reader and to knowledge.

But even if the number of words remains the same, most of these volumes could have been easily reduced in size and in weight 50%. We do not urge a reduction in the size of the face of the type used, although it is true that small type on the right paper is far less wearying than large type on bad paper; and when the right kind of paper is demanded by us we may usually ask for a relatively smaller type than is often thought necessary.

Broad margins are pleasing to the eye, but they are not necessary in scientific books in which esthetics must give way to considerations of utility and lessened expense. Moreover, one of the greatest reasons for broad margins is sadly ignored. This is because the margin next to the

"back" of the book must be broad in order to neutralize a wretched slipshodness and a silly economy in binding and in paper. When binding and paper are cheap, then the wide expanse next to the stitching must be allowed, because the book and page will not open out and lie flat, and this wasted paper and space is necessary for the curve and to hide the expensive economy.

By far the greatest reasons for the existence of unnecessarily big books is that buyers foolishly, and publishers cunningly, prefer them large. But is it not long past the time when physicians should have learned the folly of the "most, *i. e.*, the biggest, for the money," instead of the most and smallest? Every buyer should earnestly demand of publishers that offered books shall not be as huge and imposing, but rather as small and serviceable as possible. The grand array on the shelves, whether for one's own satisfaction or to make an impression, is scarcely a valid excuse for depleting one's purse and for cumbering one's bookcases. "It is magnificent, but it is not—literature."

Still another powerful reason for the big book lies in the fact that it is the bigness that seems to justify us in paying the big price, whereas we should prefer the small book, if equally complete and scholarly, at the same or even at a greater price. Let us quit buying books by the pound!

And lastly, it is only the big book at the big price that pays the canvasser's expenses. At present we prefer to pay a man several dollars to convince us of the value of a book, rather than to order it direct. It would be far cheaper and better to order the complete volume "on inspection," paying express charges both ways, rather than to order from the "dummy." Publishers, we believe, would be willing to accept this offer, and we doubt not would prefer this plan of selling their books.

We have reserved to the last the single consideration of dominating importance—that of the paper used in books. It is by means of poor, bulky, cheap paper that books are

made poor, bulky, but expensive. By paying for paper several cents a pound more than is customary, books could be tremendously lessened in bulk and weight. This additional cost of thin, opaque, and tough paper increases the cost of the volume none or only a few cents, so that is of no concern, and it is counterbalanced a dozen times by narrower margins, smaller type, and better stitching. But besides size, etc., the outweighing benefits of better paper are the flat page, ease of ocular labor, and durability. There is a vicious tendency toward the use of "loaded," calendered, and rotten paper—principally because, it is said, illustrations "show up" better upon it. This is a fallacy. If the right quality of paper is used, illustrations are as effective on a "dead-finish" paper as on that with a sheen that irritates and tires the eyes.

THE SIZE OF BOOKS AND ARTICLES.—As to articles in medical journals every editor and experienced writer knows how much more acceptable, how much more likely to be read, are short, concise, rather than long and verbose ones. Every writer for journals should limit his article to an aspect as specific and single as possible, and not try to cover too much space or too many phases of a subject. Write more often if you please, but drive one nail at a time, and drive that home. It hardly needs saying that one should not attempt writing upon a subject until he is thoroughly certain he has something new or valuable to say. Writing for vanity's sake or to advertise the writer is the bane of medical literature. We once knew a writer who in his everlasting rehashes of well-known facts or opinions was in the habit, when sending it to the editor, of accompanying his MS. with a $10 or $20 bill. The number of our medical journals hungry for "copy" hardly makes this necessary nowadays, except when the offering is of the most flagrant worthlessness. Having something of value to write about, endeavor to tell it in the fewest words possible,—subject of course to the proviso that you do not

adopt the horrible note-book or reporter's style, in which sentences are without a subject, or a predicate, or some other necessity of English. Beware of staccato speech and other evidences of vocal paralysis.

As to books, medical authors should use their earnest influence to stop the intolerable manufacture of bulky books, and especially of "Systems." The day of these 5, 10, or 20 volume systems, is, we hope, irrevocably past. The busy man has no time for them, in the first place, and he is beginning to grow conscious that they are born of the publisher's desire and not of the scientist's demand. His arms grow tired of holding them, and his pocket-book thin in paying for them. They are commercial in origin, not professional. One man's intelligence and experience should penetrate and control every line of monographs,—that man a master in his special field. To this rule there is hardly more than one exception, and this relates to books merely gathering and epitomizing the progress and literature of a period or a subject. And even here the exception is not so decided as one would suppose, as special and ripe editorial judgment and criticism are required not only to winnow, and condense, but also to indicate a scientific rating. In this class of books also heaviness and excess of size are less objectionable than in others, because, like dictionaries, they are essentially for short-time reference, scarcely for a half-hour's continuous use. Medical men of all kinds, whether writers or only readers, should unite in sharp scorn of books made big for the publisher's benefit, in which cheap and thick paper with too broad margins shows clearly the motive and the deceit of selling printed and folded paper instead of scientific literature. Good, thin, light, and opaque paper is expensive; poor, thick, heavy, and rotten paper is cheap; many a book-buyer in his ignorance does not know this, and publishers are well aware of the buyer's mistake and encourage it, to the profit of the seller and the loss of the buyer.

COLLABORATION-BOOKS.—In the preface to one of the least defective of modern composite books we find the following words as the best excuse the authors can adduce for their work:

"It is unnecessary to discuss the 'collaboration-method' employed, which has too often demonstrated its value to need either defense or explanation in this place, except to point out its greatest use, and the one to which no doubt it is indebted for its success—namely, that by its means the student gains the point of view of a number of teachers, reaping, in a measure, the same as would be obtained by following courses of instruction under different teachers."

We feel constrained to point out what we think are some fallacies lurking in this statement. It would be true if the authors treated the same subjects; but it is plain that when they treat wholly different subjects the student learns only the opinion and teaching of the single author who writes on a single subject. It would also be true if the editors dared or would be allowed to so edit and transform the articles as to make them fuse into an organic or a homogeneous unity. When an author signs his article he would not allow an editor thus to make over his article. The result is that the whole body of teaching of the work represents the scientific and therapeutic results and beliefs of no one brain, and not one of the hundred separate authors would entirely, or frequently even in great part, assent to the teachings of the articles bound up with his in the same volume. This seems to us an argument against the modern composite book, in which the multitude of authors preserve their distinct and separate individualities.

There are other objections to the composite book of the type criticised: Confined as he is to a definite and altogether too limited space, each author must deal in too many glittering generalities. To the student or practitioner the articles are not helpful; they do not enter into those details of diagnosis and treatment which are pre-

cisely what the uninstructed need. In a vague and soary way, the author who is brilliantly getting over his ground, showing off his own learning, but who is utterly indifferent to the state of mind and needs of his uninstructed reader, will say, for example, that a certain treatment may be tried, and that it sometimes succeeds and sometimes fails. All of which is quite as instructive as, and far less amusing than, the experiences of Violet, the Quangle-Wangle, and the 600 crusty crabbies. What kind of cases are adapted? How should the treatment be carried out? By what kinds of doctors? Why and when does it fail? A hundred such questions arise in the mind of the average reader of nearly every page of the patch-work composite book.

Still another objection is evident: The learned authors must display an erudition equal to that of the other fellows; and thus meaningless omniscience stares at one from pages of mathematic formulas and diagrams for instance, which not a reader will ever comprehend or get a ray of light from. Colorless abstractions and showy shams are thrown in as if the poor student were as consummate a mental prestidigitator as the great author,—just as poor orators preface their profoundest and strangest bits of knowledge with, "You have all read," "As all are aware," etc.

All of which is especially true of the big "systems," running into shelves-full of dumped-together treatises by a hundred authors, in which the unfilled gaps, the overlappings, and the contradictions have long been the butts of ridicule of men with scientific and literary training. Such books are good for publishers, but comparatively useless and surely wasteful of the money and house-room of physicians.

The only composite books that we judge of use to professional men are those in which the work of individual authors is rigidly wrought over, supplemented and rendered organically unitary with the rest, by the dominating

control of the responsible editor. Better if the individual authors merge their work anonymously into the homogeneity desired. But, when possible, and better yet, we think, if authors preserve their own independence and make their work stand for what it is, the product of personal experience and judgment. All good work rests at last upon the character of the single man who actually did the job.

Such are some of the dangers and disadvantages of composite books, chiefly those of the large systems of many bulky volumes, appearing one after another, and requiring a number of years before the completion of the set. There are, of course, correspondingly great advantages in the properly edited single volume composite-books, in which, as we said, "the work of individual authors is wrought over, supplemented, and rendered organically unitary with the rest by the dominating control of the responsible chief editor." One of these advantages lies in the perfection of specialist-work. Science has become such a vast aggregation of facts and experience even in a specialty of medicine that we are fast approaching the time when the masters can only be specialists of a specialty. Thus, the best exposition of such a subspecialty can only be made by a person who has given long attention to it. Another advantage is that a composite-book by a number of authors may be issued in a shorter time, the results and opinions chronicled being more promptly brought down to date, than if one or a fewer number of authors worked a longer time upon it. The often exemplified danger of lack of a harmonious view and oversight of the whole by a weak and a careless chief editor remains. To this, attention has been called. On the other hand we must not forget that the work of a single author treating many subjects may be narrow, inaccurate, prejudiced, and lack precisely the unity, the large outlook and clear overlook gained by the composite work of a number of authors, in proper subordination and with free control

by a chief editor. American editors and publishers have excelled those of other nations in attaining the proper balance between the extreme of the huge heterogeneous undigested masses of dumped together multivolume knowledge by one or two hundred independent authors, and the myopia of books by a single author.

We hope that our writers and publishers will continue to hold this literary and bibliographic preeminence. But it cannot be done, we think, if we do not renounce both the helter-skelter of the interminable "system" and the individualistic narrowness of the monograph.

It can be done by choosing the good things of each—the fulness of knowledge and experience of the specialists unified and mutually completing each other, through the domination and completeness of control of the chief editor. Individual writers must be willing to subordinate their single work to the perfection of the whole, and the editor in charge must not shrink from demanding such subordination and unity. In this way our medical editors and publishers can retain their present superiority in the art of scientific bookmaking.

DUPLICATES OF ARTICLES SENT TO TWO JOURNALS.—Recently one journal charged another with the downright stealing of an article from its columns without any recognition of the supposed first appearance in the columns of the injured journal. Some months ago a journal abstracted an article and credited a certain journal No. 2, in which the original appeared after its publication in more widely-known journal No. 1. The editor of journal No. 1 expostulated in vain. In both these cases it was subsequently learned that the authors of the articles had supplied the two different journals with the same article—a proceeding wretchedly impolitic for author and publisher alike. The deceived journal justifiably feels like using a harsher adjective than *impolitic*. We trust no author will ever treat us that way. It may be wise to publish an article synchron-

ously in two journals, but it is not honorable to keep either editor in ignorance of the fact.

MISUNDERSTOOD PROVERBS are constantly quoted, even in medical literature, by rote, by those who do not know the meanings of the words they use, and people who hear or read the quotations imagine these have some significance, when in fact on their face and without etymologic knowledge they have no significance whatever. One of the most common of these misused and misunderstood sentences in Shakespere's "One touch of nature makes the whole world kin." As Shakespere and his cotemporaries understood the line it meant something very different indeed from what the pseudo-literary quoter of today thinks. The word *touch* signified *defect* or *bad trait*, and not a good one as is supposed, reaching down to the elemental or primal quality of life and feeling. The word came into use from confusion with the word *tache*, sometimes misspelt *touch*. The whole passage (in *Troilus* iii, 3) as used by Shakespere shows he *reprobated* not *praised* the "one touch of nature."

One of the most senseless of these proverb-blunderings is the very common "The exception proves the rule," derived from the Latin *exceptio probat regulam*. Now, any school-child must see that an exception invalidates, not proves, the rule. It positively disproves it. The explanation of the nonsense consists in the fact that the old signification of *proves* is *tests*, as when St. Paul advises that we should prove (*i. e.*, test) all things to hold fast that which is good. The Latin scholar also knows the definition of *probo*.

In the saw, "The more haste the worse speed," a similar contradiction occurs if the words are considered apart from their history. In Old English, *speed* really meant *success*, and the proverb thus becomes luminous. So, also, "God speed the plough" has significance if we understand the word speed properly as *prosper*.

In "God sends the shrewd cow short horns," shrewd means ugly-tempered, or bad-dispositioned, not clever or intelligent; and in "Handsome is as handsome does," handsome does not mean beautiful, but neat in the sense of skilful.

CHAPTER X.

HISTORY AND PSYCHOLOGY IN WORDS.

THERE is a story that a society of learned philologists made it the first of its by-laws that no member would be allowed to contribute a paper on the origin of language. By this means only was it possible to shut off the vague theory-spinners and prevent unendurable boredom. To a great extent the reason for the rule still holds, because as yet we have hardly gathered facts sufficient to enable us to form any very clearly warranted induction as to the manner in which animalian cries become articulate and thought-conveying language. Noiré has traced the beginnings of speech to what has been called the yo-he-ho theory—the cries of men working together. Similar guesses are the bow-wow and the pooh-pooh theories or other imitative plans of the reproduction of sounds of animals or of inorganic nature, as well as of those of man himself when emotion passes into cries of various kinds.[1]

The creation of language by onomatopoietic methods is still a fact today, and in poetry the imitation of sounds by words is quite an art, as *e. g.*:

"Rend with tremendous sound your ears asunder,
With gun, drum, trumpet, blunderbuss, and thunder."

"I love the language, that soft bastard Latin,
Which melts like kisses in a female mouth,
And sounds as if it should be writ on satin
With syllables that breathe of the sweet South;

[1] A writer, Mr. J. Donovan (*Mind*, July, 1892), contends that articulation originated in the impassioned intonations of festal excitement. One cannot help feeling that before festival and religious dance came into being language must have become a pretty complete and satisfying instrument.

And gentle liquids gliding all so pat in,
That not a single accent seems uncouth,
Like our harsh, northern, whistling, grunting guttural,
Which we're obliged to hiss, and spit, and sputter all."

Whatever theory we may accept as to the origin of language, none will deny that it is and remains primarily the product and expression of emotion. The ultimate origin of the word *mama*, whether the infants' cry for food, for the mother's breast (the mamma), or for the mother herself, is lost with the childhood language of the race, but its preservation in all languages with one or all of the three significations given, is a suggestively beautiful fact. Hunger is the first of all bodily feelings or desires, and remains the most fundamental and continuous of all. Physiology is found to be the mother of language in an ever varying but real sense, and in a multitude of ways of which the proofs are found in nearly all the words we use, at least if we run them down to their rootings. A curious demonstration of this may be seen in the fact that almost all of our common words pertaining to the nose begin with the sound *sn*. We need not stop here to show this in detail, but the word-hunter may find lively interest in looking up the etymologies of multitudes of words, such as, in English, *snaffle*, *snap*, *snatch*, *snack*, *snarl*, *snark*, *sneer*, *sneeze*, *sniff*, *snip*, *snipe*, *snite*, *snivel*, *snob*, *snore*, *snort*, *snot*, *snout*, *snub-nosed*, *snuff*, etc.

And by physiology as the mother of language, I do not mean the outgrown theories which were so prevalent when a crude Darwinism blew men off their feet and topsy-turvey with its explanation of the origins and the causes of the changes in words by the conformation of the palate, the mouth, throat, ease of articulation, laziness, or even deformity. The emperor, said one professor, might change the map of Europe, but no man could possibly influence language. The phase or partial truth existing in such dogmatism should not make us inattentive to the fact that primitive people are not unimaginative, that the origin of

language is by logical necessity a highly imaginative and, moreover, a conscious act. There is a somewhat silly attempt of many evolutionists to ignore and belittle the part of consciousness in the development of biologic phenomena, and especially those of *homo sapiens*, and in linguistics it is particularly fallacious. The process of language-making never began and never ends; it is going on all the time. It is partly conscious, partly unconscious. Of course it is absurd to speak of the individual consciousness, or any number of such, as only in the smallest degree contributive, in changes such as those represented by Grimm's law, extending over many centuries and a dozen races. And the discussion as to whether the people as a whole, or only their intellectual leaders originate the changes, is also futile, because, as we see about us every day, both function in this way. There is a continuous mutation going on in language just as there is in the human spirit, an interaction of conscious and unconscious, of the thoughtless people and the purposive intelligent leaders. M. Bréal who has written an excellent book on Linguistics, thinks the doctors of language are powerless and yet with delightful self-contradiction he says that "for many centuries the cultivated Englishman spoke French, and left his own tongue to the people, and since it is the province of culture to retard the development of a language, English adapted itself to the common want without the impediment of an imperious tradition."

The reconciliation of the different views as to people and cultivated, consciousness and unconsciousness, would appear to be in the thought of the larger psychic personality of the race; perception and consciousness are indeed indistinct in the populace, but rise to clarity in the leaders; this permits the creative impetus and changeful spirit to be first grasped and recommended by the clearer-headed initiative of the intellectuals; but the advice is accepted, rejected, or modified, by the less articulate, yet still not nonexistent consciousness of the common people. It must not, dare not, be forgotten that

language is an organism and cannot be created without a creator; it is an art product and demands an artist. No philologist can be an atheist—so long, at least, as he is a logician or even a scientist, for philology is a branch of biology and it requires the merest modicum of intellect to see that all physiology is mothered by mentality. Physiologic function is teleologic and is based upon purpose and planned outcome. Evolution can only be the unrolling of what was initially inrolled. The materialistic scientist has the greatest and most amusing difficulties in trying to avoid the teleology inherent in words and in facts. The blindest of evolutionists is he who makes evolution blind; the most ignoring of scientists he who makes science ignorant; the sorriest of physiologists he who does not see that as function precedes structure, so does mentality precede function. Organs are but bundles of cells, and it is cell-hunger and cell-function that make organic hunger and somatic function. As no cell exists for itself, so we are driven by a remorseless logic to the inference that back of cells is intention, using cells, together with their organs, as tools of design and for purpose. We thus reach a conclusion, one which open-eyed observation indeed does not need, that language, however physiologic in secondary origin, is essentially psychic, because all physiology in final analysis is psychic. Even hunger is psychic, a means to an end, that end the purposes for which the entire organism exists. The infant's *mama* means "I will be a man and do what manhood requires."

When it strikes the imagination with its full force one is astonished to recognize the immateriality of language. It is the oldest, the most enduring, the most used of all the things created by man, and yet it is neither here nor there, neither now nor then. The living reality behind the phonating larynx seems almost to forget and to scorn the air-waves that die the instant they have been born. The λόγος hides from its word, scarcely recognizing it; no echo of the printing office reaches the faraway editor-in-chief.

Like aerial hummings our alphabetic letters come down to us as if from the ghosts of voices dead many thousands of years ago. The mutations of sounds during these cycles are the most subtle and indeterminate of studies of the phonologists. It is mathematically true that no two persons have ever uttered a sound or a word alike. Sound has three components: 1. The pitch, or number of air-waves of which it is composed; 2. The energy (loudness, emphasis, accent), or the force and extent of the vibrations; 3. The timbre (overtones, qualities), or shape of the waves. All these factors can never be alike in two persons. Twins or dromios can never disguise their voices to deceive even strangers.

That language must be held the most perfect, artistically, musically, philologicly, and as an instrument of the psychic life, which has the purest vowel-sounds, which uses them most, which secures the few modifications of these necessary by the free parts of the tongue, the teeth, and the lips. The ideal language must be highly voweled, leaving these pure tones unbestialized by throat or nose, and securing the slight and few modifications required by light touches of the sensitive, educatable, responsive, mobile tongue and lips. Despite the danger of overvaluing one's own, it is true that of the modern languages of civilization, English undoubtedly comes far nearer this ideal than any. In language-formation, as in the psychic life of the racial or national speakers, the origins and rootings are far off and deep, so that change must be slow, and conservatism strong. Hundreds, and even thousands of years may be required to demonstrate decided changes and progress; in the imperishable immateriality of language this progress is shown with a conciseness and vividness unequalled by any other product of the mind. And shown, I would say, in an easily comprehensible and exciting way which should stimulate philologists and educators to popularize the knowledge and bring it even to the common schools and the common people. There are innumerable phases and

facets whereby history may be mirrored and seen, and as many connections of past and present,—every word, indeed, is such—to incite the liveliest interest in the dullest pupil or the most erudite investigator. Philology is not language-learning. One may be able to speak or write but one tongue and yet be profoundly learned in linguistics. As a method of mental evolution and gymnastics there is no study comparable to it. It has few or no uses; it will not help one to acquire money, fame, or power, but it will help one to understand this world better even than any of the physical and biologic sciences. Neither will it much help one to acquire literary style, except to choose words somewhat more fittingly, for style is another name for genius, and genius is not taught or learned of man.

One of the most curious things is man's incuriosity,—first, concerning the world in which he lives, and second, about himself. Science began with the study of the stars rather than of the earth, and even now the average person knows more about astronomy than about geology and geography. Man desires to learn about the most distant and objective before he does about things nearer himself. Centuries and cycles go by before he thinks of asking a few questions about himself, and when at last he does so, it is of bones and dead structures he desires to know. Physiology has but recently arisen and the physiologic conception of disease and of cure constitutes a new era in medicine just opening to our view. But even today it is only corporeal physiology that interests us. If it is of history we are eager to learn, it is of kings first, and wars, and nations,—the history of religion, of commerce, of the people, and of civilization, is the last and least we seek. When science arises it is first of stars, worlds, and stones, and when biology is born, it is at first and for a long time only to morphology that we give attention. So confirmed is the habit of outward looking that much of our modern science is materialistic. The looker denies himself, and the subject denies the subjective, forgetting in this philo-

sophic suicide that subject and object are necessary correlatives, the one nonexistent without the other. There cannot be a physics without a metaphysics. Hence of psychology we know little. The ancient oracle seemed to voice the spirit of life when it said "Seek never to know who thou art." And yet it is true that,

> "A man's best things lie nearest him,
> Lie close about his feet;
> It is the distant and the dim
> That we are fain to greet."

And language proves and illustrates both truths. Of all the things he has created it is the one that lies nearest to man's soul and the most precious. It is, or it may be, one of the most exact of the sciences; it is the first and most continually used instrument of our psychic nature, it is the most suggestive paleontologic "find" in the world, its every word and letter is almost an epitome of the history of civilization,—and yet few know or care a fig for it! People may know half a dozen languages and be utterly ignorant of the abecedaria of linguistics. In schools children and even adults are taught a hundred things of infinitely less inherent value, abiding interest, or enlightening beauty. If I had a child I would rather have him a master of one book, that of Taylor, on the Alphabet, than of a dozen things rated so highly by our schools and colleges. How few of even cultivated people know their A B C's! When the child handles his alphabet-blocks he fumbles with a million mysteries leading directly and naturally into every possible human science and into all history. And yet not even his teachers have cared to follow up any of these clues, and the ignorant pupils grow up to become in their turn ignorant teachers. Language illustrates how like dolts we stare in dazed incomprehensiveness at a thousand riddles flung down before us from the sky and from the past. We may even pick up one of these skilfully fashioned artistic enigmas and finding that

it cannot be eaten, or used as clothing, or fired out of a gun, we throw it away and go on with our stomach-fillings and our fantastic blunderings.

According to Taylor the letters of the alphabet were invented about 1900 B. C., and, except a few, are conventionalized pictures derived from the Egyptian hieroglyphic writing through various stages of ideogram and phonogram. At first they were pictures or representations of actual objects; second, symbols for suggesting abstract ideas; third, verbal signs standing for entire words; fourth, syllabic signs; fifth, alphabetic signs, or letters, representing elementary sounds. The consonants were the vertebras of the organism and were first invented, the vowels being of a considerably later origin. Even today Semitic has no true vowels. The greatest achievement of the human race—for such is the creation of the alphabet, is of Semitic origin, and to De Rougé, a Frenchman, we are indebted for the knowledge, a discovery dating only forty years back. Great aid has been given by the discovery of the scrawled letters of the alphabet on the drinking cups and plates of children, the broken pieces of which, thousands of years old, are more valuable than the most prized original MSS. of the greatest poems. What a strange fact is this discovery, proving again how little we think of the most important things, the tools of intelligence, and the *sine qua non* of civilization. How many thousands of years were required for pictures to become letters we cannot imagine, but the greatness of the task is suggested by the fact that of all earth's races only the Phenicians have ever invented an alphabet. Its value to humanity is shown in the adoption with marvelous rapidity by all the races of the world of this one alphabet fashioned in Egypt. This universal adoption of it is a condensed account of universal history, with aids and more than glimpses into politics, numismatics, commercial supremacies, religious evolutions and revolutions, and almost every phase of civilization.

A was originally the picture of an eagle.

B was that of a crane. In Corinthian the upper part of the B, representing the crane's head, was not closed, but left open, resembling somewhat our letter Z.

D was a hand.

F was the horned asp, the vertical stroke representing the body, the bars the horns.

G is what is left of a picture of a throne.

H in combination with T, the Greek theta, was once the picture of a pair of tongs.

K was a bowl.

L a lioness.

M was an owl; its two ears are what is left.

N was the water-line, or wave-line.

P was once the picture of the shuttle.

Q was the angle of the knee.

R the mouth.

T the lasso.

Y was introduced in Cicero's time to represent the Greek upsilon, which up to this time had been represented by V.

Z was reintroduced in the first century B. C. to transliterate Greek words.

U and **V** were made separate signs in about the fifteenth century, V representing the consonantal and U the vowel sound.

W came first into use in about the eleventh century. It was recognized that in English there had developed a sound that was neither that of V nor of U, but a combination of the two. To represent this *we* sound, two V's were first put together, then the last stroke of the first letter was made to cross the first stroke of the second. Finally they were joined, as we now have them, and are of course called *double U.*

In the fifteenth century when two *i's* were at the end of a word the last one was "tailed" in order to distinguish better. The same was done with our initial I. This form was finally called J and was used to denote the consonantal sound. The Hebrew *Jahveh* with the initial sound of I or Y, we call *Jehovah*, with our *J* sound. We say *John*, the Germans, *Johann.*

Paleography, and even graphology, are alluring studies, and the development of our handwriting leads one into a hundred bewitching by-paths. Taylor shows a little instance in the evolution of our sign for plus (+) out of the Latin conjunction *et*. The sign — (minus) is probably a modification of *M*, the first letter of *minus*. There is striking proof of the popular ignorance and misconception as to letters in the common use of the old English *th*, or thorn-letter. It is, says Taylor, "the survival of a Scandinavian rune which the Goths before they left their early home on the Baltic had obtained from the Greek colonies on the Euxine, centuries before the commencement of the Christian era. It proves ultimately to be derived from the Greek *delta*, which, after making the round of Europe by the northern seas, rejoined in England the other letters of the Greek alphabet which had come by the Mediterranean route." It proves out that our letter *y* for the thorn-letter is a mere substitute of writers and printers for the thorn-letter. People who wish to appear as antiquarian or philologic scholars, without giving themselves the trouble of learning a single fact to justify the pretense, constantly pronounce, even indite, imitation lines, in which the modern printer uses a *y* for the old *th*. Every Fourth of July hundreds thus air their assumed antiquarianism by pronouncing y^e as *ye* instead of as *the*. When the old printers could not "space out" properly, or had no type of the thorn-letter, they used *y* instead of *th*, and *th* was represented by *y* in such words as y^e (for *the*), y^t (for *that*), y^u (for *thou*), etc. In old medieval manuscripts are found: *ve, yai, yair, yaim, yat*, etc., and the words should be pronounced *the, thai, thair, thaim* (them), *that*. The alphabet of the Chinese is not properly an alphabet, but has stuck fast in the pictogram stage; it is composed of some 40,000 conventionalized pictures. All words are of one syllable, and position in writing, and accent in speaking give the grammatic relations and functions. The Japanese have advanced to a syllabary alphabet, but there stopped

short. This was a great improvement on the Chinese, but still appallingly clumsy. There was an interesting account in the newspapers recently of the work of a typesetter in a Japanese printing-office. The letters are so numerous that little boys have to run all about a large store-house for types to get those desired. When the boys bring the proper letters the typographer puts them in place.

We thus recognize one of the advantages of a small alphabet. Combined into words these letters tell us and only by inference all we know of the civilization, character, and even of the very existence of some races. The data of the great race called the Aryan, the father of all European peoples and literatures, is thus guessed out from its etymologic rags and tatters that have come down to our modern languages. The Aryan was a "dolichocephalic blonde," and his house was circular, roofed with clay, only late supplied with windows, the walls made of twigs; no bricks or stone were used. Our Aryan forefathers were rovers, and their wagon-wheels were of one piece, without spokes or felloes. Cattle-rearing was a chief occupation, although they had no domesticated hens, ducks, or geese. Their clothing was originally composed of hides and pig-skins, but later they learned how to plait, weave, and spin wool and flax, and they fastened the blanket at the left shoulder, similar to the toga of the Romans. Of course they were flesh-eaters and did not always cook their meat. Wild fruits and cereals were also common articles of diet, also milk—at least cream and whey. They probably knew nothing of cheese. Mead and honey were in use, but not wine. Strangers and enemies were at first one, as is likely to be the case with primitive peoples, although hospitality in time became a duty. They were an inland people unacquainted with the sea. A picture of the Swiss lake-dwellers, and a glance in our museums at the articles found beneath these houses on piles over shallow water, give us a pretty good conception of them. It is further suggested that at first the wife was obtained by capture (later by pur-

chase) and that she merged her individuality in that of her husband's family, disproving the matriarchal theory as applied to the Aryans—indeed the wife was almost a chattel. Time was measured, the month by nights, and the year by lunar months; the hardships of winter and of night were deeply impressed upon the imagination, a glimpse of which is given in our own words *fortnight and sennight.* Where they lived, what was their religion, how they migrated and fathered us, these and many such things are also intimated in the word-stems they have handed down to us.

Taking our words as we find them and going back step by step in their history, we learn that like the spirit which begets them they are constantly undergoing change. A new subtle meaning is always being put into them and they lose their old significances with a silent and secret elusiveness. When we collate them after a century or two they are like antiquated photographs, and from still farther dates and countries they are strangely exotic. Psychic revolutions and social histories are thus focussed in them.

There are, for example, words now applied only to women which were once predicated of both men and women. This can signify only that women monopolized the qualities thereby expressed, and that the men unlearned them, so that they became ludicrous as male characteristics. How much longer we may call a man a *flirt* is a question. The word is evidently going the way of

Coquet, which was once as much a male as a female virtue. Women will find it difficult to prove, at least etymologically, that they have not trifled with love more than men have.

Hag was once applied to men also. It perhaps tells a sad tale of the cruelty to old women, who were forced out of the town, lived in the bushes, became more hated by their methods of "getting even," their superstitions, and those of their cruel fellows.

Witch. Piers Ploughman, and even Beaumont and Fletcher, still applied this word to men, but women evidently monopo-

lized the business of the wizard, soothsayer, or wiseacre, and so became by still later degradation the only witches.

Termagant was once applied to men as well as women. It might appear ungracious to press this matter before ladies!

Man, strange as it may seem, was once applied to woman. Its significance at that time seems to have been "the thinking animal." Was it woman's fault or man's egotism that thoughtfulness was claimed as his attribute alone? Either horn of the dilemma it is not safe to seize.

Girl was applied by Piers Ploughman to both sexes. Does the fact tell of the indiscriminating age when the child was "it," an age, I believe, not wholly past.

Hoyden was spoken of both boys and girls. The seriousness of life made the boys, alas, scorn the playfulness which girls might still longer exhibit.

Hussy. To be done with discourtesies, we can note the sorry glimpse into domestic infelicity given by the transformation of *housewife* into hussy; and of

Gossip, which has a peculiarly distressing history. It meant once, Skeet tells us, god-sib, i. e. related in God, by the sponsor in baptism, who, alas, became a crony and tale-bearer of scandal.

Nobody ever pays any attention to dead words, and yet there are thousands in every language, coffined, begraved, and epitaphed in lexicons old and new, pathetic in their uselessness, awkwardness, and denied immortality. They are simply the only records left of myriads of the failed experiments of mind with life. They have real and many ghosts. Skeat has gathered and classified a type of words he calls "Ghost-words." But the name is inappropriate because they never had a ghost—they were never even born. The doctors would call them examples of pseudocyesis. They are words imagined, or the result of blunders of copyists, printers, etc. I have lately come upon one which may illustrate and serve as an addition to the list. An amanuensis of an old lexicographer took down the dictation of *concurro,* and without awaiting the definition hastily jumped at the meaning with an interjected

question: "Concur, I suppose?" The disgusted etymologist pettishly jerked out, "Condog, rather!" and down went the synonym, so that *condog* may be found in some old word-books as a grave synonym of *concur*.

Just as a person, a family, or a race, may degenerate or rise, weaken or grow strong, change occupation and character,—so it is with words. Not only are there dead words, but there are thousands of old and dying ones, also demonstrating failures and lived-up usefulness, or fruitless wastes of mistake and misguidance. The teratology of philology awaits its scientist and historiographer. There are tramp-words, criminal words, pathologic words; insane, idiotic, and paralytic words. I do not mean words or argot used by these classes of people, that is another affair; but words that bear the same relation to language as these sick, vicious, and crippled people do to society. All of which is but a corollary of the law that Ψυχή lies behind and causes Φύσις, or that physiology is mothered by psychology.

I cannot forbear mentioning a few examples of degeneration and of ennobling. Of the latter class there are but few; and how this fact fixes the attention and how it tallies with the lives of families and of nations!

Emulation, by Shakespere and older writers meant envy. There was energy and aspiration in the people who made it mean what it now means.

Companion. The value of friendship is nobly attested, even under adverse circumstances, by the change in signification from that of *a low fellow*.

Spinster. Women, as is usual and right, come by their own and proved their quality by transforming the meaning of this word which once denoted a woman of evil life. The same truth is found in

Feminine, now signifying womanly, which once, at best, meant only womanish.

Liberal, once signified unscrupulous. Englishmen learned that liberality may be separated from chicane and deceit, just as with

Generous they proved that the common people, not only those of noble birth, could be unselfish and magnanimous.

Popularity, it is feared, may be in present danger of a reversion to its older meaning of courting applause. It had risen to better uses, but if the people love bad traits and demagogic popularity, we shall be as badly off as in predemocratic days.

Enthusiasm. "Our ancestors," says Leslie Stephen, "understood by enthusiasm the state of mind of the fanatical sects of the Commonwealth, or of the 'French Prophets' of the eighteenth century. An enthusiast meant a believer in sham inspiration. The gradual change of the word to a complimentary meaning marks the familiar change which was also shown by the development of sentimentalism in literature."

Respectable. "Chesterfield speaks of the hour of death as 'at least a very respectable one,' and Hannah More thinks a roomful of portraits of admirals 'a respectable sight.'"

Imp, or **Brat,** once meant simply a child. It is sad to think that the loveliness of children should be either so misconceived or so nonexistent as to bring shame and contempt into the terms.

Idiot was once used only of a private person, one not interested in public or state affairs; then of an uneducated simple-minded person; then of an ignorant and selfish one, and so on. How few were the interests of people, how fatefully dominant the affairs of the government, while the Greek ἰδιωτης was becoming the English *idiot!*

Base. In the same way, what pride filled the hearts of the maligners, and how spiritless were the silent poor while this word passed from *humble* to its present degradation.

Slave. Before Slavs were slaves, *slave* meant *glorious.*

Disease once signified discomfort only, and by

Misery was understood *avarice.* The logic is as plain today.

Knave once denoted simply a servant, or boy, like the present *Knabe.* Were they knavish or were the masters supercilious and neglectful? The same question applies as to

Varlet, which was once the title of a groom.

Libertine, even in Shakespere's time meant nothing more than a free-thinker. It is very probable that libertines used free-

thinking as an excuse for libertinage, and also that the self-righteous applied the term with egotistic indiscrimination.

Miscreant, once simply an unbeliever, shows also the *odium theologicum*, rather than that unbelievers were miscreants; just as an

Infidel need not be a heathen or atheist to be *untrustworthy.*

Cupidity is noteworthy for its remarkable transformation, as it is, of course, derived from *cupid*, who is supposed to laugh at avarice and covetousness. The Latin *cupere* meant simply to desire. That the engrossing object of desire becomes money is plain enough in the present-day character of Cupid contrasted with our definition of cupidity. Of an avaricious man by the name of Love, a mot-maker said "Cupid is the God of love, but cupidity is Love's God."

Sensual, Bacon properly applied to all the senses. The engrossing domination of one sense is shown in the present limitation. The same may be said of

Lust, which Bishop Hall thought of as *eager desire* of any kind.

Egregious. Milton's use was simply that of *remarkable;* ours is *remarkably bad.*

Silly, once meant *timely*, then *innocent*, then *simple* or *foolish.* On German tombstones one will to-day find it to signify *blessed* or *beloved.*

There are hundreds of words with most noteworthy origins or histories, in which interesting and startling lessons are taught. *Assassin*, e.g., tells us of that astounding "Old Man of the Mountains," who defied governments, and created an army of death-dispensing and death-loving slaves by means of opium narcosis, a mimic paradise, and assassination. The pawnbroker's three balls tell us of the pills of the medical or Medici family, while still physicians, before they became bankers. The barber's pole is a whole chapter in the history of surgery. What a glimpse into history with its roads, caravans, etc., lies in the word *trade*, the *path trodden!*

Many such words could be listed by the pagefuls and illustrate the sad truth that men are quick to see evil and misrepresent good. One needs to go over such lists alone,

ponderingly, and tracing out the subtle mutations, the numerous sidepaths of alluring, if frequently of mournful suggestion. There is no novel so dramatic and interesting as Skeat's etymologic dictionary.

Many words in present use "may be caught in the very act" of debasement. Only one may be cited. We English are nearing the danger-line in the word *sentiment.* A man would prefer to be spoken of as having a good character rather than as a man of good feeling, although it was only a little while ago that he would be more highly honored by the title of *a man of feeling.* It is a doubtful compliment to call him a man of sentiment, but any of us would deny that we are ever sentimental; while to call a man a sentimentalist would be positively insulting. We smile derisively at Continental men kissing each other. The histories of words are often the degree-marks of the thermometer of national emotions, and so of national character. The disgusting liar Mercier cried out to Labori, "Our military justice is not the same as yours," and good men thank God for the truth spoken by the stupid blunderer, a truth very different from that meant by him, when he sought to introduce the definition of honor as dishonor, and to define justice by the word injustice. Fortunately, words as well as national character change somewhat slowly; at least it takes more than a generation of soldiers utterly to reverse the significance of the noblest of words.

The comforting result which we English will come to is that though the debasement of words is common enough with us, it is less so than with other people. Virility, dignity, and honor, without undue self-flattery be it said, are Anglosaxon birthrights, and though they may lead to prides, egotisms, and overstrengths, they serve to put soul and self-possession into words, and to prevent good ones from growing weak and morbid. The essence of the matter is by means of changes in word-formation and word-meanings to observe the psychic histories of the peoples of which the words are merely the pointers and relics.

To a biologist the charm of etymology and philology is psychological. We get nearer the subtle and elusive reality of spirit through words and language than in any other way, and when the psychologist is doubled by the historian we shall have something worthy of the name of a philosophy of history.

But the phonologist must be a musician! Because only through an adequate realization of the function, power and art of music and a fusion of its science and art with that of linguistics, shall we have a genuine comprehension of the history and meaning of word-formation and language-making. In a general way the same laws underlie both music and etymology, and in a large yet clear sense, progress in the one is bound up with or analogous to that of the other. Take as a single illustrative fact the simple truth that half of the art of singing consists in getting singers to open their mouths and to make pure vowel tones. To this vowelization of music there is an exact phonologic analog in what one may designate the vowelization of language. Does the unconscious, with the added conscious art-spirit of a people find expression only in buildings, painting, sculpture, dress, poetry, and music? And not in the first and most direct, most immaterial, ever living product of the spirit—language? The question is its own absurd answer, but in the science of philology the fact seems hardly to have been suspected. I have looked in vain among the official philologists for any statement of a fact which appears to me far more primal and fundamental than Grimm's Law or Verner's Law,—the fact that the more barbaric a language, the nearer its speakers are to the animal; the more are vowel sounds strangled in the pharynx, and hawked, clicked, clucked, coughed, or buzzed, forth. The progress toward civilization is accurately gauged by the progress in vowelization, and in extinguishing the function of the pharynx as a checker or modifier of sound in the production of words. There is not a truer or more accurate gauge

of the actual or possible civilization of a race than this fact. Grimm was a German who used the word *Ich* a hundred times a day and surely several times every *Nacht* and every *Woch*, and yet he began his law with a consideration of the progress forward, from the back of the tongue, of the gutturals, to the dentals and to the labials,—*i.e.*, only of the mutes or stops—ignoring the first journey from the pharynx and root of the tongue to the middle and front of the mouth. This seems unaccountable. In English we have wisely utterly stopped all these *Ich*, *Nacht*, and *Woch* throaty abominations, just as the Germans, high or low, had previously discarded numerous indescribable glottal buzzes, pharyngeal clucks, gurgles, coughs, and hawkings, of peoples "pawing to get their hinder parts free" from animalian progenitors, and vainly trying to swallow, vomit, or hawk out their makeshift of language from pharyngeal or esophageal depths.

The significance of Grimm's law is that, although he began in the middle of the process, and not at its beginning as he should have done, when he did catch sight of it the progress of phonation consisted in the least possible interruption of pure tone, and that progressively by parts of the mouth more and more towards the front—*i.e.*, the point of the tongue, the front teeth and the lips. Some modifications and checkings and stoppings of vowel-sounds there must be because the continuous tones are insufficient for the creation of the large number of sounds and words required in thought-expression. But English, *par excellence*, proves that the modifications by the pharynx and root of the tongue are not only unnecessary but are artistically abominable.

Parenthetically, I may note two morbid variations, or two *impasses*, which English phonologic evolution and good sense have avoided, and we may therefore believe that in the progress of civilized phonology, these bad experiments will never be repeated. The French never do anything that they do not overdo it, and hence their language evo-

lution illustrates the psychic law most patly. In the progress of vowel-modification from the throat forward, the French first snuffed a part of their language from the pharynx up into their nose *via* the postnasal and nasal passages. These parts in normal beings, animal or human, are designed and used for breathing, but the Frenchman characteristically knew better and he learned to blow half of his words out of his nose. The other half he bites, spits, or kisses off in a petulant, superficial and dilettante way from the teeth and lips. His egotism and superficiality have made him enslave and tyrannize over almost every pure vowel-sound, and his language at best is a lifeless, fragile, crystalline toy, not a vital organism.

The umlauts and *W* sound of the Germans, also have lessons for us. They are extremes of lip-modifications, but are too clumsy and indicative of too much good will rather than malicious, morbid, conceited, or selfish. It is not pretty, this rolling and sphinctering of over-mobile lips to say *oel, wir, wo, ueber*, etc., but the vowel-sounds are not stopped, or smelled, or twanged, or spat out.

Besides the foregoing, there are many facts urging the conception that the character of a people and of its language is almost identical. Hold to the thought that a language is the racial soul expressing itself, is character talking, and no other conclusion is possible. Is the German not as awkward, plebeian, harsh, vital, guttural, adaptive, profound, as his language? Does not the Spaniard promise as much and perform as little as his speech? Is he not as cruel, orotund, verbose, pompous, good-mannered? Are French people not as selfish, hypocritical, tyrannous, pretty, superficial, reckless, logical, and moralless, as their tongue? And English,—how perfectly it answers the common sense, the vigor, the dignified, concentrated, absolute and accurate self-possession of its speakers! When Byron preferred the soft "bastard Latin" to the native tongue he affected to stigmatize, he told a good deal more than he was conscious of. We must remember it was

Byron who spoke, and his term *bastard* was and remains most apropos. Bastards are prone to procreate bastards. A language may have a bad ancestry, and may be too liquid and too watery, as may a people; witness the Italy of today. The admirable restraint, the marvelous conservatism, whereby the English language and English people have preserved a rugged virility, solid bones and upright backbones beneath vigorous muscles, is solely the reason of England's greatness, present and to come,—is the reason we had a Shakespere and a Cromwell; it is also the reason for what all admit, that this language, simple yet herculean, limpid yet on occasion glacial, is destined to become the language of the entire world of men.

What a suggestive and revelatory fact is the unique monosyllabic character of English. Latin has been praised for its conciseness, but take the common names of the human body, those things that are nearest and dearest to a man's self, his senses, his family, his domestic animals, and the most important natural things among which he lives and with which he works; compare them with the words for these things in Latin:—

ENGLISH.	LATIN.	ENGLISH.	LATIN.
Head	Caput.	Hand	Manus.
Skull	Cranium.	Thumb	Pollex.
Face	Facies.	Hip	Coxa.
Hair	Crinis.	Knee	Genu.
Ear	Auris.	Skin	Cutis.
Tongue	Lingua.	Throat	Guttur.
Cheek	Gena.	Back	Dorsum.
Scalp	Pericranium.	Wrist	Carpus.
Brain	Cerebrum.	Arm	Lacertus.
Eye	Oculus.	Finger	Digitus.
Nose	Nasus.	Nail	Unguis.
Lip	Labrum.	Toe	Digitus pedis.
Chin	Mentum.	Thigh	Femur.
Neck	Cervix.	Shin	Tibia.
Breast	Pectus.	Heel	Calcaneum.
Lungs	Pulmo.	Blood	Sanguis.
Heart	Cor.	Nerve	Nervus.

ENGLISH.	LATIN.	ENGLISH.	LATIN.
Sight	Visus.	Vein	Vena.
Hearing	Auditus.	Pain	Poena.
Touch	Tactus.	Dog	Canis.
Smell	Olfactus.	Rat	Sorex.
Taste	Gustus.	Cow	Vacca.
Lame	Claudus.	Hen	Gallina.
Blind	Caecus	Goose	Anser.
Deaf	Surdus.	Cat	Felis.
Dumb	Mutus.	Horse	Equus.
Sick	Morbidus.	Pig	Porcus.
Fire	Ignis.	Duck	Anas.
Air	Aër.	Bull	Taurus.
Water	Aqua.	Earth	Terra.
Rain	Pluvia.	Clouds	Nubes.
Storm	Procella.	Hail	Grando.
Thaw	Glacii Solutio.	Frost	Gelu.
Heat	Fervor.	Wind	Ventus.
Cold	Frigus.	Work	Labor.

Here are seventy words, all but three of which are of one syllable. To express these most used of all words the Romans had to enunciate one hundred and sixty-six syllables. This is a convincing proof of the compactness and decisiveness of the Englishman's character, not unallied with his taciturnity, his control of territory seventy seven times as extensive as the homefarm, and a foreign investment of twenty-five thousand million dollars.

I do not know if others have noticed one method whereby this shortening of our language is proved to be an active process today: the tendency despite logic and repugnance to throw accents back from penult to antepenult, and even to the fourth, sometimes to the fifth syllable. We no longer say *re-ven'-ue*, etc., and in many such words as *for' mid a-ble* the trend is obvious. In compound words the accent is thrown back half-a-dozen syllables. The one striking result is to make us disregard and even scorn the ending syllables, and finally to lop them off entirely, as in *domestical*, and a thousand similar

words. We shall be soon saying *scientific*, instead of *scientifical*, and *scientificly*, instead of *scientifically*.

Progress in the English language and in the English civilization have gone on step by step, ever united and ever interacting, since English history began. Traces of the banal teutonic throatiness of vocalization, of a noncomprehension of I, still stick in the untutored Scotchman's pharynx, but as the Englisman's virility and selfconsciousness strengthened, he rid himself of all of them. As the national consciousness grew, the national language also freed itself from tyranny, and the vowelization became more free. The whole history of England is epitomized in the history of those most important and significant of all words, the pronouns, and is focalized in the story of the commander of them all, the grandest word of English, or of any language, the freed, dignified, splendid I. Magna Charta could never have been forced from kings or aristocrats by people who swallowed their *ego*, hissed their *ich*, or choked or hiccoughed with their *ik;* it came only to men conscious of their own nobility and valor and who expressed these qualities by the glorious English I, rolled forth with purity, self-control, and self-consciousness. That word is the revelation of the ideal of all history, the promise too of civilizing evolution.

The animal or the savage man moved by pain, desire, joy, or any one of hundreds of emotions, expresses these by sounds which are recognized as more or less appropriate or indicative; they objectify the soul, as it were. The sounds of inanimate nature are anthropomorphicly construed by the poetic imagination as suggestive of similar psychic movements and conditions. How far we judge correctly of them, or how much, for example, we read into the songs and calls of birds our own moods and phonologic habits, are questions as doubtful as they are interesting. But more or less accurately interpreted we have gone on until there is in the mind of every sensitive and cultivated person a considerable unity of result as to the significance

of musical sounds and of music. The vocal or instrumental repetition of sounds similar to those of a groan, a roar of defiance, a shriek, the "come to me" of the woodthrush, or the susurrus of an evening zephyr, induce in us emotions, faint or strong, according to our sensitiveness, like those aroused by the original sounds in the original circumstances. The mind in one of its most constant phases thus becomes itself a musical instrument, upon which life plays the thousand tunes and symphonies of daily joys and sorrows. But the mind is the listener also, as well as the player, and sits silent behind the instrument, to learn how others feel and what they think; the player also as well as the listener, to tell the others how it is with this one soul. That in music there is this more or less accurate interchange and perfect interpretation, every one will admit.

My thesis is that in linguistics, and especially in phonology, in language *quâ* language, there is a correspondence hitherto unrecognized, almost an identity, with the musical fact of psychic expression, and with musical significance, interpretation, and progress. In the language itself, and not only in what the words mean, there is a reflex of the creating mind of the race. A language is a musical or an art product, and as surely as any other will tell of the character of the artist. That the artist is a millionfold personality instead of one individual does not change the law. A Gothic cathedral that required a peculiar people, myriad hands and a thousand years to create, speaks no more peculiarly and distinctively of the ψυχή of its builders than does a Gothic language. Indeed, one may say the stones speak far less clearly and precisely, because the language is immaterial. I would believe that this truth extends to the veriest details, to the mutations of the forms of single words, and to the nuances of pronunciation themselves. Every dialect, every patois, especially our American Negro language, is incontestable proof of this, and no better could be desired than English pronouns. Pronouns are the most

precious and most used of all words, and yet how late in evolution they arose in perfection. Even the child of the most cultivated parents naturally says, *Georgy* wants, *Boy* wants, before he says, *me want*, and this before he learns, *I want.* All our English pronouns are monosyllables and those nearest the personal life are the most perfectly vowelized; the one consciously designating the subjective life, *I*, being pure tone, and the next most honored, *you*, but little less pure, with the slightest added touch of modification in *we.* Notice that in no other Teutonic tongue is the representative of the conscious self a pure tone. We have *Ic*, *Ie*, *Ik*, *Ich*, *Ik*, *Jig*, *Jag*, *Ek*, but not *I.* All the "Laws" of all the philologists cannot explain the fact except psychologically. Note also that our *I* refuses to be mangled and shunted into the next following word, as in many languages whose people love to be tyrannized over and are incapable of holding their I with dignity and freedom. The French, for example, elide the half, the vowel, too, of their *je*, and *me*, whenever apportunity offers, while we will do nothing of the kind. *I'm* for *I am*, is a poor colloquialism and we are ashamed to print it, and should be ashamed to say it.

Notice the fact also that the same growing sense of freedom of the English spirit has shaped its language with a perfectly analogous freedom. Never before was there a civilized language so absolutely grammarless. We have stopped the nonsense of case-endings, inflectional, syntactic, and terminologic puzzles, and have given our words a single form. To put that in biologic language, we have advanced from morphology to physiology, from form to spirit. The spirit is so free that we can make almost any noun into a verb, and any verb into a noun. "I first postaled him and then I wired him," said a man to me last week, "but I could get no wire from him." Viewing this wonderful dual march of English linguistic and English political freedom, how utterly silly the blindness, dogmatism, and materialism of "*Die Lautgesetze wirken blind, mit*

blinder Nothwendigkeit." Blindly indeed act the laws of phonetics to him who sees no racial or common Consciousness behind individual consciousness, no

> "One far-off divine event
> To which the whole creation moves."

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