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.

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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

a measure, the Secretary of Agriculture, following a definite drive instituted by Mr. Ickes at the American Game Conference in New York, in December, stated that he was authorized to announce that no such move was contemplated.

This effort having failed, as did the previous attempts of Secretaries Lane, Fall, Works, Wilbur and Ickes, the plan was hit upon to renew the presidential authority for the reorganization and transfer of departments, but gently to guide his hand in the proper direction. The name of the Department of the Interior was to be changed to that of Conservation and Works. The President would then be authorized to transfer to this department any commission, board, bureau division or service engaged in conserving the national resources (or in carrying on public works activities) in the United States or its territories or possessions; and he could also transfer from the Department of the Interior to other departments any such body *not engaged* in conserving the natural resources.

This bill was introduced into the Senate and House, before the committees on expenditures in executive departments, as S-2665 and HR-7712 accompanied by statements prepared by Secretary Ickes giving evidence to show that the Department of the Interior was in effect the center of conservation activities, listing the agencies within his department so employed and the measures and their character which had originated there. All references to the conservation work of the Department of Agriculture were omitted.

During the hearings and in correspondence the Secretary of the Interior endeavored to suppress critics of this measure, and declined to commit himself as to the purposes of the bill or the agencies whose transfer was contemplated. The Forest Service and the Society of American Foresters were charged by him with maintaining a strong and efficient lobby, from which alone arose opposition to the measure. The Senate Committee on Public Lands, to whom the measure was referred, reported it out favorably. At the time of writing, the Committee on Expenditures of the House had not reported.

The Department of the Interior officials realize that grazing regulation on the public domain will be constantly compared with that on the National Forests, under the Department of Agriculture, and that as a matter of sound administration, the two branches should be in the same department. Unwilling to take any chances on an executive decision to transfer this grazing branch to agriculture, as was done with soil erosion, this bill is intended to make the transfer mandatory in the direction desired, taking with it, lock, stock and barrel, the forests, the wild life and the watersheds, and cleaving the work of forestry in two. Farm forestry and extension, cooperative fire protection, the combating of forest insects and diseases, and all the research and educational work would remain logically with the Department of Agriculture; thus a Forest Service would then exist in both departments. This article is not a discussion of the reasons why such legislation should not pass, which would occupy more space than is available. They hinge on two points. First, the organic resources, soil, forests and wild life, constitute a balanced whole, which can be regulated intelligently only by unified control in the hands of men trained in the fundamentals of biology and administration of such problems. Second, the continuous and continuing record of the Department of the Interior is such as to prevent those who understand these problems from extending their confidence to this department as the custodian of such resources.

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A TERMINOLOGY PROPOSED FOR MOTION PICTURE FILMS

THE possibility of taking motion pictures at a known speed and then projecting the processed film at the same or at a different rate of speed permits control of the time variable for analytical purposes. This is one of the very few methods available for the alteration of time and is of fundamental importance to many branches of science. The motion picture technique has been used for a half century,[1] but as yet there is no consistent terminology.

When the film is taken at a slow rate over a period of time and then projected at a more rapid rate the action is reviewed in a few minutes, even though the original action took hours. Such films have been called stop motion, time lapse, accelerated motion, etc. These terms are inconsistent and confusing. During the early development of motion pictures Pizon[2] used the term "biotachygraphic" for his films of this type, meaning to write life rapidly. While the term "tachygraphic" has been used[3] this is not the best name because it also means shorthand. To see a process in less time is a sort of shorthand, but the combining terms for the other three types of motion picture film are not satisfactory. The best word to describe this kind of film seems to be "tachykinetic," and this is proposed for future use to describe a motion picture film that is projected on the screen at a faster rate than the film was taken in the camera.

If a motion picture is projected at the same rate as it was taken no change in time-rate occurs, and

[1] O. W. Richards, *Jour. Biol. Photog. Assoc.*, 1933, 2: 39–55.

[2] A. Pizon, Congrés Zool. Bern., 1904, pp. 404–409.

[3] O. W. Richards, *Jour. Biol. Photog. Assoc.*, 1934, 3: 64–71.