

AMONG THE PUBLISHERS.

IN the February *Atlantic* the Bering Sea question is discussed by Charles B. Elliott; and Mr. K. Kaneko, the head of the Japanese commission which has been visiting various countries to compare their legislative assemblies, in order to establish a Japanese parliament, has a paper on "An Outline of the Japanese Constitution." The article which will arouse the most discussion is by Gen. Francis Walker, about Mr. Bellamy and the new Nationalist party. There are four articles devoted to recent books on political and historical subjects.

Messrs. J. B. Lippincott Company publish immediately the long-looked for book concerning Henry M. Stanley and his rescue of Emin Pacha. This work, entitled "Stanley's Emin Pacha Expedition," will be entirely authentic in every particular, as it is compiled from Stanley's own letters to the president of the society which was mainly instrumental in sending him on the journey. The book contains about four hundred pages, together with numerous illustrations and maps.

Public Opinion has issued No. 3 group of "Representative Moulders of Public Opinion." The first two contain portraits of the editors of daily papers. The third is confined to the weeklies and monthlies, of which the following is a list: E. L. Godkin of the *Nation*; H. Clay Trumbull of the Philadelphia *Sunday School Times*; A. E. Winship of the Boston *Journal of Education*; Prof. W. J. Youmans of the *Popular Science Monthly*; Henry C. Bowen of the *Independent*; Mrs. Martha J. Lamb of the *Magazine of American History*; Rev. Edward Bright of *The Examiner*, New York; J. N. Hallock, *Christian at Work*, New York; Rev. A. E. Dunning, *The Congregationalist*, Boston; Rev. C. W. Leffingwell, *The Living Church*, Chicago; F. M. Somers, *Current Literature*, New York; Rev. Samuel J. Barrows, *The Christian Register*, Boston; F. M. Hexamer, *American Agriculturist*, New York; George William Curtis, *Harper's Weekly*; Rev. Charles Parkhurst, *Zion's Herald*, Boston; Rev. Lyman Abbott, *Christian Union*, New York; William H. Hills, *The Writer*, Boston; Joseph Keppler, *Puck*; Rev. John Talbot Smith, *The Catholic Review*, New York; Rev. O. P. Fitzgerald, *Christian Advocate*, Nashville, Tenn.; R. H. Edmonds, *Manufacturer's Record*, Baltimore; David M. Stone, *Journal of Commerce*, New York; Albert C. Stevens, *Bradstreets*, New York; Rev. Simeon Gilbert, *The Advance*, Chicago; Richard H. Clarke, *Catholic Quarterly*, New York; T. C. Martin, *The Electrical World*, New York; Joseph B. Gilder, *The Critic*; Rev. J. W. Mendenhall, *Methodist Review*, New York; W. J. Arkell, *Judge*, New York; L. S. Metcalf, *The Forum*; R. W. Gilder, *The Century Magazine*; E. L. Burlingame, *Scribner's Magazine*; Lloyd Bryce, *North American Review*; Allan Forman, *The Journalist*, New York; John A. Mitchell, *Life*, New York; E. H. Talbot, *The Railway Age*, Chicago; William H. Park, *Banker's Monthly*, Chicago; Howard M. Jenkins, *The American*, Philadelphia; John Boyle O'Reilly, *The Pilot*, Boston; Rev. A. T. Pierson, *Missionary Review of the World*, Philadelphia; DeWitt J. Seligman, *The Epoch*, New York; Rev. Wendell Prime, *The Observer*, New York; N. D. C. Hodges, *Science*, New York; Charles W. Price, *Electrical Review*, New York; Rev. I. K. Funk, *Voice*, New York; and Rev. David H. Moore, *Western Christian Advocate*, Cincinnati.

LETTERS TO THE EDITOR.

An Insect Destructive to Wheat.

ON p. 41, No 363, of *Science*, you tell that "an insect destructive to wheat, but previously unknown in this country, has appeared in considerable numbers in the Cornell University farm at Ithaca." We beg to say that so long as thirty-five to forty years ago, and probably longer, an insect similar in appearance and behavior to the foregoing was common in the wheat-fields of middle Tennessee, though we never knew them to be sufficiently numerous to seriously reduce the yield of grain. That it was the same insect, we have no doubt.

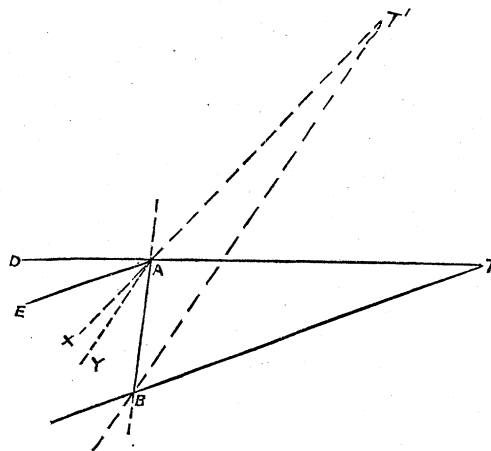
Q. C. SMITH.

Austin, Tex., Jan. 22.

The Fiske Range-Finder.

IN *Science* of Jan. 24 there is a full and comprehensive description of the Fiske range-finder, which, although interesting and very ingenious in regard to its electrical arrangement, is not so clear in its mathematical principles. I refer particularly to Fig. 4, p. 59. The error being so apparent, it cannot be conceived that the inventor has overlooked it, and I write more in a spirit of inquiry than of criticism.

Let the continuous lines in the following figure represent the essential conditions of Fig. 4, p. 59. Moving the index along the scale mn , op (Fig. 6, p. 59), a distance corresponding to the angle DAE, the bridge becomes balanced, and the reading will give the distance AT. Now let us suppose that from the position T, the object moves to T', AT' being equal to AT. The resulting diagram is indicated in broken lines. Moving the sliding index along the scale mn , op , as before, a distance corresponding to the angle XAY, the bridge is balanced, and the reading of the



scale will indicate the distance AT'; but this reading will by no means be the same as that obtained when the object was at T, because the angle XAY is smaller than DAE. In other words, it is impossible to construct a scale giving true distances of objects from A in terms of the angle DAE, unless we impose as a condition that one of the sight lines shall make a fixed and constant angle with the base.

The angle DAE will vary for different positions of the point T, in a circumference drawn with A as a centre and AT as a radius, having its maximum value when the triangle ATB is isosceles, and becoming 0 when T is in a rectilinear prolongation of the base.

THOS. L. CASEY.

New York, Jan. 27.

INDUSTRIAL NOTES.

The Anglo-American Storage-Battery.

A FORM of storage-battery invented by Mr. Charles Sorley, and manufactured by the Anglo-American Storage Battery Company of this city, is shown in Figs. 1 and 2. In the construction of the cell, the object aimed at by the inventor is to get as large an amount of active material as possible, with a correspondingly large conducting and contact surface. With a view to attaining this object, the plates of the cell are constructed as shown in Fig. 1, being built up of strips of lead bent into convolutions, as shown, and secured together so as to form a plate. The thickness of the plate, of course, depends upon the width of the strips. All the plates of the same sign are connected by means of the projecting ends of the lead strips, as shown in Fig. 1. The plates are separated and supported by insulating strips, and bound together by insulating rods, which pass through the centre of the plates. The complete cell is shown in Fig. 2.

A battery of these storage-cells has been in constant use in the Schermerhorn building in this city since May 20, 1889. Of this battery the superintendent of the building reports as follows: "In every respect it has exceeded the claims made for it, and is

saving us two and a half hours' running of engine and dynamo each day, half a ton of coal each week, and our gas bill is reduced proportionate to the number of lights we are wired for. We have never had the slightest trouble with it, and we have

only when running; now the dynamo runs only seven and a half hours each day, furnishing light the whole twenty-four hours where required.

Among the claims made for these cells are their high efficiency, yielding ninety to ninety-two per cent of the current put into them; their freedom from buckling or breaking, owing to

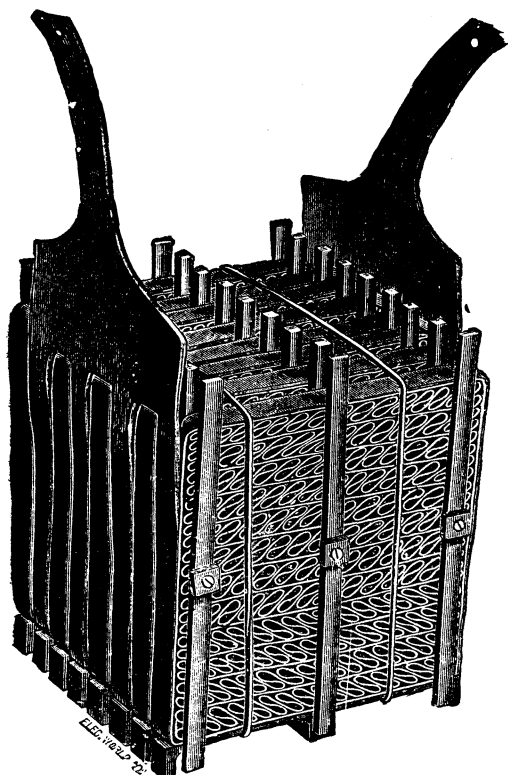


FIG. 1.

taken from it its rated capacity every night for the past thirty-three nights, and on Sundays from thirty-three and a third to fifty per cent in excess." Formerly, before the battery was put in, the dynamo ran ten hours daily, furnishing light, of course,

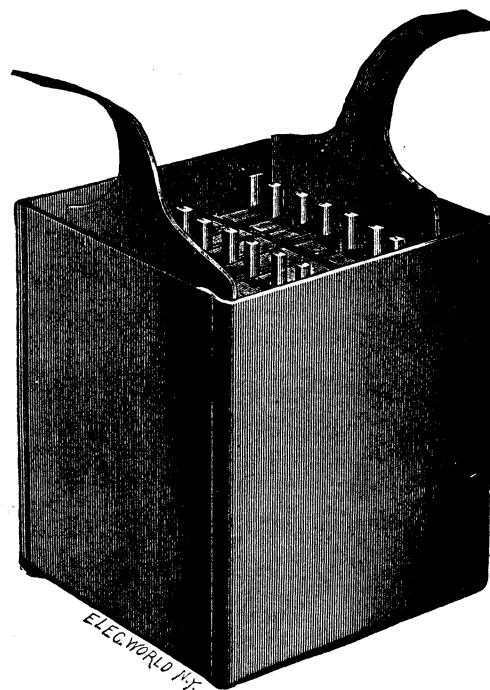


FIG. 2.

their peculiar construction; economy in use, as they can be charged in a comparatively short time; their capacity, giving about five hours and a half ampère hours per pound weight; simplicity of service, not requiring an expert electrician to superintend them; and, lastly, their long life. These batteries are now in use in many parts of the country.

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What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance, the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians celebrated for curing cataract was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, *has ruined more stomachs than alcohol*. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.

Mineral Lands.

MANGANESE DEPOSITS.—A rich deposit of Manganese is for sale. Apply to H. N., care of *Science*, 47 Lafayette Place, New York.

GOLD-BEARING QUARTZ VEINS.—Any one wishing to engage in gold mining will learn of a newly discovered vein by applying to H. N., care of *Science*, 47 Lafayette Place, New York.

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Readers of Science

Corresponding with or visiting Advertisers will confer a great favor by mentioning the paper.

CALENDAR OF SOCIETIES.

Natural Science Association of Staten Island.

Jan. 9.—The building fund committee reported that the public appeal, heretofore adopted, had been printed and distributed to all members, to the press of the county, and to about two hundred prominent citizens in all parts of the island. Mr. Thos. Craig showed specimens of Staten Island pond-life under the microscope. Among the objects shown were *Amoeba proteus* and *Protococcus viridis*. The latter organism is the cause of the green coating on the trees, stones and fences, which has attracted so much attention lately, especially in New York, where some persons have tried to connect it with the prevailing epidemic of influenza or "grip." Dr. Britton showed seeds of native orchids (*Corallorhiza odontorhiza* and *C. multiflora*) under the microscope, and explained their differences of appearance and structure. Mr. Arthur Hollick presented specimens of *Draba verna* in full bloom, collected at Tottenville, Dec. 30, at which date the fields in places where white with it. Skunk cabbages were in full bloom in abundance in many of the swamps at the same place. Mr. Hollick also showed fossil leaves in clay ironstone from the shore at Tottenville. The specimens were part of a recent rich find, resulting in adding many new species of the local fossil flora, which will be studied and reported upon at some time in the future.

Exchanges

[Free of charge to all, if of satisfactory character. Address N. D. C. Hodges, 47 Lafayette Place, New York.]

Wanted.—Marine univalves of the west coast, from U. S. line southward, and from Pacific Islands, offered; exchange from a general collection. — F. C. Browne, Framingham, Mass. Box 50.

D. E. Willard, Curator of the Museum, Albion Academy, Albion, Wis., will answer all his correspondence as soon as possible. Sickness and death in the family, with many other matters, have prevented his answering as promptly as he should have done.

I will give 100 good arrow heads for a fine pair of wild cattle horns at least two feet long. If you have shorter or other horns write me, and also how many arrow heads you want for them. I will also exchange shells, minerals and arrows. W. F. Lerch, 308 East 4th St., Davenport, Iowa.

I wish to purchase Vol. 7 of the *American Chemical Journal*, either bound or unbound. State price. Address, Wm. L. Dudley, Vanderbilt University, Nashville, Tenn.

A few duplicates of *Murex radix*, *M. ramosus*, *M. brandaris*, *Cassis rufa*, *Harpa ventricosa*, *Olivula triangularis*, *Chlorostoma funebre*, *Cypraea caput serpentis*, *C. lynx*, *Lottia gigantea*, *Acmola patina*, *Chama spinosa*, and some thirty other species, for exchange for shells not in our collection. List on application. — Curator Museum, Polytechnic Society, Louisville, Ky.

Photographs and Stereoscopic views of Aborigines of any country, and fine landscapes etc., wanted in exchange for minerals and fossils. — L. L. Lewis, Copenhagen, New York.

Droysen's *Allgemeiner Historischer Hand-atlas* (Leipzig, 1886.) for scientific books — those published in the *International Scientific Series* preferred. — James H. Stoller, Schenectady, N. Y.

Astronomical works and reports wanted in exchange or to buy. Reports of observations on the planet Neptune and its satellite specially desired. — Edmund J. Sheridan, U. S. A., 205 Adelphi St., Brooklyn, N. Y.

I would like to correspond with any person having Tryon's "Structural and Systematic Conchology" to dispose of. I wish also to obtain State or U. S. Reports on Geology, Conchology, and Archaeology. I will exchange classified specimens or pay cash. Also wanted a copy of MacFarlane's "Geologists' Traveling Hand-Book and Geological Railway Guide." — D. E. Willard, Curator of Museum, Albion Academy, Albion, Wis.

Morris's "British Butterflies," Morris's "Nests and Eggs of British Birds," Bree's "Birds of Europe" (all

colored plates), and other natural history, in exchange for Shakesperiana; either books, pamphlets, engravings, or cuttings. — J. D. Barnett, Box 735, Stratford, Canada.

I have *Anodonta opalina* (Weatherby), and many other species of shells from the noted Koshkonong Lake and vicinity, also from Western New York, and fossils from the Marcellus shale of New York, which I would be glad to exchange for specimens of scientific value of any kind. I would also like to correspond with persons interested in the collection, sale, or exchange of Indian relics. — D. E. Willard, Albion Academy, Albion, Wis.

Will exchange "Princeton Review" for 1883, Hugh Miller's works on geology and other scientific works, for back numbers of "The Auk," "American Naturalist," or other scientific periodicals or books. Write. — J. M. Keck, Chardon, Ohio.

Shells and curiosities for marine shells, curiosities or minerals address W. F. Lerch, No. 308 East Fourth St., Davenport, Iowa.

I want to correspond and exchange with a collector of beetles in Texas or Florida. — Wm. D. Richardson, P.O. Box 223, Fredericksburg, Virginia.

A collection of fifty unclassified shells for the best offer in bird skins; also skins of California birds for those of birds of other localities. Address Th. E. Slevin, 2413 Sacramento St., San Francisco, Cal.

I have forty varieties of birds' eggs, side blown, first class, in sets, with full data, which I will exchange for books, scientific journals, shells, and curios. Write me, stating what you have to offer. — Dr. W. S. Strode, Bernadotte, Fulton County, Ill.

CATARRH.

Catarrhal Deafness—Hay Fever.

A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N.B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King Street, Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.

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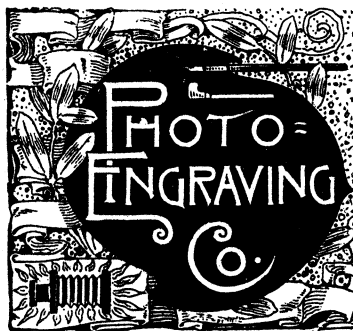
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