son, in respect of the post held by him at University College.

DR. ORESTES H. CALDWELL, electrical engineer, has been named science director of the Hall of Science of the National Electrical and Radio Exposition, to be held at the Grand Central Palace from September 18 to 28.

THE Dutch and French Governments have officially recognized the International Office for the Protection of Nature and have appointed the following delegates to be their representatives to the general council of the office: *Delegates for Netherlands and Dutch East Indies:* Dr. P. G. van Tienhoven, president of the Society for Nature Protection in Netherlands; Dr. W. A. J. M. van Waterschoot van der Gracht, chief engineer of Mines; Professor Dr. L. Ph. le Cosquino de Bussy, director of the Colonial Institute, Amsterdam; Dr. J. C. Koningsberger, former Minister of Colonies. *Delegates for France and Colonies:* M. Bolle, conservator of forests, Ministry of Agriculture, Paris; Professor Dr. A. Gruvel, general secretary of the National Committee for the Preservation of Fauna and Flora in the Colonies; Raoul de Clermont, president of the Section for Nature Protection of the Société Nationale d'Acclimatation de France.

Nature reports that Dr. R. F. Lawrence, who has been assistant in charge of reptiles, amphibians and arachnids at the South African Museum since 1922, has been appointed director of the Natal Museum, Pietermaritzburg.

THE Secretary of the Interior has appointed as executive secretary of the Division of Geographic Names Dr. George Curtis Martin, of Corvallis, Oregon, who was for twenty years a geologist with the U. S. Geological Survey. The Division of Geographic Names, successor to the U. S. Geographic Board, was set up by Secretary Ickes under the authority of President Roosevelt's Executive Order of April 17, 1934.

DR. OSCAR RIDDLE, of the Carnegie Institution of Washington, sailed on July 20 for Europe where he will present a paper "On Anterior Pituitary Hormones" before the fifteenth International Physiological Congress at Leningrad and Moscow, which meets from August 9 to 17. While abroad he will visit various physiological laboratories in England, Denmark, Russia, Jugoslavia, Germany, Holland and France.

DR. HOWARD DITTRICK, of the School of Medicine of Western Reserve University, has been appointed official delegate of the United States Government to the tenth International Congress on the History of Medicine, to be held in Madrid, Spain, from September 23 to 29. Dr. Dittrick has also been appointed delegate of the American Association of the History of Medicine.

SIR HUBERT WILKINS arrived in the United States from Europe on July 24 *en route* to South America to join an expedition of the National Geographic Society to the Antarctic. After his return next March he expects to begin preparations for his second undersea exploration of the North Polar seas.

AT the close of the initial program presented by west coast geographers in connection with the meetings of the Pacific Division of the American Association for the Advancement of Science, held at the University of California at Los Angeles during the last week of June, the formal organization of an Association of Pacific Coast Geographers was completed. Dr. Otis W. Freeman, of the Washington State Normal School at Cheney, was elected *president;* George C. Kimber, of the Sacramento Junior College, *vice-president,* and Willis B. Merriam, of the University of Washington, *secretary-treasurer.* The meeting in 1936 will be held in conjunction with the regular meetings of the Pacific Division in Seattle under the auspices of the University of Washington.

AT a meeting on July 26 of Arctic explorers at the American Museum of Natural History steps were taken to organize the American Polar Society, which will issue semi-annually as the organ of the society *The Polar Times.* The first number of the magazine has recently appeared. The society has an initial roll of eighty-four members living in eighteen states and in England, France, Norway, Germany, Turkey and Cuba. Its chief object is to compile data relating to the polar regions in cooperation with the Scott Polar Research Institute in Cambridge, England, the New Zealand Antarctic Society, the Arctic Institute at Leningrad and similar groups throughout the world.

DISCUSSION

THE NEW ERGOT ALKALOID

PERHAPS I ought not to intervene in a discussion in which I am not directly concerned; but, apart from the fact that I have been engaged in research on the pharmacology of ergot, and side issues therefrom, for over 30 years, I have been in close touch with Dudley and Moir's work from the very beginning. When Moir, in June, 1932, published the observations which

formed the real starting point of all the new development, he kindly allowed me to add a note, in which I recorded my conviction that his method had revealed an ergot principle then unknown, and stated explicitly that Dudley had already joined Moir in the search for it.

The really serious aspect of the position which has now arisen is the threatened confusion in the literature. For alkaloids which I believe to be all identical with that which Dudley and Moir first clearly described and named Ergometrine, three other names have already been put forward, *viz.*, Ergotocin (Kharasch and Legault), Ergobasine (Stoll) and now Ergostetrine (Thompson). What is to be done to get a decision, among these rival claimants, as to the name to be adopted into the scientific literature, and into the national Pharmacopoeias, as the proper name of this alkaloid, if only one is really in question? We seem to need an expert and impartial judge or court to decide the matter. I do not expect that I should be accepted in that rôle. The best that I could hope to do would be to hold a brief—an easy one, it seems to me—for ergometrine, and to present the case for it, with an effort to be fair and courteous. I should like to acknowledge on behalf of my colleagues, and to reciprocate, Thompson's graceful recognition of their success in that respect.

One could hardly expect our judge, in such a case, to accept the invidious responsibility of allowing an appropriate handicap to the men who first started the investigation, as against those who took the risk of rival attempts to anticipate its completion. He would have to base his decision solely on priority of publication and proof of identity or difference; and I should be content to plead on those lines. I should ask the court to assent to certain principles, by which such a matter could be decided.

(1) Speculative argument should be inadmissible on the question of identity. Stoll bases his whole argument for "Ergobasine" on the suggestion that his alkaloid is *not* identical with Ergometrine, making an entirely courteous acknowledgment of Dudley and Moir's priority in discovering and describing the latter. One of the claims of Kharasch and Legault for "Ergotocin" is also based on the suggestion that it is a different alkaloid. I do not honestly believe that the evidence is sound in either case; but argument on such a matter is out of place. The recognized method of decision is by an exchange of specimens, or their submission to a neutral umpire, if that is preferred. In any case, while no method is yet available for the preparation of any of its rivals, Dudley[1] has published a simple method, by which any competent chemist can prepare and purify Ergometrine for himself. The onus of proof, I should suggest, is thereby laid on any one else who claims that his alkaloid is a different chemical substance, and therefore entitled to a different name.

(2) I should ask the court to rule against any attempt to obtain a spurious priority, by transferring a name from one kind of substance to another. If A, for example, had described a preparation, emphasizing as its chemical characteristics that it was non-alkaloidal and probably related to the pituitary oxytocic principle, and had applied a name to it; and if B, very shortly afterwards, had described the isolation of an alkaloid and given a careful preliminary description of its characters; then I should urge that A had no right subsequently to apply his name to B's alkaloid, and that neither that procedure nor the omission of any reference to B would support A's claim to priority in its discovery.

(3) I should urge that, when once a substance, such as an alkaloid, has been obtained practically pure and properly described, so that it can be recognized by a competent chemist, the fact that somebody else obtains enough of it for further recrystallization, and thereby raises its melting point by a few degrees, does not entitle him to rename it. If this practice were admitted, every alkaloid that has ever been discovered might soon require a separate catalogue for its nomenclature.

I should ask the court to rule, then, that, if the names Ergometrine and Ergotocin had been applied to the same alkaloid, Ergotocin was inadmissible under (2) and (3); and that if, under (1), it was claimed that Ergotocin or Ergobasine had been applied to a different alkaloid, its sponsor should bring proof of its different identity.

(4) I should ask the court to rule out, as not evidence, a suggestion that its sponsors had "succeeded in separating Ergotocin from the known ergot alkaloids late in 1933" (1923 being, of course, a misprint). Dudley and Moir might, with equal truth but equal irrelevance, claim that they had separated Ergometrine from the known ergot alkaloids already in 1932. What is on *published* record is that Ergotocin was still the name of a supposedly non-alkaloidal preparation early in 1935, and for a month after Dudley and Moir had published their paper.

My real difficulty, in asking for the application of such principles as the above, would arise in dealing with Thompson's claim for the name "Ergostetrine." The friendly and reasonable form of his statement (SCIENCE, June 28, 1935) and his frank recognition of the difficulties created by his method of publication, make me reluctant to be critical. I believe that he will understand me, however, if I say that the difficulties

[1] *Pharm. Jour.* (iv), 80: 709, 1935.

have not been removed. We learn now that the article which appeared in the *Journal* of the American Pharmaceutical Association, in March, 1935, formed part of a thesis submitted at Baltimore in May, 1934. I should leave the court to decide whether deposition of a thesis in university archives constitutes "publication," with reference to the point under discussion; but, whatever the decision, the difficulties would remain. It is admitted that the name "Ergostetrine" appeared neither in the thesis nor in the article published ten months later. Thompson tells us that he did not name the alkaloid, although he had it crystalline, because he was doubtful as to whether it might not be Küssner's "Ergoclavine"; but he does not explain why the fact that a crystalline alkaloid had been obtained still remained in a footnote in the article published in May, 1935; or why no details of its properties were even then given, which would have excluded the possibility of its being, indeed, Ergoclavine. Thompson gives, indeed, in his statement in SCIENCE of June 28, an account of his communication in April, 1935, to the American Society for Pharmacology, etc., containing physical data sufficient to make probable the identity of his alkaloid with ergometrine; yet in the *Journal of Pharmacology* for June, 1935, in the official abstract of this same communication by Thompson, there is no reference to any such identifying data or to the fact that anything had been crystallized, or to the name "Ergostetrine." The reference there is still to "X-alkaloid," as in the article in the *Journal* of the American Pharmaceutical Association for May, 1935, where, as Dudley and Moir have observed, apart from the footnote merely mentioning the crystallization of something, there is no evidence as to the nature of "Alkaloid-X," except physiological evidence that it still contained much alkaloid of the Ergotoxine type.

What are we to make of all this? Honestly I do not know, and can only await further information. It can be taken for granted that Dudley and Moir would not wish to deprive Thompson, or any one else, of any priority which would properly be awarded to him by my imaginary judge, on full evidence, such as is not available to us. Thompson's article in SCIENCE of June 28 contains the first public reference which we have seen to the name Ergostetrine, or to any data in Thompson's possession to support a claim that he had prepared an alkaloid identical with Ergometrine.

The important matter for early decision—and it is really urgent—is that of the proper name for *scientific* application to the new alkaloid, which we probably all believe to be one and the same, whatever some may for tactical purposes have suggested. It is really important that scientific journals and still more important that Pharmacopoeias should adopt one common name. For the former it is desirable, and for the latter it is essential, that the name should be free from protection by trademark. There is a hint in Thompson's statement that his difficulty in presenting his observations and his suggested nomenclature in the normal course of scientific publication may have been in some way connected with patent and trademark applications. I may be mistaken and should be glad to find myself so. My views on patents by academic workers and their effect on the proper spirit of scientific cooperation are well known to my friends, and I need not enlarge upon them here. What I wish to plead, as my fifth and last submission to the court, is:

(5) That if an investigator protects by trademark or patent a name which he desires to apply to a new substance, he ought to lose any claim to the acceptance of that name for general scientific use. As Thompson realizes, there is no published record of the properties of what he had really in hand, when he "legally assigned" the name Ergostetrine to it in May, 1934. A system, by which a name could be registered and protected, without mention in the literature, and held ready for scientific application to a substance when somebody else had published its isolation and its properties, is obviously unacceptable in principle, whatever may be the true facts in this case. And the surrender of a trade monopoly in the name, to facilitate this maneuver, would not render it more acceptable.

As at present advised, therefore, I should still ask the scientific court to hold that Ergometrine, as the first name openly applied in scientific publication to the new alkaloid, by those who first described its isolation and its characters, without any kind of restriction by patent or trademark, ought to be recognized as the neutral, scientific name. And I should be content to accept the decision of the court, if it were composed of the many American friends whose standards I know and trust.

H. H. DALE

THE NATIONAL INSTITUTE
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SHALL THE DEPARTMENT OF THE INTERIOR BECOME THE DEPARTMENT OF CONSERVATION AND WORKS?

DURING the fall of 1934, it became evident that the administration of the Taylor Grazing Act on the public domain by the Department of the Interior was being used as a pretext to bring pressure to bear upon President Roosevelt to use his authority (which expired March 15, 1935) to transfer the National Forests to that department.

As the result of a nation-wide protest against such