While reminding one forcibly of some monstrous fossil bryozoan, it seems improbable that it is such, neither is it a plant, nor a mollusk, as I believe. Possibly it is the case of some ancient worm. I have shown the specimen to eastern as well as western geologists and botanists, besides sending drawings and descriptions of it to others, who pronounce it entirely new to them. As far as my own experience goes, I have neither seen anything of the kind in any of our large eastern museums nor have seen anything published relating

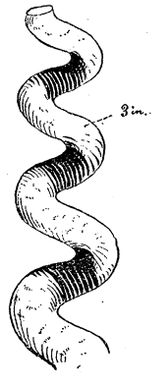

FIG. 3. — Diagram of another form of Devil's Corkscrew, as sketched in the field.

to it, and I feel reasonable confidence in offering a notice of what I believe to be a new paleontological specimen, trusting that, if nothing more, it may elicit information on the matter from anyone who has it to offer.

IRWIN H. BARBOUR.

CONFIRMATION OF THE DISCOVERY OF THE INFLUENZA BACILLUS.

To Dr. Pfeiffer of Berlin is due the discovery of the influenza bacillus. Dr. Kitasato has cultivated it to the fifth generation. Koch has shown, in an article not yet published, how pure cultures of tubercle bacilli can be obtained directly from the sputum. Kitasato has succeeded in employing the same method with the influenza bacilli. According to him, the single colonies are so uncommonly small that they can be easily overlooked, so that former investigators may have failed to see them. The colonies do not flow together as in other kinds of bacteria, but always remain separated; this is so characteristic that the influenza bacilli can be distinguished from all other bacteria with certainty.

The same bacilli have been found in the blood of influenza patients by Dr. Canon. Dr. Koch has compared these with the micro-organisms discovered by Pfeiffer, and pronounces them identical.

And now Dr. Canon has gone still further,[1] and has succeeded in cultivating the influenza bacillus from the blood of patients attacked with the disease. The cultivation is especially difficult since the bacilli in the blood-drops are very few in number, and the colonies, on account of their fineness, are concealed through the coagulated blood. The blood therefore was not inoculated in tubes upon glycerin or sugar-agar, but in the Petrian "Schalen." A great quantity was employed. By this method there was not only a greater probability of preserving colonies, but also the possibility of eventually seeking out the colonies with the microscope.

The blood is taken in the following manner: a finger-tip is cleansed with sublimate, alcohol, and ether in the usual way; then with a red-hot needle the finger is pierced; an assistant presses the blood out of the opening in drops, being careful that they remain globular in form; from eight to twelve drops are placed upon the Petrian "Schale," and they are heated in a temperature of 37° C. The colonies show a slight development after twenty-four hours; in forty-eight hours they are distinctly seen. They are like those cultivated by Pfeiffer from sputum of influenza patients. In the cultures from the blood the colonies often lie close upon one another. The pure cultures from these colonies have the same appearance as those Kitasato has described.

Dr. Canon cultivated influenza bacilli from the blood of six patients, and in all the bacilli in the blood preparation were few in number and separated. And thus it appears that in those cases where the bacillus is wholly separated in the blood preparation, a sure diagnosis of influenza is given.

A. MACDONALD.

Georgetown Medical School, Washington, D.C.

[1] Deutsche Med. Wochenschrift, Jan. 21, 1892.

NOTES AND NEWS.

THE University of Edinburgh in June, 1891, conferred upon Professor Simon Newcomb the honorary degree of doctor of laws (*in absentia*). Professor Newcomb was also elected, in June, 1891, an honorary member of the Royal Institution of Great Britain.

— At a meeting of the trustees of Johns Hopkins University, Dec. 15, 1891, it was determined to proceed to construct an academic hall on the property belonging to the university, at the corner of Monument and Garden Streets, running back to Little Ross Street. The trustees are enabled to take this important step by the gift of the late John W. McCoy, who made the university his residuary legatee. Sufficient funds have been received from his estate for the erection of a building which will furnish rooms for the classes in languages, history, and philosophy, with space for the present requirements of the library, and an assembly-room which will hold over six hundred persons. The trustees voted that the building should be known, in honor of the munificent donor, as McCoy Hall. The piece of ground on which the new hall is to be constructed is 100×185 feet, and is now taken up with residences used for purposes of the university. Messrs. Baldwin and Pennington have been selected to draw up the plans for the building.

— On 12th of May, 1890, while making a professional call in the outskirts of the town, B. H. Hartwell, M.D., of Ayer, Mass., was summoned into the adjacent woods by a messenger, who stated that her mother was "burned alive." In a paper read before the Massachusetts Medico-Legal Society, and published in the *Boston Medical and Surgical Journal*, Dr. Hartwell says: "Hastily driving to the place indicated (about forty rods distant) a human body was found in the actual state of conflagration. The body was face downward; the face, arms, upper part of the chest, and left knee only touching the ground; the rest of the body was raised and held from the ground by the rigidity of the muscles of the parts. It was burning at the shoulder, both sides of the abdomen, and both legs. The flames reached from twelve to fifteen inches above the level of the body. The clothing was nearly all consumed. As I reached the spot the bones of the right leg broke with an audible snap, allowing the foot to hang by the tendons and muscles of one side, those of the other side having burned completely off. Sending my driver for water and assistance, I could only watch the curious and abhorrent spectacle, till a common spading fork was found with which the fire was put out by throwing earth upon it. The flesh was burned from the right shoulder, exposing the joint from the abdomen, allowing the intestines to protrude, and more or less from both legs. The leg bones were partially calcined. The clothing unburned consisted of parts of a calico dress, cotton vest, woollen skirt, and thick, red, woollen undergarment. The subject of the accident was a woman, forty-nine years of age, about five feet five inches in

height, and weighing not far from one hundred and forty pounds; of active habits and nervous temperament. A wife and mother, she was strictly a temperate person, accustomed through life to hard work, one who, in addition to her household duties, went washing and cleaning, besides doing a good share of the work in a large garden. On the fatal afternoon she had — as the place showed — been clearing a lot of stumps and roots, and had set fire to a pile of roots, from which it had communicated to her clothing, or it had spread into the woodland and had set fire to the clothing during her endeavors to stop it. The body lay about two rods from the burning pile. As proof that the flesh burned of itself, and nothing but the clothing set it afire, it may be stated that the accident occurred after a rain; that the fire merely skimmed over the surface of the ground, not burning through the leaves; that there was nothing but charred leaves under the body; that her straw hat which lay several feet distant was simply scorched; that the wooden handle of the spade was only blackened. The above case is interesting in several particulars. It is the first recorded case in which a human body has been found burning (that is, supporting combustion) by the medical attendant. It differs from nearly all of the recorded cases, in that it occurred in a person in middle life, not very fat, and not addicted to the use of alcohol. It is interesting in a medico-legal sense. It proves that under certain conditions — conditions that exist in the body itself — the human body will burn. We have abundant proof in the many recorded cases of so-called spontaneous combustion (seventy-three are chronicled in medical literature) that the body has been more or less completely destroyed by fire, under circumstances that show that it will support combustion, and this has given rise to the belief in the spontaneous origin of the fire."

— A gentleman in New York has recently tested the result of preserving a turkey in a refrigerator for ten years, says the *Boston Medical and Surgical Journal*. This time having elapsed, the fowl was removed from the refrigerator, and after being properly cooked was eaten by a party of gentlemen. While putrefactive changes seem to have been entirely absent it was found that the meat was practically tasteless.

— The annual general meeting of the Royal Meteorological Society was held on Jan. 27. Owing to the absence of the president, Mr. Baldwin Latham, through an attack of influenza, his address on "Evaporation and Condensation" was read by the secretary. The question of evaporation is of as great importance as the study of the precipitation of water on the face of the earth, as the available water supplies of the country entirely depend upon the differences between these two sets of observations. The earth receives moisture by means of rain, dew, hoar-frost, and by direct condensation. It loses its moisture very rapidly by evaporation. Although evaporation mainly depends upon the difference between the tensional force of vapor due to the temperature of the evaporating surface and the tensional force of the vapor already in the atmosphere, yet it is largely influenced by the movement of the air and by its dryness, or the difference between the dew-point and the actual air temperature. Evaporation goes on at night so long as the water surface is warmer than the dew-point. With sea-water the evaporation is about 4½ per cent less than with rain-water, while with water saturated with common salt the evaporation is 15 per cent less than with rain-water. In his experiments Mr. Latham used an evaporating gauge made of copper, one foot in diameter, and containing one foot in depth of water, which was floated by means of a hollow copper ring placed six inches distant from the body of the evaporator and attached to it by four radial arms. This form of evaporator was found extremely convenient in carrying on all evaporation experiments; it was floated in a tank four feet in diameter, containing thirty inches depth of water. During the period of thirteen years, from January, 1879, to December, 1891, this evaporator has never once been out of order or been interfered with in the slightest degree by frost. Experiments were made with some 5-inch evaporators as to the effect of color on the amount of evaporation, one being painted white, another black, and the results given by these gauges were compared with a copper gauge exposed under similar conditions. This comparison was the means of showing that the greatest errors in evaporating gauges arise from the capillarity of the water rising on the sides of the gauge and thus inordinately increasing the amount of evaporation. Consequently a small gauge having a larger amount, in proportion, of side area than a larger gauge, gives a very much greater amount of evaporation. The results from the floating evaporator, one foot in diameter, show that the average amount of water evaporated annually during 1879–91 was 19.948 inches. It was found, however, that, as a rule, during the period from October to March, there were certain occasions when condensation was measured. The amount of these condensations in thirteen years averaged .308 of an inch per annum The 5-inch evaporating gauge, freely exposed to atmospheric influences, gave during the same period (1879–91) an average annual depth of evaporation equal to 38.185 inches. The average annual evaporation during the three years 1879–81 from the 5-inch copper gauge standing in water was 27.90 inches, from one painted black, 22.97 inches, and from another painted white, 21.74 inches, whilst a gauge of the same dimensions, freely exposed in the atmosphere, gave in the same period 36.96 inches, and the 1-foot floating evaporator, 19.40 inches. The 5-inch copper gauge gave a larger amount of evaporation than the gauge painted black. Mr. Latham next described some percolation experiments which were carried out by Mr. C. Greaves at Old Ford, by Messrs. Dickinson and Evans at Hemel Hempstead, and by Sir J. B. Lawes and Dr. Gilbert at Rothamsted. He then detailed the results of his own experiments, and also the gaugings of the underground waters in the drainage areas of the rivers Wandle and Graveney. He further stated that in the course of his observations on the flow of underground water he had observed that at certain particular seasons of the year it was possible to indicate the direction and volume of the flow of underground streams, even when they were at a considerable depth, owing to the formation of peculiar lines of fog. Dr. C. Theodore Williams was elected president for the ensuing year.

— The *British Medical Journal*, in commenting on the death of a boy who died from drinking hot tea without milk, says that the tea had been left in the oven for some time, so that it had become a strong decoction of tannin. In being drunk without milk, the tannin was not brought into a relatively harmless albuminous tannate. It is on account of this method of making tea that it is so injurious to digestion. Neither the Chinese nor the Japanese, who know how to make tea, use milk with it; but with them the hot water is poured on and off the leaves at table, and it is drunk as soon as it becomes a pale straw color. No people in the world drink so much tea as the Japanese, yet in Japan it is never injurious to the digestion, as by their method of preparation the tannin is not extracted from the leaves.

— There will shortly be opened, probably early in March, in the Museum of Archæology of the University of Pennsylvania, a loan collection of objects used in religious ceremonies, including charms and inplements used in divination. The basis of the exhibition is the collection of oriental idols of the Board of Foreign Missions of the Presbyterian Church in the United States, comprising objects sent home by foreign missionaries through a period of sixty years. They include a series of Indian brass and marble idols, and a representative collection of Chinese deities and ancestral tablets. There are also a number of African idols from the well-known missionary station on the Gaboon River. This collection is supplemented by numerous loans from private collections and objects from different sections of the museum. A catalogue is in course of preparation which will contain sketches of the great religions of the world by Mrs. Cornelius Stevenson, Dr. Daniel G. Brinton, Dr. Morris Jastrow, and others. Ancient Egypt, India, Burma, China, Thibet, Japan, Aboriginal America, Polynesia, and Equatorial Africa will be represented by appropriate specimens, which are now being arranged and catalogued.

— At the opening session of the seventy-first meeting of the American Institute of Mining Engineers at the Johns Hopkins University, Baltimore, Md., on Tuesday evening, Feb. 16, Mr. George F. Kunz read a paper on the mining of gems and minerals in the Ural Mountains, illustrating his remarks with lantern slides made by himself on his trip last summer.

— The following experiment is reported in bulletin No. 15 of the Georgia experiment station: The object of this experiment was to determine the effect of applying varying quantities of each of the three elements — nitrogen, phosphoric acid, and potash. The section selected comprised one acre of very poor, gravelly soil, underlaid by a yellow pebbly clay, inclining to pipe clay. The original growth was scrubby post oak, red and yellow oak, and the soil is probably the poorest on the farm. It was in corn in 1890, fertilized at the rate per acre of 160 pounds of super-phosphate, 170 pounds of cotton seed meal, and 80 pounds of muriate of potash. The yield was 18 bushels of corn. The land was well broken, April 8, with a one-horse turn-plow, and harrowed smooth. April 14 it was laid off into fifty-two rows, running east and west, and four feet wide, using a long scooter, followed by a shovel. The section was then divided in the middle, across the rows, and grouped into plots of three rows each, extending half across the acre, from the west to the middle line, and from the middle line to the east side. The plots were numbered from 1 to 17, commencing on the north side of the west half and extending to the south side; then from 18 to 34, continuing from the south side of the east half to the north side. The normal or standard formula was: 156 pounds super-phosphate, 19.4 pounds of muriate of potash, and 32.4 pounds of nitrate of soda. This formula was applied to plots 1, 10, 18, and 27. On the next succeeding plots, 2, 11, 19, and 28, the potash was doubled, the other ingredients remaining the same. In the next series, plots 3, 12, 20 and 29, the nitrogen was doubled, the others remaining normal. In the fourth series, plots 4, 13, 21, and 30, both the potash and the nitrogen were doubled, phosphoric acid remaining normal. In the fifth series the phosphoric acid and potash were doubled, nitrogen remaining normal; and so on through to the eighth series. Plots 9 and 26, abutting each other, contained four rows each, and were not fertilized. By this arrangement of the plots inequalities in the character and productiveness of the different portions of the acre were approximately adjusted or corrected. In the table following the results are given, the yield in the case of the unfertilized plots being the average of two plots, and in every other case being that of four plots.

Series.	Fertilizers Per Acre.			Cost Per Acre.	Yield Per Acre.
	Super-phosphate.	Muriate of Potash.	Nitrate of Soda.		
1	156	19 4	32.4	$2.36	7 62
2	156	38 8	32 4	2.77	7.94
3	156	19.4	64.8	3.06	8 34
4	156	38.8	64.8	3 48	8.84
5	312	19.4	32 4	3.58	8.12
6	312	38.8	32.4	4.00	7.93
7	312	19.4	64 8	4.29	8.95
8	312	38.8	64.8	4 71	8 46
9	—	—	None.	—	5.00

— Dust, like the poor, we have always with us, nor has Hygeia with her newest brooms yet succeeded in banishing it. Yet there is abundant evidence to show that a dusty street contains more lurking potentialities of mischief than a jungle peopled with the hungriest wild beasts. To the researches of Miquel and others can now be added, says the *British Medical Journal*, the results of an elaborate investigation by Dr. Luigi Manfredi of the composition of the dust of the streets of Naples. The number of microbes of all kinds found in it amounted on the average to 761,521,000 per gramme. Remarkable differences in the proportion of micro-organisms were, however, observed in the dust from different quarters of the city. Thus, in the streets least exposed to contamination, that is to say, where there was the least traffic and where the hygienic conditions were most satisfactory, the average number of microbes in the dust was only 10,000,000 per gramme. On the other hand, in the busiest thoroughfares, the average rose to 1,000,000,000, and in some of the dirtiest streets to the enormous figure of 5,000,000,000 per gramme. In this "endless ocean" of infinitesimal life, there was a large number of pathogenic organisms, and the unhealthiness of the street or quarter was directly proportional to the number of microbes in the dust. Dr. Manfredi carefully tested the infective power of the dust, and obtained positive results in 73 per cent of his experiments. Of forty two cases in which he communicuted disease to guinea-pigs by inoculating them with Neapolitan dust, he found the microbe of pus in eight, the bacillus of malignant œdema in four, the bacillus of tetanus in two, the bacillus of tuberculosis in three, not to mention several other microscopic *ferœ naturœ* possessing the power of inducing fatal septicæmia in the unfortunate guinea-pigs on which they were tried. The moral pointed by these discouraging facts is that our Ædiles should take the Dutch housewife for their example, and wage relentless war against dust and dirt of every kind.

— Prosessor William Guy Peck of Columbia College died suddenly in Greenwich, Conn., on Feb. 7, aged 72 years. He published, in 1859, "The Elements of Mechanics," in 1860, an edition of Ganot's "Physics," and was joint editor with Charles Davies of the "Mathematical Dictionary and Cyclopedia of the Mathematical Sciences." He wrote several other text-books in mathematics.

— The Institute of Jamaica has begun the issue of special publications. The first, the "Rainfall Atlas of Jamaica," contains thirteen colored maps showing the average rainfall in each month and during the year, with explanatory text. The maps are based upon observations made at 153 stations from about the year 1870 to the end of the year 1889. The available stations are irregularly distributed, being for the most part sugar estates and cattle-pens, and in consequence of this irregularity the island has been divided into four rainfall divisions. The north-eastern division has the largest rainfall, then comes the west central, next the northern, and lastly the southern. The annual distribution of the rainfall varies from 30 to 35 inches in a few places to over 100 inches in the north-eastern division. The greatest fall is in October, and the least in February. The driest stations are on the north-eastern and south-eastern shores. The maps show the distribution and average amount of rainfall very clearly by different tints, and cannot fail to be of both scientific and practical utility. The work has been prepared, according to *Nature*, by Maxwell Hall, the government meteorologist.

— The Equatorial current of the Pacific Ocean, striking against the Philippines and the islands lying to the south of that group, divides into two branches (*The Scottish Geographical Magazine*, February, 1892), one of which turns southwards to the coast of Australia, while the other, under the name of Kuro Shiwo, or Black Stream, flows past the Liu-Kiu Islands and the coast of Japan. Coming from the warmer equatorial regions, its waters have a higher temperature than that of the sea through which it passes, and hence its limits may be determined by observations of temperature. Its breadth and velocity are greatly modified both by the monsoons of the Chinese Sea and by the storms of the Pacific. In fair weather the Kuro Shiwo flows in an almost straight line from the Van Diemen Straits to Rock Island, touching Oshima on its way. In winter it often lies considerably to the south of this limit, but the line from Oshima to Rock Island may be taken as its northern boundary. Its course is marked by sea-weed and drift-wood, and also by the dark color to which it owes its name. From Rock Island it runs past Nosima Saki into the Northern Pacific. On the northern edge of this stream no current is found as a rule, though occasionally a current in the opposite direction has been noticed. Between the zone where no marine currents are found and the coast of Japan tidal currents occur. The breadth of the zone between the Kuro Shiwo and the coast increases during violent northerly winds, and diminishes when southerly and easterly winds prevail. When the latter blow steadily and with great strength, the current sets more or less directly onto the coast, causing high tides, and it is then necessary for ships to keep a sharp lookout, lest they should be driven ashore. The zone of tidal currents extends for a distance of five to six nautical miles from the coast, and their velocity varies in

general inversely as the breadth of this zone. At Oshima the tidal current is sometimes imperceptible, either because it is overpowered by the Kuro Shiwo, or because at that time it flows through the strait between Oshima and the main island.

— The New York Industrial Building, erected during the past year, is nearly ready for use. The furniture dealers will be the first to occupy the building, and other trades have bespoken it so that there will be a continuous exhibition or fairs of varying kinds. The building is in a most fortunate situation, occupying the block bounded on the east by Lexington Avenue, on the west by Depew Place, on the north by Forty-fourth Street, and on the south by Forty-third Street, within a short block of the freight depot of the Grand Central Railroad, and within reach of all the street cars connecting with the ferries by which New York is approached from New Jersey, etc.

— The influence of steam on magnets is the subject of an interesting note in the *Schweizerische Bauzeitung*, in which reference is made to the researches of Strouhal and Barus. These have shown that, with long continued heating in steam, magnets lose from 28 to 67 per cent of their power. If, after this, the magnets are remagnetized, and again exposed to the action of steam, only a very slight loss of magnetic power is found to take place. The experiments which have been made would seem to warrant the conclusion, also, that after such treatment a magnet is less liable to deterioration from mechanical vibration as well as heat. In one of the experiments a short magnet was boiled in water for four hours. It was then magnetized and held in an atmosphere of steam for two hours more, after which its magnetic moment was measured. It was then subjected to fifty blows from a piece of wood, both transversely and longitudinally. Again measuring, its magnetic moment showed a loss of $\frac{1}{900}$, and, on repeating the hammering with the wooden bar, the loss was $\frac{1}{400}$ of the original moment. In view of this, repeated steaming and magnetizing is recommended as a good means of securing permanent magnetism in pieces of hard steel.

— The Orang-Ulu are a people living in the southern part of Sumatra, who were visited by M. J. Claine during the summer of 1890 (*Asiatic Quarterly Review*, October, 1891). In May he arrived at Palembang, formerly the capital of the sultans of Palembang and now the seat of a Dutch resident. This town, containing a population of 60,000, composed of Malays, Arabs, Chinese, and a few Europeans, is situated on the Kuraa Sunsang, a branch of the Musi. Leaving Palembang in August, M. Claine ascended the Musi and its affluent, the Lemattang (Lamatang), to Muri-Enim (Muara Inim), about 186 miles from Palembang. Two days later the land journey was commenced, and, after a few hours' march, the country of the Orang-Ulu was entered by a bridge guarded by a group of natives. At Lahat the curious peak of Bukih Segello (Cerillo?) was photographed, and at Bandar, the last fortified post of the Dutch Government, a halt of two days was made. The country is mountainous and wooded, with here and there fine plains. The head-waters of the Lemattang run through profound gorges, and aborescent ferns afford a welcome shade from the burning rays of the sun. Soon after leaving Bandar M. Claine came in sight of the rich plateau of Passumah and the superb outlines of the Dempo, strongly marked against the sky, and came to a halt at Pager Alam. The Ulu are very similar to the Malays in outward appearance and costume, but, never having adopted Mohammedanism, they differ in their habits. Each village is governed by a *Creo*, or chief, who wears, as a sign of authority, a pair of gold-woven pantaloons, provided by the Dutch Government. His power is very limited, all his acts being controlled by the elders. The chief occupations of the men are smoking and cock fighting, while the women do all the hard work. They grow rice and cocoa-nut trees. The houses, like those in other parts of Sumatra and Java, are built on piles, and entered by means of a notched beam. The husband, on his marriage, is bound to enter the service of the wife's family. Marriage is celebrated with the following curious ceremony: An immense balance, adorned with leaves, is placed before the house of the bride, in one of its wooden scales the parents deposit fruit, rice, fuel, cocoa-nuts, and a small kid, and in the other the bridegroom is bound to lay before sunset the gifts he makes to his intended. As soon as the scale dips in his favor, the girl leaves the house and approaches him, and the ceremony is concluded by a feast and dance. On the 11th of September M. Claine set out with a Dutch officer to ascend the Dempo. Passing by the village of Gunong Agun, through a region abounding in tigers, they reached the summit on the second day, and then, crossing a long and narrow plateau, ascended the Merapi volcano, visited seven years before by Mr. H. O. Forbes. The barometer marked 9,000 feet at the summit. From Pager Alam M. Claine made a tedious journey across the Passumah plateau to Padang-Bornay and Talang-Padang, crossing the Upper Musi several times by bamboo bridges. At Tebbing-Teggi (Tingi) he took passage on a coffee *prauw*, and descended to Palembang. The current is so rapid that it takes forty-five days to ascend the river, whereas three-fourths of the descent is accomplished in three days, and the remainder in four days and four nights.

— It has been proposed through the pages of the *British Journal of Photography* that upon the advent of the twenty-first birthday, in 1892, of the gelatino-bromide dry plate process, in photography, a substantial and fitting testimonial should be offered to Dr. R. L. Maddox, the inventor, now a veteran invalid, who has derived no pecuniary advantage from his valuable discovery, which has so largely advanced the progress of photography in all its branches, and in every country. For this purpose a committee has been formed in London, in order to carry out the scheme in the United Kingdom of Great Britain, consisting of the following gentlemen: Mr. James Glaisher, F.R.S., president of the Photographic Society of Great Britain, chairman; Captain W. de W. Abney, C.B., F.R.S., R.E., Messrs. A. H. Harman, F. York, and Sir H. Trueman Wood, assisted by others, as the executive, with the aid of Dr. A. Clifford Mercer, F.R.M.S., Syracuse, N.Y. For the furtherance of this project internationally, a foreign committee has been formed in Southampton, of the following gentlemen: James Lemon, Esq., Mayor of Southampton; Col. Sir Charles W. Wilson, K.C.B., F.R.S.. R.E., director of the Ordnance Survey, Southampton; Major-General I. Innis-Gibbs, Captain Robert Evans, R.N. Subscriptions can be forwarded to the Southampton Branch of the National and Provincial Bank of England, by check or bank draft, crossed "Maddox Fund," or by post-office order; but, if preferred, they can be addressed direct to the secretary, Charles J. Sharp, solicitor, 71 French Street, Southampton, and will be acknowledged by him.

— The outlook for the recently discovered coal mines in the Argentine Republic is so favorable, according to *Engineering*, that the railway companies of that country have declined to renew their contracts with the British mines for fuel. Hitherto all the coal burned on the Argentine railroads has been imported, but it is believed that the newly-discovered mines will furnish a supply entirely sufficient for domestic consumption.

— Mail advices from the Argentine Republic bring information of the discovery of a vast bed of silver in the bottom of the bay of San Blas, Argentine Republic. The silver appears in the black metallic sand which covers the bottom of the bay. This sand is full of silver pellets, and divers have brought up a sufficient quantity to justify the belief, as stated by the Buenos Ayres *Standard*, that "the silver deposit in the bottom of the bay is greater than in the famous Bonanza mines of California."

— About four years ago there was inaugurated in Berlin a series of popular lectures on astronomy, illustrated with stereopticon views. This series has proved so successful that it has continued till the present time, and within ten days a similar course has been opened in New York. The lectures are given at the Carnegie Music Hall three times a week, and are entitled "A Trip to the Moon." The views shown are excellent and must certainly impress on those seeing them many an important fact in astronomy. The matter given by the lecturer varies somewhat as occasion may require.

— William Draper Lewis, Ph.D., is the author of a pamphlet recently published by the American Academy of Political and Social Science. The title of the essay is "The Political Organization of a Modern Municipality."