Two localities in particular are associated respectively with the freedom of the will and generalized space, and whenever I think of one of these subjects the corresponding place, with surrounding buildings and scenery, is always vividly present. Of course this is mere association of ideas, but the localization of a numerical series is doubtless nothing more, and I can see no analogy between it and the phenomena of color-hearing, etc., which seem to have for a basis an actual stimulation of two senses by the causes that usually affect only one—probably a purely physiological phenomenon.

It is not necessary to suppose any material basis for the diagram. I used to think that mine arose from my learning my numbers from a set of blocks, which I placed in a row. It seems just as likely, however, that the diagram was wholly imagined, it being easier to remember the numbers when associated with a position in space. It seems likely that many people have these diagrams who do not realize it; I was not always aware of mine till they had been firmly fixed in my mind for many years.

ARTHUR E. BOSTWICK.

Office of The Standard Dictionary, 2 Clinton Hall, Astor Place, N. Y. City.

#### ROUND WORMS IN THE BRAINS OF BIRDS.

In reference to the note by Professor G. H. French, in Science for June 2, it may be said that many years ago the late Professor Nyman published an article in the Proceedings of the Boston Society of Natural History on a nematoid parasite which lives coiled up in the brain of the anninga or snake-bird in Florida. The species is Eustrongylus papillosus of Diesing. Afterwards, in the Bulletin or Report of Hayden's Geological Survey of the Territories, the volume and year not in my mind at this writing, I described and figured a similar species (Eustrongylus buteonis) which was found by a student of mine living under the eyes of Buteo swainsoni, while another species (Eustrongylus chordeilis, Pack.) was removed from the brain of the night-hawk. These are all referred to in my text book of Zoölogy, p. 169. A. S. Packard.

#### SHARKS IN FRESH WATER.

I have twice noticed extended and circumstantial accounts of the existence, and in great abundance, of genuine sharks in the fresh-water lake of Nicaragua. Though the first account, according to my recollection, appeared in a very reputable publication, I was inclined to think, from the novelty of the idea, that it was merely an invention of some writer who was amusing himself, and filling out an article, but seeing another account by another writer, and even more circumstantial than the first account, I cannot doubt that there is some basis for the statement. If any readers of Science know of the occurrence of genuine sharks in fresh water, and especially in the case of the lake above mentioned, I should be glad to have a report to Science.

In conversation the other day with one who is a good deal of an authority in such matters, I found that he had no knowledge of any occurrence of sharks in fresh water, but saw nothing unreasonable in the idea. C. H. Ames.

5 Somerset Street, Boston, Mass.

THE many friends of Henry de Varigny, Sc. D., of Paris, France, will be glad to know that he is on the way to this country, having sailed on Aug. 23, being sent by the French government to investigate certain questions connected with the fisheries and applied entomology.

Corrections: In the letter by Joseph C. Thomson, not Joseph W. Thompson, on page 97, for "innovated" read "innervated."

—Charles Scribner's Sons have just ready a little volume of "Stories of the Sea" to match the "Stories of the South," "Stories of New York" and "Stories of the Railway," already published.

# Indigestion

### Horsford's Acid Phosphate

Is the most effective and agreeable remedy in existence for preventing indigestion, and relieving those diseases arising from a disordered stomach.

Dr. W. W. Gardner, Springfield, Mass., says, "I value it as an excellent preventative of indigestion, and a pleasant acidulated drink when properly diluted with water, and sweetened."

Descriptive pamphlet free on application to RUM FORD CHEMICAL WORKS, PROVIDENCE, R. I. Beware of Substitutes and Imitations.

For sale by all Druggists.

EXCHANGES.
[Free of charge to all, if of satisfactory character.
Address N. D. C. Hodges, 874 Broadway, New York.]

For exchange—Complete set of serial slides of embryo chick, 12 to 72 hours old; of rabbit lom long, and various stages of development of tadpole, mouse and rat. Will sell or exchange for botanical slides, or books or photographic apparatus. D. T. MacDougal, University of Minnesota, Minneapolis, Minn.

For sale or exchange.—A fine collection of Lep idoptera, native and exotic. For particulars address Addison Ellsworth, Binghamton, N. Y., care Republican.

For sale or exchange for works on entomostraca, Wolle's "Desmids of the U.S.," Hentz "Spiders of the U.S.," The Amer. Entomologist & Botanist, Vol. 2, The Amer. Entomologist, Vol. 1, Harris's "Insects Injurious to Vegetation," colored plates, copy formerly owned by Townend Glover. C. Dwight Marsh, Ripon, Wis.

"The Conchologist: a Journal of Malacology," Vols. 1 and 2, with wood cuts and plates, value 12 | will exchange for any works or pamphlets on American Slugs or Anatonry of American Fishes, W. E. Collinge, Mason College, Birmingham, England.

I wish to exchange a New Model Hall Type-writer, price \$30, for a Daylight Kodak, 4x5 preferred. George A. Coleman, Dep't. Agric., Div. of Ornithology, Washington, D. C.

#### Wants.

I WOULD be grateful to receive replies to any of the following questions.—Is copper found native in Mexico? Is it found native in Cuba? If so, in either or both cases can I purchase authentic specimens? Can any one furnish me with results of analyses of native Mexican or Cuban copper, also analyses of unalloyed copper reduced from the ore from Cuba or Mexico? Is it possible to procure aboriginal implements of copper from Cuba or Mexico? Answers to these questions will greatly aid the preparation of a report for a scientific institution. C. B. Moore, 1321 Locust St., Philadelphia, Pa.

A YOUNG woman who has been an assistant for a literary and scientific man desires a similar position. Is an experienced and accurate stenographer and typewriter, thoroughly educated, and sufficiently familiar with literary work to write, independent of dictation. Has some knowledge of the Spanish language. Will go to any part of the United States. Address, Box 147, Ravenna, Ohio.

A GRADUATE of an American Polytechnic insti-tution and of a German University (Gottingen), seeks a position to teach chemistry in a college or similar institution. Five years' experience in teaching chemistry. Address Chemist, 757 Cary St. Brockton, Mass.

WANTED.—A position as teacher of Biology, by an experienced teacher, a college graduate with four university post-graduate courses in the Sciences. Good endorsements, and eighteen years' experience. Address A. N. Somers, La Porte, Ind.

Exchange—The undersigned is desirous of obtaining correspondents interested in macro-hpideptera, in Alaska, the far Western, Southwestern and Southern States. Will also exchange rare lepidoptera for entomological literature. Levi W. Many Department. The Civil Service Computer Mengel, Reading, Penn.

Wanted to exchange—Medical books, Obstetrical Transactions, London, Works of Sir J. Y. Simpson, Beck's Medical Jurisprudence. Handbook for the Physiological Laboratory, by Burnton, Foster, Klein and Sanderson, Quain's Anatomy, and about fifty others. Catalogues given. Want Geological, Botanical and Microscopical books in exchange. Dr. A. M. Edwards, 11 Washington St., Newark, N. J.

## THE American Bell Telephone COMPANY. 125 MILK ST., BOSTON, MASS.

This Company owns the Letters - Patent No. 186,787, granted to Alexander Graham Bell, January 30th, 1877, the scope of which has been defined by the Supreme Court of the United States in the following terms:

"The patent itself is for the mechanical

structure of an electric telephone to be used to produce the electrical action on which the first patent rests. The third claim is for the use in such instruments of a diaphragm, made of a plate of iron or steel, or other material capable of inductive action; the fifth, of a permanent magnet constructed as deof a permanent magnet constructed as described with a coil upon the end or ends nearest the plate; the sixth, of a sounding box as described; the seventh, of a speaking or hearing tube as described for conveying the sounds; and the eighth, of a permanent magnet and plate combined. The claim is not for these several things in and of themselves, but for an electric telephone in the construction of which these things or may be construction of which these things or any of them are used."

This Company also owns Letters-Patent No. 463,569, granted to Emile Berliner, November 17, 1891, for a combined Telegraph and Telephone, and controls Letters-Patent No. 474,231, granted to Thomas A. Edison, May 3, 1892, for a Speaking Telegraph, which cover fundamental inventions and embrace all forms of microphone transmitters and of carbon telephones.

## THE MODERN MALADY; or, Sufferers from 'Nerves.'

An introduction to public consideration, from a non-medical point of view, of a condition of ill-health which is increasingly prevalent in all ranks of society. In the first part of this work the author dwells on the errors in our mode of treating Neurasthenia, consequent on the wide ignorance of the subject which still prevails; in the second part, attention is drawn to the principal causes of the malady. The allegory forming the Introduction to Part I. gives a brief history of nervous exhaustion and the modes of treatment which have at various times been thought suitable to this most painful and trying disease.

By CYRIL BENNETT. 12°, 184 pp., \$1.50.

## N. D. C. HODGES,

874 Broadway, New York.

SOFTLY STEALS THE LIGHT OF DAY wher filtered through windows covered with

#### CRYSTOGRAPHS,

a substitute for Stained Glass that is inexpensive, beautiful, and easily applied.

20c. per square foot. Samples and catalogue, 10c. CRYSTOGRAPH CO., 316 North Broad St., Philadelphia.

## LIGHTNING DESTROYS!

Shall it be your house or a pound of copper?

Entirely new departure in protecting buildings from lightning. One hundred feet of the Hodges Patent Lightning Dispeller (made under patents of N. D. C. Hodges, Editor of Science) will be sent, prepaid, to any address, on receipt of five dollars.

> Correspondence solicited. Agents wanted.

AMERICAN LIGHTNING PROTECTION CO... 874 Broadway, New York City.

#### Fact and Theory Papers

THE SUPPRESSION OF CON-SUMPTION. By GODFREY W. HAMBLETON, M.D. 12°, 40c.

II. THE SOCIETY AND THE "FAD." By Appleton Morgan, Esq. 12°. 20 cents.

III. PROTOPLASM AND LIFE C. F. Cox. 12°. 75 cents.

IV. THE CHEROKEES IN PRE-CO-LUMBIAN TIMES. By CYRUS THOMAS. 12°. \$1. V. THE TORNADO. By H. A. HAZEN.

VI. TIME-RELATIONS OF MENTAL PHENOMENA. By JOSEPH JASTROW. 12°. 50c.

HOUSEHOLD HYGIENE. MARY TAYLOR BISSELL. 12°. 75 cents.

N. D. C. HODGES, Publisher,

874 Broadway, New York.

## QUERY.

Can any reader of Science cite a case of lightning stroke in which the dissipation of a small conductor (one-sixteenth of an inch in diameter, say,) has failed to protect between two horizontal planes passing through its upper and lower ends respectively? Plenty of cases have been found which show that when the conductor is dissipated the building is not injured to the extent explained (for many of these see volumes of Philosophical Transactions at the time when lightning was attracting the attention of the Royal Society), but not an exception is yet known, al though this query has been published far and wide among electricians.

First inserted June 19, 1891. No response to date.

## N. D. C. HODGES, 874 BROADWAY, N. Y. SCIENCE CLUBBING RATES.

10% DISCOUNT.

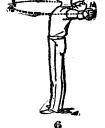
We will allow the above discount to any subscriber to Science who will send us an order for periodicals exceeding \$10, counting each at its full price.

N. D. C. HODGES, 874 Broadway, N. Y.

#### BUSY FOLKS' GYMNASIUM."



A few minutes' daily exercise on our fascinating apparatus clears the brain, tones up the body, develops weak parts. Our cabinet contains chest weights, rowing-weights, lifting-weights, 'clubs and dumb bells, adjust-able for old and young. It is the only complete exercising outfit in the world suitable for use in living rooms. All prices. You can order on approval. Chest machine separate, \$4.50 and up. Shoulders and Upper Back good for Round Shoulders Educated agents wanted. Physi



CAL CULTURE CHART, with illustrated directions for de veloping every part of the body healthfully, 50 cts. Sent for half price to those naming this paper.

WHITNEY HOME GYMNASIUM CO., Box D., Rochester, N.Y.