

nized likewise seems to have little foundation. To be sure, the passage in which the conversion is mentioned appears in an unusual place, but it is the unusual rather than the commonplace that attracts attention. An addendum to our paper contains the reference to his experiments.

Since this note is a presentation of our views on points raised by Marrian and Butenandt perhaps we may be accorded the privilege of commenting upon another phase of the matter.

At times we are mildly annoyed by the statements that are attributed to us by others writing on the follicular hormone. For example, both Laqueur⁵ and Butenandt⁶ state that we found a potency of 8,000,000 mouse units per gram of theelin. Actually, we have reported from 2,500-4,000 *rat units* per milligram and each investigator has converted these figures to mouse units, using such conversion factor as seemed most probable to him. Recently, we have for the first time assayed our crystalline theelin according to Butenandt's procedure (a single injection of a solution in sesame oil) and obtained a value much greater than 8,000,000 mouse units per gram.

As another example, both Marrian³ and Butenandt⁷ have stated that we gave to theelin the formula $C_{18}H_{23}O_2$, whereas what we actually stated in a brief preliminary note was: "Average, C 79.69 per cent; H 8.49 per cent; O 11.82 per cent. These data give an empirical formula of $C_{18}H_{23}O_2$ with a molecular weight of 271, which corresponds with the data of the table." Any organic chemist would know that either $C_{18}H_{22}O_2$ or $C_{18}H_{24}O_2$ is possible and more probable. Apparently the data were not recalculated or the wording of our statement would have been more apparent. Such corrections might be made *ad infinitum* if we allow our grievances to annoy us.

We have been both amazed and pleased with the investigations which seemed to have hinged at least in part upon the introduction of the vaginal smear bioassay procedure.⁸ Others being interested in the same general problem increases one's interest in his own work, and it has been a source of extreme gratification that so many investigators have become interested in the "ovarian hormone" problem.

The interests of the workers of this laboratory have been mainly chemical and we have endeavored to contribute our bit, at the same time recognizing the contributions of others. If the outstanding results of Marrian and Butenandt have not been adequately

recognized in our previous papers, we are sincerely regretful, since it is farthest from our desire to attain recognition by detracting from the works of others.

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STALACTITES AND STALAGMITES GROWING ABOVE GROUND

AN interesting occurrence of stalactities and stalagmites forming above ground has been noted by the writer. More than three hundred stalactites and a number of stalagmites, in all stages of development, are growing from the roof of a railroad bridge in the city of Wooster, Ohio.

The rain water which falls upon the bridge percolates through four feet of limestone ballast and a foot of cement before it finds its way through the joints between the steel plates to the ground below. The largest stalactite is twelve and one half inches long and about one half inch in diameter. There are many others more than six inches in length.

During the summer of 1919 the bridge was cleaned and painted. The stalactites are, therefore, not more than twelve years old. Where the water has dripped on the steel girders below a number of stalagmites have formed. Several of these are from an inch and one half to two and one half inches long. The solution is of high concentration and the rate of evaporation is high; consequently the stalactites are growing rapidly. Their great number affords an excellent opportunity to study them in all stages of development. In the near future the writer expects to publish the results of his observations.

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ENTOPTIC COLORS

THE entoptic colors described by Elmer F. Way as occurring during the operation of a motion picture projector at reduced speed, may perhaps be an instance of the phenomenon known as Fechner's colors. If a disk, partly black and partly white, be rotated slowly on a color wheel under bright illumination, a flickering play of colors appears on the surface. The proportions of black and white and the speed of rotation necessary to give the best results depend upon conditions, but a speed of two to five rotations per second is usually satisfactory.

This phenomenon is described by Charles S. Myers in his "Text-book of Experimental Psychology," part I, page 81.

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⁵ E. Dingemans, S. E. deJongh, S. Kober and E. Laqueur, *Deutsch. med. Woch.*, 56, 301, 1930.

⁶ A. Butenandt, *Zeit. f. physiol. Chem.*, 188, 1, 1930.

⁷ A. Butenandt, *Abhandlungen d. Gesellschaft d. Wissenschaften z. Göttingen*. III Folge, Heft 2, 1931.

⁸ E. Allen and E. A. Doisy, *J. Am. Med. Assn.*, 81, 819, 1923.