the central organs mainly through the full-line connections. A simultaneous stimulus of all the end organ from A to B would then reach the central organ mainly through the dotted connections just as would a stimulus moving from B to A.

W. S. FRANKLIN.

OCCURRENCE OF THE VIRGINIA OPOSSUM IN SOUTHERN CENTRAL NEW YORK.

DURING the present year several Virginia opossums (*Didelphis virginiana*) have been killed near Owego, Tioga Co., N.Y. Some twelve years ago a farmer residing near here told me he had killed one. Last fall a large female was killed on a mountain side two miles east of this village, and while myself hunting a mile farther east, on December 3d, I met a hunter who had just caught two. He had tracked them a mile or so through the snow, and finally dug them out of a woodchuck's hole. They were both dead when found, probably having starved, as their stomachs were empty. Their skulls are in my possession. Several days later he secured another, an old one, the sex I do not know. It was taken four miles west of where the two young ones were captured. The animal is alive and in his possession. This man is an old-time hunter and trapper, and considered truthful. He told me he had seen their tracks several times before. I have failed to learn of anyone who has liberated a pair of these animals or even had a pair in captivity. The capture of two, early in the fall, has come to me, but I cannot say if it is authentic.

I wish particularly to note that this record comes from Owego, N. Y., not Oswego, two widely separated places.

J. ALDEN LORING.

OWEGO, N. Y.

NOTES ON INORGANIC CHEMISTRY.

THE December number of the *Journal of the American Chemical Society* contains an extended review of the year's progress in applied chemistry by Dr. Wm. McMurtrie. Development along these lines is going on more rapidly than ever before, and it is encouraging to note that this country is taking its place as an important factor in chemical technology. While Germany will long hold the first place in those industries in which chemistry plays an important part, America has already become an important factor, especially in the field of electro-chemistry, and it requires little effort of the imagination to see, in the not-far-distant future, the supremacy crossing the water. Dr. McMurtrie's review is well worth careful perusal by the economist as well as the chemist. Only a few points can be noticed in this column. In Germany, at the close of 1896, 96 chemical works, with $64,000,000 capital, gave a return of nearly $8,000,000, an average of 12.3% as against 8.9% for 1897. Of these the coal-tar industries gave the highest returns, 24%, while the fertilizer industries gave the lowest. An interesting announcement has been made by Dupre that gold can be extracted from ores by an inexpensive solution containing sodium thiosulfate, ferric halids, with an acetate. The solution extracts fifteen to twenty times as much gold as a cyanid solution in the same time, and does not attack sulfids; hence, if the success of the process is confirmed, it may be expected to replace the cyanid and chlorination processes for low-grade and sulfid ores. Great progress has been made in the metallurgy of zinc, and there is every reason to believe that within a few years the old and unsatisfactory process will be entirely displaced, except for very pure ores. The use of the electric furnace is revolutionizing the preparation of phosphorus, and with the increased production in France and Russia, and prospective developments in Germany and at Niagara Falls, the English monopoly is seriously threatened. The advantages of the new processes are both the reduction of price and the increased protection of the health of the operatives. The electrolytic alkali industry is still in an experimental stage, but with the certainty of future success, indeed, it may be said that the great question to-day is the selection and development of the *best* electrolytic method. Already in the manufacture of potassium chlorate the electrolytic methods have taken the lead, with a consequent marked fall in price. The commercial production of liquid air and of oxygen on a large scale will render possible many new developments along many lines. The production of calcium carbid