calcium has lately been redetermined by Henri Moissan from the action of water on crystallized metallic calcium. The value was found to be Ca + O = + 145 cal. This value is greater than that for the oxids of potassium (+ 98.2) and sodium (+ 100.9), from which it appears that calcium can replace these metals in their oxids. It is also slightly greater than that of the oxid of lithium (+ 141.2). Corresponding to this, metallic lithium was obtained by heating the oxid with metallic calcium at a red heat. The heat of formation of magnesium oxid as found by Thomsen is + 143.4, but the previous observations of Winkler were confirmed, that at a low red heat calcium is freed from its oxid by magnesium. It is suggested, therefore, that the observation of Thomsen is erroneous, owing to impurities present in the metal used.

It is interesting to find a paper from a Spanish chemist in a recent *Comptes Rendus*. J. R. Mourelo, of Madrid, describes the preparation of phosphorescent strontium sulfid from the carbonate. Finely powdered strontianite and sulfur were heated in boats in a porcelain tube while a current of nitrogen was passing. In no case was a crystalline sulfid obtained. If the strontium carbonate was pure, especially free from alkalies, the sulfid was not phosphorescent. If the temperature was too high (above a bright red heat), or if the nitrogen current was too rapid, the same was the case. The best results were obtained by using a strontianite which contained 96.12% strontium carbonate, 2.03% calcium carbonate and traces of water, manganese and iron. Particularly are the traces of manganese necessary if the strontium sulfid is to be highly phosphorescent.

A study of aluminum has been made by P. Degener as to its use for culinary utensils, and published in the *Hygienische Rundschau*. While aluminum is but slightly acted on by weak acids when they are pure, in the presence of sodium chlorid it is rapidly attacked, as, for example, by sulfur dioxid, acetic acid, and even by alum. The inference is that some considerable danger attends the use of aluminum vessels in the preparation of many kinds of food. Whether, as a matter of fact, the amount which would be dissolved would do injury in the system remains a mooted question. While many experiments seem to indicate that aluminum salts have a somewhat detrimental effect upon digestion, yet it is well known that the inhibition of large quantities of alum water is often found very beneficial to health, and many alum springs enjoy a high reputation.

J. L. H.

THE NAPLES ZOOLOGICAL STATION.

We have recently received from Professor Anton Dohrn, the Director of the Zoological Station at Naples, a complete list of the American biologists who have worked at various times at the Naples Zoological Station. It is probable that the future demands upon the Naples tables will be quite as great as the present and the past, and the three tables, or rather two and one-half tables, which are now supported by subscriptions from this country, should be continued. Professor Dohrn has never raised any technical question of rights, but has always welcomed every American investigator. The least we can do in return is to extend to his institution the strongest support.

The Americans who have worked in the Zoological Station, the Tables they have occupied and the periods during which they were in attendance are as follows:

			Zoological Station.				
Professor Whitman, Boston.	12	11	81	2	5	82
Miss O'Neill, H.	11	3	98	22	4	98
			Austria.				
Dr. H. K. Corning	6	4	92	10	5	92
			Baden.				
Mr. H. B. Ward, Troy	7	3	90	8	4	90
			Bavaria.				
Dr. B. Sharpe	19	3	83	26	5	83
Dr. B. Dean, Columbia	27	4	92	3	6	92
			British Association.				
Dr. N. Cobb, Spencer, Mass.	11	11	88	27	1	89
			Cambridge.				
Miss E. A. Nunn	22	11	82	1	5	83
			Hamburg				
Dr. W. W. Norman, Ind.	5	10	89	21	3	90
			Williams College.				
Prof. E. B. Wilson, Baltimore.	30	3	83	20	10	83
Prof. S. F. Clarke, Williamstown	8	1	84	1	5	92

University of Pennsylvania and Zoological Station						
Dr. Ch. Dolley, Rochester	15	1	85	18	6	85
Dr. W. Patten, Boston (Zool. St. Table, 14/4/85 18/6/85	14	4	85	23	4	85
Davis Table.						
Dr. H. I. L. Russell	20	3	91	6	7	91
Miss I. B. Platt, Boston	7	4	91	2	7	91
Prof. E. B. Wilson, Phila.	11	1	92	1	7	92
Dr. I. W. Field, Baltimore	5	10	92	29	3	93
Dr. G. H. Parker, Cambridge, Mass	10	3	93	1	6	93
Prof. C. W. Hargitt, Syracuse	10	3	93	1	6	93
Prof. J. Gardiner, Boulder	1	10	94	1	3	95
Dr. Ida Hyde, Chicago	12	3	96	1	5	96
Smithsonian Institution.						
Dr. G. Fairchild, Washington	16	11	93	17	3	93
Dr. W. H. Wheeler, Chicago	30	12	93	14	4	94
Prof. H. C. Bumpus, Providence	25	1	94	2	4	94
Dr. L. Murbach, Berkey, Ohio.	25	4	94	23	6	96
Prof. T. H. Morgan, Bryn Mawr	29	10	94	15	7	95
Prof. Herb. Osborne, Ames	15	12	94	7	3	95
Mr. W. T. Swingle, Washington	10	3	96	30	5	96
Dr. MacFarland, California.	11	3	96	24	3	96
Prof. F. H. Herrick, Cleveland, Ohio	6	11	96	4	12	96
Dr. E. Meek, Washington	19	3	97	5	5	97
Dr. H. Jennings, Michigan	10	4	97	25	6	97
Dr. H. Neal, Cambridge, Mass.	16	4	97	25	5	97
Mr. B. M. Davis, Chicago	29	10	97	3	12	97
Prof. H. W. Conn, Brooklyn.	11	3	98	24	4	98
Prof. D. Mottier, Indiana Univ.	12	3	98	18	4	98
Mr. W. T. Swingle, Washington.	22	3	98	28	4	98
Dr. J. R. Gerould, Dartmouth.	3	11	98			
Harvard College.						
Mr. E. Rice, Middletown	23	3	94	12	5	94
Dr. C. Child, Chicago	4	6	94	6	12	94
Prof. W. E. Ritter, Berkeley.	14	9	94	29	12	94
Prof. J. Reighard, Michigan.	2	4	95	3	6	95
Prof. C. C. Nutting, Iowa	1	6	95	17	8	95
Dr. R. T. Harrison, Baltimore.	1	2	96	1	5	96
Dr. R. C. Coe, New Haven	17	3	96	6	5	96
Dr. A. Weysse, Boston	19	3	96	18	6	96
Columbia University, One-Half Year (Resp. University Table).						
Dr. A. Matthews, New York.	19	3	96	28	6	96
Dr. J. Graham, New York	9	4	97	14	6	97
Dr. E. O. Hovey, New York.	3	11	97	4	12	97
Woman's College Table.						
Prof. Miss M. Willcox, Wellesley College	9	4	98	20	5	98
Miss Peebles Florence	2	9	98	19	11	98

The three tables now being supported in this country are as follows :

Smithsonian Table.—Applications should be addressed to Professor S. P. Langley, Smithsonian Institution, Washington, D. C.

University Table.—The main subscription is by Wm. E. Dodge, Esq., of New York, in the name of Columbia University. The American Society of Naturalists has also subscribed $50 towards this table for the year 1899. Applications should be addressed to Professor T. H. Morgan, Bryn Mawr, Pa.

Women's College Table.—Supported by subscriptions from colleges, associations and private individuals.

Applications should be sent to Miss Ida H. Hyde, 91 Langdon St., Cambridge, Mass.

Students and investigators intending to visit the Station should apply to Dr. Anton Dohrn for a printed circular giving them all the necessary information as to preparation and the procedure to be observed on arrival.

SCIENTIFIC NOTES AND NEWS.

AT a recent meeting of the Board of Trustees of the University of Pennsylvania the Provost was authorized to extend an invitation to the American Association for the Advancement of Science to hold its meeting in 1900 at the University.

THE medical department of Johns Hopkins University has sent a party to Manila to study the tropical diseases prevalent there in the hot season. The party includes Dr. Simon Flexner, recently elected professor of pathology in the University of Pennsylvania, and Dr. L. F. Barker, associate professor of anatomy at Johns Hopkins University.

THE field work of the United States Biological Survey during the present season will be mainly in Texas and California. Vernon Bailey, chief field naturalist of the Survey, has begun work on the coast of Texas, and will work westerly to and across the Staked Plains. Later he will join Dr. Merriam in California.

Nature states that Mr. J. Stanley Gardiner, Balfour student of the University of Cambridge, and Mr. L. Borradaile have gone to the Island of Minikoi, situated between the Maldive and