

This gives in complete form the classification of meteorites wrought out by Dr. Brezina at the Vienna Museum and now brought quite up to date. Seventy-four groups are named and under each group are given the meteorites assigned to each. The complete presentation of this classification is a work which will be of great service to students of meteorites and an aid to further study of the groups. Following this a table shows to what extent these groups are represented in the Ward-Coonley collection. It appears that all the groups are represented and 95 per cent. of the group localities. The total weight of the collection is given as 2,495 kilos (5,509 pounds), and the total number of specimens as about 1,600. The average weight of the representatives of each fall is 4,138 grams ($9\frac{1}{8}$ pounds), or, counting nothing over 50 kilograms to a fall, 1,746 grams ($3\frac{7}{8}$ pounds).

The following meteorites are stated to have larger representatives in the Ward-Coonley collection than in any other: Among siderites, Arispe, Bacubirito, Ballinoo, Cañon Diablo, Canyon City, Central Missouri, Costilla Peak, Illinois Gulch, Luis Lopez, Nejed, Roebourne, Saint Genevieve, Surprise Springs, Tonganoxie, Ute Pass and Willamette. Among siderolites, Morristown, Pavlodar and Veramin. Among aerolites, Baratta, Bluff, Castine, Indarch, MacKinney, Mighei, Ness County, Oakley, Petersburg, Pipe Creek and Rushville.

Adjuncts to the collection such as casts, micro-sections, betyl coins, etc., are listed and the ten illustrative full-page plates show the appearance of about fifty typical specimens of the collection and the manner of mounting and installation.

It is a cause for felicitation that so large and complete a collection of meteorites is to be found on this side of the Atlantic, and students of science will join with Dr. Brezina in congratulating, as he does in a recent letter which the present writer has been permitted to see, Professor Ward 'upon the results of such uncommon energy and experience. Instead of three first-class world collections, Vienna, London and Paris,' says Dr. Brezina, 'there exist now four.'

OLIVER C. FARRINGTON.

Le Mouvement. By R. S. WOODWORTH. Paris, O. Doin. 1903. Pp. viii + 421. 4 fr.

This volume, which is a part of the 'Bibliothèque internationale de psychologie expérimentale normale et pathologique,' edited by Dr. Toulouse, is an excellent and complete discussion of movement in all its aspects.

The work is divided into two parts, viz., I., on the perception of bodily movements, and II., on the production of movement.

In the first part there are excellent accounts of the physiological, clinical and anatomical findings regarding the muscular sense, and of the functions of the semi-circular canals in relation to sensations of movement. The remainder of the section is concerned with a general survey of the literature on the perception of the extent, the time, and the force of movement, on the perception of lifted weights, on weight illusions, and a critique of Weber's law in relation to the perception of movement.

The second part—on the production of movement—consists in discussions regarding reflex action, coordination, dynamogenesis, motor automatism, voluntary movement, rapidity of voluntary movement—including reaction time—the precision of movement, and fatigue.

Not every one will agree with the author regarding the rôle of the synapses in the production of habits, etc. (p. 227): "S'il y a un arrêt quelconque dans le système nerveux, comme cela arrive pendant le sommeil, il provient probablement du synapse. Et probablement aussi, c'est le développement des extrémités nerveuses et le rapprochement des extrémités des branches de dendrites et de l'axe qui produisent la formation des habitudes et la maturité des instincts." The movements of dendrites and the shortening of spaces between parts of contiguous neurons has not been sufficiently investigated to make the above statement 'probable.'

Fatigue is considered to be a phenomenon connected with muscle, very little or not at all with the neurons controlling the muscle. This view, it is admitted, is somewhat radical, but the author guardedly concludes that 'the theory of the participation of the central nervous system in motor fatigue is without proof' (p. 400). It might also be retorted

that the theory of muscle being the only seat of so-called motor fatigue is yet without proof. The early experiments of Mosso and of other investigators do not clearly establish a nervous fatigue, but results in these, and certain later experiments may be explained in either way, namely, that there is nervous fatigue or that there is only muscular fatigue. There is, indeed, as much reason to say that there is a widening of the synapses in fatigue as in sleep (see above).

Such a book has long been needed both by psychologists and by physiologists. Material has been carefully chosen from psychological, physiological and clinical literature, and theory has been properly subordinated to fact.

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SOCIETIES AND ACADEMIES.

SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE.

THE seventh regular meeting of the society was held on Wednesday, May 18, at 8:30 P.M., in the physiological laboratory of the New York University and Bellevue Hospital Medical College at 338 East 26th Street. Dr. S. J. Meltzer presided.

Members present.—Adler, Burton-Opitz, Dunham, Ewing, Gies, Jackson, Levené, Lusk, Meltzer, Murlin, Richards, Salant, Wadsworth, Wallace, Yatsu.

Members elected.—P. B. Hawk, W. G. MacCallum, A. R. Mandel, R. M. Pearce, Franz Pfaff, William Salant, H. U. Williams, A. S. Warthin.

ABSTRACT OF REPORTS ON ORIGINAL INVESTIGATIONS.*

The Lecithin Content of Fatty Extracts from the Kidney (Preliminary Report): E. K. DUNHAM.

Rosenfeld has shown that the percentage of the alcohol-chloroform extracts from the dried kidneys of dogs, both normal and 'fatty,' fluctuates within very narrow limits. He calls

these extracts 'fat,' and regards the microscopical examination as entirely untrustworthy for gauging the amount of fat in the kidney. His work on other organs has led him to the conclusion that, when the fat content is increased in the cells, it has been transported from the fat-depots of the body. It appeared to the author of interest to compare the extracts obtained from the kidney by Rosenfeld's method with similar extracts from the depot-fats. It was at once evident that they differed markedly in the percentage of phosphorus they contained, as is shown by the following analytic results.

Alcohol-chloroform Extracts.	Percentage of Phosphorus.
Human kidney (mean of 28 analyses).....	1.3849
Panniculus adiposus (4 2288 grams).....	0.0026
Perinephritic fat (5.6750 grams)	0.0069

The extract from the kidney contains from 200 to 500 times as much phosphorus as the extract from depot-fat. These facts suffice to show that the two extracts are not directly comparable, and to throw doubt upon the idea advanced by Rosenfeld that the fat in 'fatty' organs is a simple infiltration from the depots of the body.

The phosphorus in these extracts was found to be wholly organic in character. Protagon could not be detected even in 400 grams of the tissue. The quantity of jecorin that may have been present was too small to influence materially the analytical results. The most probable compounds containing the phosphorus are forms of lecithin. The barium hydroxide-platinic chloride method for the separation of cholin was employed with the following results:

	Extract, Grams.	Phos- phorus, per cent.	Platinum, Gram.	Lecithin in the Ex- tract (Calculated as Di-stearyl-lecithin), per cent.
I.	0.4600	1.43	—	37.23
	0.4600	1.47	—	37.45
	1.5859	—	0.0650	34.50
II.	0.6032	1.12	—	29.11
	0.6032	1.11	—	28.99
	2.1556	—	0.0711	27.40

* The authors of the reports have furnished the abstracts. The secretary has made only a few abbreviations and minor alterations in them.

Before incineration, in the first case, the platinum salt in the crucible weighed 0.2009