

A. Findlay, "Colloidal Matter and its Properties"; and Sir J. J. Thomson, "Spectrum Analysis and its Application to Atomic Structure." The Faraday discourses began on January 17, when Sir James Dewar gave a lecture on "Liquid Air and the War"; and other discourses were announced by the following gentlement: Lieutenant Colonel A. Balfour, Professor H. H. Turner, Professor J. G. Adami, Professor C. G. Knott, Mr. A. T. Hare, Professor J. A. McClelland, Professor H. C. H. Carpenter, Professor A. Keith, Professor W. W. Watts, Sir John H. A. Macdonald and Sir J. J. Thomson.

THE United States nitrate plants were built with the greatest urgency to meet imperative military necessities. These immediate military demands were extinguished by the signing of the armistice. The problem now is to endow these plants with the maximum peace-time value, while maintaining and enhancing their war efficiency. This involves new questions in the technique of fertilization, and requires not only constructive but creative work. Following a careful study of the situation, it has been decided to establish forthwith a civilian organization, under the interdepartmental control of the Secretaries of War, Navy, Interior, and Agriculture, to be known as the United States Fixed-Nitrogen Administration, and charged with all the government's fixed-nitrogen interests. In due course the nitrate plants and other interests now administered by the Nitrate Division of the Ordnance Department of the Army will be turned over to this new fixed-nitrogen administration. Mr. Arthur Graham Glasgow has been requested to act as first administrator and to be responsible for creating the new organization.

UNIVERSITY AND EDUCATIONAL NEWS

THE Oberlin College administration has appointed a special faculty committee to stimulate original research among members of the science division. Hereafter when appointments are made to the teaching staffs of the various science divisions special consideration will be given to candidates who have already

demonstrated some particular degree of fitness in conducting original research.

RECENT demands for men skilled in geology have led to the development of a special course in practical geology which is being instituted at the engineering schools of Columbia University. The course is three years in length and is intended to train men for advisory and professional work in connection with engineering and other operations involving a knowledge of ground structure as well as for special studies of mining prospects and developments and other more formal geological investigations. The course leads to the degree of engineer of mines in geology.

DR. GEORGE NORLIN, professor of Greek in the University of Colorado, has been elected president to succeed President Farrand. Dr. Norlin was elected to the presidency by the regents on the recommendation of a committee of the faculty.

DR. RALPH R. DYKSTRA, for eight years a member of the faculty of the Kansas State Agricultural College, has been appointed head of the department of veterinary medicine.

DR. A. B. DAWSON, Ph.D., (Harvard, 1918), professor of biology in the Mount Allison University, has been appointed assistant professor of microscopical anatomy in the Loyola University School of Medicine.

THE senate of London University has appointed Dr. Reginald R. Gates, M.A. (Mount Allison), D.Sc. (McGill), Ph.D. (Chicago), for three years as from January 1, 1919, to the newly-established university readership in botany tenable at King's College.

DISCUSSION AND CORRESPONDENCE

GERMAN TERMS IN ANATOMY

THE Anatomical Society of Great Britain and Ireland, at a meeting on March 1, 1918 at King's College, London, received and unanimously adopted a report by its Committee on Nomenclature. It resolved, without a dissentient vote, that the following paragraph of the report should be circulated among the several corporations and other bodies interested in the progress of medical education:

"The Committee, after consideration of the matter, unanimously reports that it sees no reason for departing from the use of the old nomenclature as the recognized medium of description for employment in anatomical textbooks and departments, or by medical men in general; on the other hand, it thinks that there are very good reasons to be urged against the adoption of any other nomenclature for this purpose."¹

In accordance with this vote, inquiries are being made as to the attitude of various institutions toward the "old terminology" and the "new or Basle terminology," for it is recognized that "an educational problem of far reaching importance is at stake, on which the United States of America and the British Dominions have the right to be heard and their opinions considered." Meanwhile the arguments against the Basle terminology, which without any edict to enforce it, but through its inherent excellence, has been so generally adopted, are set forth by Professor Keith in the *British Medical Journal* of July, 1917. "Cursed be he that removeth his neighbour's landmarks" is his text, preceding the examination of what he terms "a wild ass movement" whereby a scheme of names is "being forced on English-speaking medical men." From all of which it would appear, to one who finds merit in the Basle nomenclature, that there is danger that great harm may be done through rulings of organizations, moved at present by justifiable anti-German feeling rather than by impartial considerations of science. Is this a favorable time to act in such a matter?

The Basle nomenclature, although prepared by a distinguished committee of German anatomists, is not German, but Latin, and there is no doubt that an international terminology for anatomy ought to be in Latin. It aims to be in correct Latin without abbreviations, and is an impressively scholarly achievement, placing anatomical terms on a far more dignified basis than those current, for example, in

surgery. Whatever may be said of an occasional error in judgment—and there is extraordinary difference of opinion in the selection of these errors—the principles of the system are sound, and instead of being abandoned, should be extended to other branches. How difficult this task would prove is shown by the failure of international committees to make any progress with an embryological terminology or with one for comparative anatomy. These failures show the skill with which the Basle nomenclature was produced. The real question is, shall it be abandoned because of its German origin?

German in origin it certainly is, although the committee appointed certain collaborators from other countries and expressed its appreciation of the cooperation of Professors Thane, Romiti and Leboucq. No American member was appointed, partly because of distance and partly because Americans seemed committed to a "telegraphic system" whereby, for example, the vena cava posterior was designated the postcava. There is no defense for this system, and the committee acted wisely. It evidently appreciated Huxley's maxim that in the multitude of counsellors there is wisdom—in a few of them. So ten able anatomists worked by themselves for six years to simplify and improve nomenclature along the sound principles which they had adopted. We can not call this "the caprice of a handful of enthusiasts."²

The Basle nomenclature is surely not beyond criticism, but criticism should be concerned first of all with the principles involved. If those are sound and the system can be accepted, as it has been generally, then criticism as to the application of those principles in special cases may be constructive. What seems unprofitable is for every one to select here and there a term objectionable to himself and to set that forth in condemnation of the whole, as is usually done. Is it better to call the chief foramen of the mandible the *mandibular foramen*, or the

¹ This entire paragraph is quoted from the *British Med. Journ.*, March 30, 1918, p. 378.

² Editorial, *British Med. Journal*, July, 1917, pp. 121–122.

dental foramen? A dental foramen should be a foramen of, or pertaining to, a tooth, but would be applied in this case to a foramen of the mandible which transmits a nerve with branches to the teeth. Is *musculo-spiral* a well-constructed designation for a nerve containing both sensory and motor fibers, which passes somewhat spirally to the radial side of the arm of which it is the chief supply, or is it better to call it the *radial nerve*? The writer of the editorial previously cited prefers dental foramen and musculo-spiral nerve, together with several other rejected names which can not be discussed here. For example, he considers that a nerve which passes through a notch in the upper border of the scapula is properly designated in the Basle nomenclature the *suprascapular nerve*, but he believes that the notch of the scapula through which it passes is faultily named scapular instead of suprascapular. Here there is apparently an unsuspected precision in the Basle distinction which makes a part of the scapula *scapular*, and a structure above the scapula *suprascapular*. It should be noted that the editors announce that they would be the last to reject this system because of its German origin. On its merits and demerits they counsel British physicians not to accept it, even though "it has now been introduced in our most widely circulated manuals of anatomy."

Whatever terminology American anatomists may finally adopt, and they are, as every one knows, using the Basle nomenclature very extensively, it would be a cause of great regret if any issue were raised with their English colleagues, whose preeminence in descriptive anatomy is acknowledged, and whose Gray, Quain and Cunningham, the last with the Basle terminology, have been so profitably used for the instruction of our students. Recognizing fully the annoyance from petty changes in names and the great provocation, it may yet be hoped that the present opinion of the British anatomists is not final.

But in another important matter of terms, Americans ought certainly to change their practise and follow British usage. This is in

the rejection of *anlage*, which indeed is only a single term, yet one used so frequently that it gives German color to a large part of our embryological literature. Some Americans never use the word, but others display it five times on a page, and it perhaps deserves special attention.

Wolff and the early embryologists used a variety of terms for *anlage*, such as rudimentum, tentamentum, fundamentum, primordium and initium, and Pander in his notable treatise in 1817 was content with Rudiment and Anfang, *e. g.*, die Anfänge der Wirbel. Von Baer used Anfang to some extent but preferred Anlage, changing Pander's phrase to "diese Anlagen der Wirbel," and perhaps through Von Baer *anlage* came to be a technical term. Americans studying in Germany thought it essential to borrow the word, since rudiment had come to imply a stunted organ, and fundament had an anatomical significance quite at variance with that desired. Either term may mean, however, exactly the beginning, the first indication, or primordium. So important was the use of *anlage* considered, that its definition has taken a prominent place in the introduction to certain American text-books, and the writer was among those taught that it was a *sine qua non* in embryology. Left in doubt whether the plural were better written *anlagen* or *anlages*, years ago I visited the venerable rhetorician, Professor Hill, for an opinion. "Is the English language then so poor that this idea can not be expressed without a foreign word?" he asked. "Oh yes, certainly, sir," I replied, with many reasons. "Then," said he, "if the language will be enriched thereby, it should be adopted, and probably the English plural would be preferable."

The fact is, nevertheless, that the idea can be conveyed in English with far greater accuracy through the abundance of expressions available. This may be shown by citing conspicuous instances from our recent journals. "The *anlage* and morphogenesis of the chorda dorsalis," seems to mean "the origin and development of the notochord," or perhaps "the

earliest stages and subsequent transformation." "The equivalence of hematopoietic anlagen" is, as may be read in the article, a reference to hematopoietic centers. This paper states that the endothelial cell is "a hematopoietic anlage," that is, a *source* of blood corpuscles. That it does not give rise to blood-cells (is not such an anlage) is the converse of this proposition, as recently expressed in the *British Journal*. All organs in young embryos instead of being called hearts, stomachs, etc., may be called anlagen of the same, giving abundant opportunity to employ the word, and necessitating references to "early anlagen." In numberless cases it is used in place of a more exact term, *e. g.*, anlage of the liver, for hepatic diverticulum, or is introduced redundantly, as "the evagination which forms (the anlage of) the arm." Its entire absence from many of the most technical and best expressed embryological papers shows clearly that it is not needed. Is the English language enriched by it? It certainly could be employed in general literature:

Tall oaks from little anlagen grow,
Large streams from little anlagen flow.

The child is anlage of the man; and Lowell might exclaim, Puritanism—the anlage of democracy!

But in the interest of scientific accuracy and purer English it should be deleted. The term, if it remains, will mark the period of German dominance in American embryology.

FREDERIC T. LEWIS

A SIMPLE COVERING DEVICE FOR THE OCULAR OF THE MICROSCOPE

TO THE EDITOR OF SCIENCE: I have experienced so much trouble and expense from the injury to eye-glasses by contact with the ocular of the microscope, that I venture to describe my experience in solving the problem in the hope that it may be of interest to others similarly annoyed. Not being able to use the microscope without the correction to vision afforded by the eye lenses, I found for a number of years that the harder glass in the ocular invariably—in the course of six months or a

year—covered the eye lenses with a maze of minute scratches and abrasions, rendering them unfit for further use and necessitating a very considerable expense in the purchase of new lenses, to say nothing of the lowered efficiency of the damaged glasses in the interim.

I first secured from one of the leading optical companies a pair of heavy rubber caps such as are used by them as a dust cap to protect oculars in storage. By cutting away a circular opening in the center of the cap (do not make it too large) I found the rim of rubber kept the two sets of lenses from coming in contact. These caps can readily be shifted from one ocular to another as occasion demands, or the cost is so slight that several sets can be afforded. They are, however, rather cumbersome and force the eye away from the lens perhaps an eighth of an inch, which is not always satisfactory.

A much simpler and, on the whole, more satisfactory device may be made by taking a circular piece of ordinary sheet rubber (such as dentists use extensively) about an inch and a half in diameter; cutting a small hole at the center, and stretching and tying it securely with fine thread below the knurled cap of the ocular. This allows the eye to approach very closely to the ocular; and, besides thoroughly safeguarding the eye-glasses from injury, it does away with the very annoying noise caused by the constant shifting of the two glass lenses on each other.

I now have every ocular covered in this way and shall never again be without the comfort and economy so afforded.

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CURIOUS DIFFERENTIATION IN FROST EFFECTS

TO THE EDITOR OF SCIENCE: A curious differentiation in frost effects on foliage came under the writer's observation yesterday. On Friday morning, November 1, a self-recording standard thermometer registered 32 degrees F. as the minimum during the preceding night, followed by a record of 31 degrees the follow-