The use of slips in scientific correspondence.[1]

An account of the 'slip-system of notes' was published by me in the Proceedings of the Boston society of natural history in 1867 (May 15, p. 242), after using it for more than a year. A fuller description is given in Wilder and Gage's 'Anatomical technology' (pp. 45–52). On p. 46 it is said that "slip-notes are of the following kinds: museum catalogues, library catalogues, references, extracts, statements of observations (original or otherwise, with or without drawings)."

During last summer I began to use slips in another way, suggested, perhaps, by the fact that *postal-cards* referring to a single point were frequently filed away with the slip-notes on the same subject. In my scientific correspondence I enclose slips (postal-card size) relating each to a special point. If written closely or with the type-writer, there is usually ample space, not only for the original note, but for an answer to it, if in the shape of inquiry: if not, a second is attached.

As compared with a letter in the usual form, such 'correspondence-slips' present the following advantages: 1. Each point may be attended to by the sender or the receiver independently of others which may require more delay; 2. Without transcription, the slips may be filed with others on the same subject; 3. The same slip, with or without attachments, may be sent back and forth, or to other correspondents, for comment or inquiry; 4. The date of each writing may be affixed, when desirable, either by hand, or by the use of Perkins rubber stamps, or other mechanical device.

As a matter of detail, I may add that I have found it convenient to keep by me envelopes addressed to those with whom I desire to communicate frequently upon matters of common interest, to insert the slips as they were written, and to send the letter as occasion arose.

Among those who have more or less fully co-operated with me in the use of slips in correspondence, should be named, especially, Dr. F. P. Foster, editor of the New-York *Medical journal;* Prof. H. F. Osborn of Princeton college; and my colleague, Prof. S. H. Gage. B. G. WILDER.

Ithaca, N.Y., Dec. 26.

American pearls.

Remembering an inquiry in a back number of *Science* regarding pearls, I thought it perhaps worth recording that small black pearls are not infrequent in the common Venus fluctifraga V. succincta, and V. simillima of this coast. We also occasionally find white pearls in the larger Pachydesma crassatelloides. Haliotis splendens and H. Cracherodii are often pearl-bearers, pearls found in them often being of value and quite pretty. Martesia intercalata buries itself in the shell of Haliotis; and upon boring through, as it often does, the abalone covers the opening with a black, pearly layer, that frequently becomes a large protuberance on the inside of the shell.

C. R. ORCUTT.

San Diego, Cal.

The earthquake of Jan. 2.

The earthquake of Jan. 2 was felt distinctly in Washington. Making allowance for the error of my watch, the shock occurred at 9 h. 12.1 m. P.M., eastern standard time, and lasted ten or twelve seconds, accompanied by a rumbling sound, a rattling of windows, and a 'chattering,' jarring, unpleasant sensation communicated from the floor of the room in which I was sitting. The place of observation was about twenty-three hundred feet north-east of the naval observatory. The time may be half a minute in error, either way. WILLIAM C. WINLOCK.

Washington, D.C., Jan. 4.

[1] Read before the Society of naturalists of the eastern United States, Dec. 29, 1884.

THE PROSPECTS OF THE NEW PSYCHICAL SOCIETY.

THE STORY of the persecution of Galileo is now familiar to every one. In those days the church had ordained a certain system for the universe, and was disturbed by the discoveries of scientific men. Exactly the same feeling has been shown by two or three scientific men of the present day with regard to the prosecution of investigations of certain so-called psychical phenomena. One of our foremost scientific men has been heard to say, that, if the facts claimed to be true by the committee on thought-transference of the English society for psychical research were true, life would not be worth living. Men of this stamp say that they cannot in any way, or by any proof, be led to believe in the facts; but they would have all study of the alleged phenomena suppressed.

It is very fortunate that men of this 'dark-age' frame of mind are in the minority. Any one who saw the reception among scientific men which was given last summer to Professor Barrett, the emissary of the English society for psychical research, would see how deep-seated is the interest in such investigations, in spite of a healthy scepticism. There is no longer a feeling that such matters can be laughed out of court. As one result of Professor Barrett's visit, at a meeting held in Boston in September, a committee was appointed to consider the formation of an American society on a similar plan to that which Professor Barrett represented. A professorship had already been established in the University of Pennsylvania, and a man appointed to the chair who should devote his time more especially to the study of the physical manifestations known as spiritualism; a late wealthy citizen of Philadelphia having bequeathed a

sum of money for the purpose of testing the truth of the so-called spiritualism.

Since September, the Boston committee has held numerous meetings, and discussed the *pros* and *cons* of the formation of a psychical society, and finally brought forward a constitution under which some eighty gentlemen from different parts of the country have organized themselves. A notice of this meeting was given in No. 100 of *Science;* and in this week's issue we give an account of the completion of the details of organization. It will be seen in this account that the society proposes immediately to begin investigations on thought-transference. It is very necessary that this work should be in the hands of trusty investigators, and that they should have ample opportunity and means for carrying on their work. To some extent, they may find parties in private life who possess the alleged powers, but it may be necessary for them to call upon professionals; and, at any rate, it would be well if they were able to hire the professionals, and subject them to such experiments as would test their capacities. If there is a large proportion of fraud, one of the best works of the society would be to detect it, and publish it to the world; but this it cannot do, unless supplied freely with the necessary funds.

RECENT ADVANCES IN ELECTRICAL SCIENCE.

ELECTRICAL science has not made great strides during the year 1884; but in the direction of practical applications it is feeling the powerful aid of business ability and capital. The U. S. patent office is crowded with applications for patents on various electrical appliances. The scientific investigator must soon make a struggle for the free use of many old and familiar electrical appliances which he has known from boyhood, unless he, too, enters the field as an applicant for patents. The tendency of the times is certainly in the direction of obtaining patents in order to prove priority, even in the direction of pure science. We leave it to the moralist to decide the difference between a copyright for a literary man and a patent for a scientific man.

The problem of electric lighting is gradually yielding to the efforts of the great army of inventors. The Edison company has plants in almost all countries. The incandescent system has made its way on steamboats and steamships. The great Fall-River line of steamboats took the initiative in lighting the steamer Pilgrim, and has now extended the system to the other principal boats of the line. It is said, that, although the cost of lighting by incandescence is double that of gas, the better quality of light and the greater safety from fire counterbalance the increased cost. Experiments have been made by the Weston electric-light company during the year, upon long-filament incandescent lamps, which promise to give lamps approaching the candle-power of many arc-lights with a far pleasanter and steadier light.

Among the methods of electric lighting by incandescence, which have received renewed advocacy during the year, is the battery system. Trouvé's modification of the bichromate-of-potash battery consists in employing a very large proportion of sulphuric acid with bichromate of potash. An experience of three months with this battery will lead its most enthusiastic advocate to long for a cheaper source of electricity.

The problem of electric lighting is to find a cheaper motor than the steam-engine to drive the dynamo-electric engine, or to discover a more direct process of obtaining electricity from heat. No advance has been made this year in the generation of electricity by thermo-electricity. The meetings of the British association at Montreal, and the American association in Philadelphia, did not result in the production of many important papers on electricity; yet there is no doubt that many persons had their ideas clarified and their thoughts stimulated by these meetings. Perhaps the coming year will bear evidence of this. The electrical exposition in Philadelphia showed the great activity in the fields of electric lighting, and was chiefly interesting as an exhibition of various types of dynamo-machines.

The members of the electrical congress, also held in Philadelphia at the time of the electrical exposition, were inclined to dissent from the resolutions of the late Paris congress in regard to the adoption of a hundred and six centimetres of mercury, a millimetre in section, at the temperature of 0° C., as the legal ohm; since the work of Professor Rowland, it was believed, would give a closer value. Professor Rowland has not yet published; but it is believed that results have been obtained which will lead to a revision of the decision of the