5 Papers, 1873

W. B. ROGERS
MC 1

1)

Mid Lothian Jan. 5th 1873. (X)

Prof. Wm. B. Rodgers.

Boston.

Dear Sir.

With the compliments of the season allow me the wish of a happy new year to you.

In receipt of yours of 16th Dec. I have not been able to answer yet, and can only to it hastily now being in the midst of closing up accounts etc for annual report etc.

The No. 105 in sinking shaft must be at least 895 ft. below surface may, be more.

I am now boring nearly due South of old pump shaft to the dip of what was called the Grove shaft. At that point this strata appear to be at 577' 10". I am urging my strata as soon as I can to take the reduction in the angle of dip in consideration, and may then

to make some modifications.
I hope soon to be at more laisure for such investigations, and will then send you such results as I shall obtain
I will also send you Drawings of the two Areas as soon as I have a little more laissure time. I have not done it yet, because I have no view, after I get all authentical and identical information to give a description of the coal field as far as it has been modified by recent exploration. I am also making afford to see if we can not get, at least the beginning of a more systematic division of the jurassic formation here, which for want of noticing the stratification clearly and scientifically when sinking of course no body formerly hardly had an opportunity.
I shall be much pleased at such times to exchange notes and opinions with you, as the pioneer Geologist of this field which I take pride to take you, as being the first to place geologically this field in its proper position.
But I do not like to venture upon such a subject until I have facts from various points collected and compared myself, as I have an aversion to do things by halfs.
I hope you will permitte me to write you occasionally upon those subjects and will be much pleased to get your opinions, as far as you can do so convinicently.

Yours respectfully,
Oswald J. Heinrich.

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Rochester March 3. 1873

My Dear Sir

When in Edinburgh I visited the Dean Cemetery, and came unexpectedly upon the grave of your lamented brother Henry. I saw him last at the Albany meeting of the American Association in 1856. at which I believe you were also present; and I remember his fine figure, and pleasant address. I copied the inscription on his tomb, and thought of writing to you and sending you a copy, when it occurred to me that

you probably had it, and perhaps prepared it. It seemed unfortunate that his remains should ~~should~~ lie in a distant land, so far from his kindred; and ~~yet~~ the place is remarkably lovely, and attached to one of the most beautiful cities on the Earth. His daughter Edith, buried at his side seemed to explain his own burial there

I regret to hear of your impaired health; but you have the consolation of a long and useful life well spent in Science. None of us can resist the stream which is bearing us onward.

I am indebted to you personally for the generous support you gave me at the Meeting of the Academy in 1868, when I read my paper on Consanguinity, and Prof. Agassiz made a wrathful attack upon it. I told him afterwards that he was wholly unable to appreciate an Ethnological fact. At this late day I desire to thank you for what you then said

I sent the printed paper to Darwin and I am inclined to think it did him a good turn in writing "The Descent of Man". Unless he had know that there were good grounds against Natural

Selection in Marriage among savages and barbarians, because of a system of regulated promiscuity. He would have been tempted to have made a strong claim for Natural Selection in the propagation of human kind. Of course I do not know that he would have committed himself to such a view.

With great respect
Yours truly
L. H. Morgan

Prof. W. B. Rogers.
Boston

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1 Walnut Street

March 11. 1873

My dear Sir

The Monthly Meeting of the "Mass. Hist Society" meets at my house on Thursday evening 13th at Seven & a half o'clock, on which occasion the death of Mr Savage will of course be noticed. It is intimated that it might gratify you to hear what is said and I therefore beg to ask you will come if it is agreeable to your feelings and

inclination. Will you permit me to avail myself of this occasion to say, how warmly I unite with all his friends and the community in general, in the expression of the very high respect felt for the Savage character, whose memory will go down to posterity, as that of one of the purest and best of men.

With my sympathy for Mrs Rogers and yourself in this affliction, tempered as it is, under the Providence of God, with circumstances of Mercy and loving kindness I remain

Very respectfully
Yours

R. McMaster

Professor Rogers

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Brookline
17 March 73 –

My dear Sir:

I am preparing, under orders, a Physical History of the Coast, and among other matters which I am venturing to discuss is the Aspect of the Coast reflected in the narratives of the Northmen, Champlain &c. I make, I fancy, one or two new points out of my own experience; and if you think this chapter, in its crude form, would be a proper thing to read to your Club, I will bring it on the 20th.

I was very much gratified by the personal tone of your note and the kindly remembrance of my father

– I know well his friendship
with you and your good wife
– and her father.

Very truly Yrs
T. V. Mitchell

I am quite a novice about
clubs, so you must, if you
please, instruct me – TVM.

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San Francisco
21 March 1873.

Mrs Rogers
Dear Madam.

I have just learned of the death of your great father. He was an old gentleman when I first knew him, old to me for I was but a boy, — but his genial kindness and his warm return of my boyish regard, won my affections, and I have never ceased to

counted him among my most valued friends.

My first acquaintance with his Savage was through a note from my mother, and when I went home in my college vacations she would always ask me if I had seen your father lately, and how he was. My mother lived to a ripe old age, and was later to her rest only a few years ago. Of many of his family and dearest friends had gone before, that she looked forward to meeting with an Eager Expectation rather than resignation or regret. I do not believe that such friendships are ended with death but rather transformed & immortal[illegible] renewed.

Often during my life in Cambridge on my Saturday afternoon of leisure, I would call on your father and spent a very pleasant hour in his study or library; and after my graduation when he asked me to visit him in Lunenburg, one of the happiest weeks of my life was during that visit. It is a solemn thought that I am the only survivor of that large company.

I know it is idle to offer you any consolation in your loss, but I wanted to tell you how much respect and affection I had for the good old gentleman who was so kind to me as a boy, and how as I grew older and knew him better, how he won my manly respect for the shining worth of his character, the usefulness of his life, and his constant thought for other people. Pardon me if I have intruded upon you, and believe me with kind regards for yourself and Professor Rogers

Very truly yours friend

Thomas Davis

[Apr. 1873 +]

# BULLETIN

OF THE

# STATED SESSION

OF THE

# NATIONAL ACADEMY OF SCIENCES,

HELD IN

## WASHINGTON, APRIL, 1873.

OFFICERS.

JOSEPH HENRY, *President*,
WOLCOTT GIBBS, *Vice President*,
LOUIS AGASSIZ, *Foreign Secretary*,
J. E. HILGARD, *Home Secretary*,
FAIRMAN ROGERS, *Treasurer*.

COUNCIL.

S. F. BAIRD,
M. C. MEIGS,
G. J. BRUSH,
W. D. WHITNEY,
BENJ. PEIRCE,
J. H. C. COFFIN.

The following members were in attendance:

Messrs.—Alexander, Barnard J. G., Baird, Brown-Sequard, Coffin J. H. C., Gill, Guyot, Henry, Hilgard J. E., Humphreys, Lane, Le Conte, Meek, Meigs, Newberry, Newcomb, Newton, Peirce, Rodgers J., Rogers W. B., Schott, Silliman, Trumbull, Watson, Whitney W. D., Winlock, Woodward.

## PAPERS READ.

A Biographical Memoir of the late Dr. John Torrey; by ASA GRAY.

The determination of singular points of curves and surfaces by the methods of quarternions; by BENJ. PEIRCE.

On the Meteoric Iron found in 1871 near Shingle Springs, Eldorado county, California; by BENJ. SILLIMAN.

Determinations of Longitude between Europe and America, by the U. S. Coast Survey; by J. E. HILGARD.

On the Structure and Age of the Cincinnati Anticlinal; by J. S. NEWBERRY.

On the need of more accurate investigations and tables of the celestial motions; by SIMON NEWCOMB.

Experimental and graphic results of distilling certain Hydro-Carbons by heat, with and without the aid of vacuum and steam; by C. F. CHANDLER & B. SILLIMAN.

The Geodesy of the U. S. Coast Survey; by BENJ. PEIRCE.

On the General Atmospheric Circulation; by A. J. WOEIKOF.

On Repeating Curves; by H. A. NEWTON.

Comparison of the spectra of the limb and of the centre of the Sun, made at the Sheffield Scientific School, by Chas. S. Hastings; read by H. A. NEWTON.

On the Observation of very small Stars near the Ecliptic and some peculiarities in two recently discovered Minor Planets; by JAS. C. WATSON.

On the altitude of Gray's and Torrey's Peaks in Colorado Territory, some questions connected with the determination of Barometric altitude in the interior of Continents; by A. GUYOT.

A Biographical Memoir on the late Prof. William Chauvenet; by J. H. C. COFFIN.

On the stability of the Meridian Circle of the Observatory of Harvard College; by J. WINLOCK.

On some experiments made in 1871, with a slitless spectroscope, in order to see the whole chromosphere of the Sun at once; by J. WINLOCK.

On a method of illuminating the threads of the reticule of a telescope by the electric spark; by J. WINLOCK.

On Observations of the Sun, made at the Observatory of Harward College in 1872, with the aid of the Bache Fund; by J. WINLOCK.

Report of progress of a Magnetic Survey made by the aid of the Bache Fund; by J. E. HILGARD.

On certain Harmonies of the Solar System; by STEPHEN ALEXANDER.

On the reproduction in progency of defects produced by injuries in parents; by C. E. BROWN-SEQUARD.

Silt Analysis of Soils and Clays; by E. W. HILGARD; read by J. E. HILGARD.

On the Unity of the system of life in animals and the true principle of gradation in various animal types; by A. GUYOT.

## MEMBERS DECEASED.

Messrs. Coffin, J. H.
Frazer, J. F.
Hadley, J.
Stimpson, William
Torrey, John.

## MEMBERS ELECTED.

Messrs. Loomis, Elias
Lovering, Joseph
Gill, Theodore
Norton, William A.
Woodward, Joseph Janvier.

## RESOLUTIONS PASSED.

Mr. Winlock moved, that a committee of the Academy be appointed to take into consideration the need of more accurate investigations and tables of the celestial motions, as represented by Mr. Newcomb and to devise such measures as may seem to it best adapted to improve the accuracy of astronomical tables.

The following committee was appointed: Messrs. Peirce, Winlock, Coffin, Newcomb.

Mr. Meigs stated, that a large Government expedition was fitting out to escort the Engineers of the North Pacific Railroad over the line from the Missouri to the Yellowstone, and suggested that it would be well for the Academy to advise the Government to take advantage of the facilities this would afford for scientific exploration of this comparatively unknown region, in the branches of botany, geology and fauna, and of the palæontology of the district which is said to be rich in fossils.

Mr. Peirce moved, that the President be requested to communicate with the Government and urge that the expedition be accompanied by men of special skill in those branches of science.

The Council having requested an expression of opinion on the part of members as to the desirability of holding a stated session in the Autumn, a general disposition in favor of such a session was

manifested, in order that pending amendments and nominations might be acted on.

Officers and Council for ensuing year:

| OFFICERS. | COUNCIL. |
|---|---|
| JOSEPH HENRY, *President*, | S. F. BAIRD, |
| WOLCOTT GIBBS, *Vice President*, | J. H. C. COFFIN, |
| LOUIS AGASSIZ, *Foreign Secretary*, | M. C. MEIGS, |
| J. E. HILGARD, *Home Secretary*, | SIMON NEWCOMB, |
| FAIRMAN ROGERS, *Treasurer*. | BENJ. PEIRCE, |
| | W. D. WHITNEY. |

## AMENDMENT TO CONSTITUTION.

Mr. Peirce moved to amend the Constitution by striking out from Article IV. Section 5—the words and after that of April 1872 not more than five members shall be elected at any one session. The Council recommended that it be adopted—which was considered and adopted by the Academy in Committee of the whole, as provided by the Constitution Article VII; to be acted on at the next stated session.

NOMINATIONS PENDING:—Charles F. Chandler, of New York City; George Davidson, of California; Asaph Hall, U. S. Navy; F. V. Hayden, of Washington, D. C.; George W. Hill, of Nyack Turnpike, N. Y.; T. Sterry Hunt, of Boston, Mass.; Charles S. Peirce, of Washington, D. C.; Edward C. Pickering, of Boston, Mass,; L. F. Pourtales, of Cambridge, Mass.; Robert E. Rogers, of Philadelphia, Pa.; William Sellers, of Philadelphia, Pa.; F. H. Storer, of Cambridge, Mass.; John Tyndall, of London, England, for Foreign Associate.

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HARVARD UNIVERSITY,
CAMBRIDGE, MASS.

30 May 1873.

My dear Sir,

I trust that the selection of the 100 books from Mr. Savage's library for the University was accomplished without putting you to serious trouble. The books have been received and will be suitably marked with the

name of the giver.

Hoping that you and Mrs Rogers will much enjoy the restfulness and natural beauty of Newport I am

Very truly yours
Charles W. Eliot

Prof. Wm B. Rogers

10)

1873

Scottsburg Halifax Co Va June 11th

My Dear Sir

As you were once a citizen of our State and Professor at our University I feel that I can take the liberty of writing to you, while a citizen of Virginia you no doubt saw the process of curing tobacco and know that annually an immense quantity of timber is destroyed in the process. In this section of the State Charcoal is used to some extent which diminishes the consumption of wood to some extent, but I am of the opinion that some Chemical agent could be employed (by fumigation) which would still further reduce the cost and labor. The manufacturers of straw hats and bonnets bleach them by sulphuric fumigation, the process would no doubt bleach tobacco but

would impart so disagreeable a flavor as to diminish the market value of the crop — unless the sulphur could be com=
=bined with some other substance that would modify its flavor
Is there any Incorporation of lime which could be made available?
Do you know a practical work on Chemistry applied to the arts and manufactures? I hope my Dear Sir that you will pardon the liberty I take in writing this to you —
I will be thankful for any infor=
=mation you may give me on the subject —

Yrs very truly
D A Claiborne

Prof Wm B Rogers

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July 28. '73

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My dear Professor Rogers,

Messrs Houghton & Co are going to send you a copy of my work, the first part of which is just finished; my work on Physical Manipulation, for use in our laboratory.

I have inscribed it with your name, for I knew of no better

way to show my appreciation of your unfailing kindness to me, and of the position you occupied in initiating this new era in Physical instruction. Hoping the summer is passing agreeably for both Mrs Rogers and yourself, I remain,

Always affectionately,

Edward C. Pickering.

July 28th. 1873.
Waterville, N. H.

United States Engineer Office,

Fort Monroe, Va., September 11, 1843.

Col. Wm. P. Craighill,
Corps of Engineers,
Baltimore, Md.

Colonel:

In reply to your letter of the 4th I have the honor to state that upon examination I have been unable to find when any specimens from or information about the Artesian Well were furnished to Prof. Rogers from this office and therefore commence from the depth he indicates, 500 feet. Such specimens as I have been able to find from that depth to the lowest reached are forwarded to you by express this day, the depth from which each specimen was obtained being marked on it.

The first specimen is from a depth of 504 feet, between this depth and 604 feet no specimens remain some were sent to the Engr. Dep't. Washington (a portion of which were submitted by Genl. Humphreys to

Mr. Clarence King) the journal kept, however, gives all changes in the strata that were noticed as the well progressed. I copy from it.

From this depth (504 ft.) no change was observed until 515 feet when the specimen obtained indicated a decided change. - "To the eye the material appears much like the clay above, except that it has a lighter shade of green - To the fingers it is less tenacious and crumbles easily. It appears to be a sort of marl, mixed more or less with clay, free from sand and effervesces quite freely under the action of nitric acid" From 515 ft. to 572 ft. there was no material change in the strata - at 572 feet a few pieces of a concretion of sand with shells imbedded in it and a few sharks teeth - two pieces of bone supposed to have been portions of the vertebra of a black fish or whale - The indications were that the stratum was changing - at 584 ft specimens were brought up which on washing were found to contain 50 per cent. sand. Washings of later specimens (599 feet) giving 80 to 90 per cent sand - All specimens obtained about this time were forwarded to the Engr. Dept Washington. At this time the water rose in the pipes above the level of the parade of the Fort for several days, it was tested at different depths and found to be very saline - Below this depth (599 ft.) the material became more tenacious and clayey and at 650 ft the boring was very difficult - at 654 ft slight indications of sand were noticed and continued to 667 feet when it was estimated there was 20 per cent. At 669 feet the clay was free from sand and continued so with slight modifications to 830 feet when it was found after washing to contain 80 per cent. sand. From this depth to 851 feet only slight changes were noticed (in the proportions of clay and sand.) at 851 a few pebbles were found and at 853 feet a conglomerate of clay sand and small gravel - at 855 feet a hard crust 3 feet thick was met with after which the clay was stiff to 874 feet, when it became variegated in color and continued so to 885 ft. when a very dark stratum was struck which again changed (in color) at 890 feet. With slight changes this continued to 900 feet when the clay was again mixed with sand which continued to 907 feet the depth of the well below the parade of of the fort.

With the hope that the information given may be satisfactory,

I am

Very respectfully Yr obt svt,

(Signed) Geo. H. Elliott,

The letter of Prof. Rogers and Col. Blunt's note are herewith returned.

Sept. 11, 1843.
(Elliott)

Office of the Chief of Engineers,

Washington, D. C., September 27, 1873.

Prof. W. B. Rogers,
Gibbs Avenue,
Newport, R. I.

Dear Sir:

In reply to your letter of the 30th of August, relative to the prosecution of operations at the Artesian Well at Fort Monroe of late years, I take pleasure in enclosing copy of letter of Mr. Geo. N. Elliott, Assistant Engineer at Fort Monroe, upon the subject.

Shall the specimens referred to be sent to you at Newport or Boston? If at the latter place will you please send me your address:

Very truly yours

A. A. Humphreys

Brig. Genl. & Chief of Engineers.

Sept. 27 1873.

Humphries

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Newport Oct. 16. 1873.

My dear Prof. Hunt.

I thank you for your interesting letter & for the Report of the meeting of the Assoc. at Portland, of which I had before read only a few imperfect fragments. I have been much interested in your papers which relate to regions and phenomena with which my daily labours made me somewhat familiar, and I anticipate great enjoyment as well as profit in talking over these subjects with you, when we meet, as I, trust, we shall often, during the coming winter. I may add that as an Institute-man I was happy to see our scientific

Reputation decision with respect to it.

character so ably represented at the Portland Meeting.

In regard to the Coal region to which your letter refers I am unable to give you any detail, ~~from personal observation~~ as all my and such Notes as I have taken by ~~one of my assistants, are not with me in Newport~~ during the Survey are in Boston. The exploration in the Coal region of the S.W. Corner of the State been only of a general character, as the County at that time was a wilderness. I have ~~the~~ postponed the ~~detail further~~ detail until the closing labors of the Survey, which have the ~~Legislature did not State~~ failed to provide for.

The extent of the Coal rocks is imperfectly represented on the Map, by ~~which~~ is laid down as the great flat lot. No. which forms the S. Eastern boundary of Mc Dowell & Wyoming Counties. ~~But~~ The upper shaly & siliceous member of the Lenticular Sandstone ~~which~~ bordering in a jagged form, north & west the N.W. part of Mercer Co. Va. is placed by the Survey group of Sandstones forming the base of the Secondary which contains one or two thick Coal Seams. Towards the S.W. entering Tazewell Co. the lower & upper lower rocks are covered by dikes & faults with ~~an unknown depth~~ the latter comparatively narrow interval between Roaring Valley & the Tug Ridge at the S.W. base of which is ~~a~~ ~~one of these long faults~~ ~~or rather series of faults~~ ~~one of~~ begins one of those lines of dislocation of which there are so many in S.W. Va. & Eastern Tenn.

Of

In a general way then affected

~~[illegible]~~ supposing
~~Taking~~ the SW boundary of the ~~Coal bearing~~ Coal Measures proper as approximately ~~that~~ the marked by ~~base as the~~ ~~north that~~ of ~~the Counties~~ ~~Coal~~ the flat top & long ledges, the areas of McD. & W. Counties may be supposed ~~over them~~ ~~are~~ ~~to be~~ ~~occupied~~ by the lower Coal Group — as occupied by the lower coal — as you have surmised. ~~Of~~ The Iron ore which is found in Northern Va. & the adj.d parts of Pa. near the top of the Umbral I have not met with in any marked amt. in the region ~~of the New River~~ SW of the New River, though ~~in such~~ the explorations have not been such as to justify any

Office of the Chief of Engineers,

Washington, D. C., October 14, 1873.

Prof. William B. Rogers,
Gibbs Avenue,
Newport, R. I.

Dear Sir:

Your letter of the 10th instant is received. There is sent you by express, to day, a small box containing specimens taken from the Artesian well at Fort Monroe, at depths from 558 to 590 feet below the surface of the parade of the fort, with an extract from the letter of Colonel Brewerton transmitting the same to the Department.

I have also directed that the specimens referred to in the report of Mr. Elliott shall be forwarded to your address.

Very truly yours,

A. A. Humphreys

Brig. Gen. & Chief of Engineers.

609 H. 1873.

Oct. 14 1873
(Humphries)

# U. S. ENGINEER OFFICE,

THIRD STORY, UNION BANK BUILDING,

FAYETTE, NEAR CHARLES STREET.

Baltimore, Md. Oct 15th 1873.

Prof. Wm. B. Argues
Gibbs Avenue
Newport. R. I.

Sir.

By direction of the Chief of Engs, a box is today sent from this office to your address, as above, containing some specimens taken from the Artesian Well at Ft Monroe. The charges for freight are paid here.

Very resp, yr obt svt.
Wm P. Craighill
Major of Engs

15th Oct: 1873
Cuiphee

[Oct. 1873 +]

# BULLETIN

OF THE

# NATIONAL ACADEMY OF SCIENCES.

A stated session of the Academy was held at Columbia College, in New York City, on October 28th, 1873, pursuant to a resolution of the Council.

The session was attended by the following members:—Messrs. Abbot, Barnard F. A. P., Baird, Coffin, Crafts, Gibbs, Gill, Guyot, Henry, Hilgard J. E., Le Conte, Loomis, Mayer, Newberry, Norton, Peirce, Rogers F., Rood, Silliman, Trowbridge, Trumbull, Whitney W. D., Woodward, Young.

The amendment to the Constitution striking out the provision "that not more than five members shall be elected at any one session," proposed by Mr. Peirce at the last session, was taken up for final action, and was rejected—there being nine votes in the affirmative and thirteen in the negative.

The election of Foreign Associates was postponed until the next stated session.

The Treasurer's report for the year ending April 1st, 1873, was read and accepted.

A letter from the President of the Academy to the Secretary of the Treasury was read, relative to experiments on "Boiler explosions."

A report of the Committee on the "Polaris" expedition was read.

A paper by S. W. Burnham, in reference to a general Catalogue of Double Stars, was presented to the Academy, and referred to Messrs. Coffin, Winlock and Newcomb for examination, and a report as to whether it is worthy of acceptance, by the Smithsonian Institution for publication.

A letter was read from Mr. Peirce, announcing his withdrawal from membership in the Academy; which was laid upon the table.

THE FOLLOWING PAPERS WERE READ:

1. Sound in relation to Fog Signals—by Joseph Henry.
2. Results of explorations of the deeper portions of the Gulf of Maine with the dredge—by A. S. Packard, Jr. (Read by Theodore Gill.)
3. On the constitution of the Sun's surface—by C. A. Young.
4. On the admeasurement of volume—by J. E. Hilgard.
5. On the determination of the volume of a sphere—by J. Homer Lane. (Read by J. E. Hilgard.)
6. On the distribution of the thoracic spiracles of Insects—by A. S. Packard, Jr. (Read by Theodore Gill.
7. Some results derived from an examination of the U. S. Weather Maps—by Elias Loomis.
8. Circles of Deposition in American Sedimentary Strata—by J. S. Newberry.
9. On the Relations of the Different Classes of Vertebrates—by Theodore Gill.
10. On a new method of Analysis of Composite Sounds, and on experiments elucidating Helmholtz's Hypothesis of Audition—by A. M. Mayer.
11. Experimental Researches on Fluorescence—by Henry Morton.

The two last papers were read at the Stevens Institute of Technology in Hoboken, to which the Academy had adjourned, in order to afford Messrs. Mayer and Morton the opportunity of using their apparatus.

The President announced the decease of the following members, viz:

Messrs.—W. S. Sullivant,
H. J. Clark,
Joseph Saxton.

Mr. Le Conte presented a biographical memoir of the late John F. Frazer.

The election of new members being proceeded with, the following were duly elected members of the Academy, viz:

Messrs.—Edward C. Pickering,
L. F. Pourtales,
F. V. Hayden,
T. Sterry Hunt,
William Sellers.

The following were duly put in nomination for membership in the Academy:

C. F. Chandler, of New York City.
B. F. Craig, of Washington, D. C.
George Davidson, of San Francisco, Cal.
Asaph Hall, of Washington, D. C.
William Harkness, of Washington, D. C.
G. W. Hill, of Nyack, N. Y.
O. C. Marsh, of New Haven, Conn.
Henry Morton, of Hoboken, N. J.
Arthur W. Wright, of New Haven, Conn.

The Academy adjourned on October 30th, at 4 P. M.

1850.
57 + 942
1792.3

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Mid Lothian Nov. 1st 1873.

Prof. W. B. Rodgers.

Newport.

Dear Sir.

I took the liberty, about 12 months ago to address you upon the subject of some samples of rocks formerly kept at this place at the sinking of a new shaft termed the sinking pit. Unfortunatly, I was informed by Mrs. Rodgers that you were very ill at the time, and strictly forbidden to attend to any business matters. I met at our last meeting of the „American Institute of mining Engineers" one of our members and acquaintance of yours Mr. Henry Hunt of Boston, who informed me of your better health at present and handed me your address. I shall therefore make an other effort to trouble you to see if you could and would be kind enough to help me out of my „scientific trouble" if I may call it so.

You may remember that when this new shaft, the deepest shaft sunk in this district, were in progress of sinking, Col. Wm Waddridge, then President of the Mid Lothian coal mining company, had a collection kept of the strata penetrated by the shaft, and as he informed me had a duplicate sample of each strata forwarded to you. Most of the samples are still here, but during the war, by removal of the office, some of them have been lost, and unfortunatly no written record being kept,

I can not even substitute the measurement still less the character of rocks. I am now for over 4 years in charge of this mines, bought by a New York capitalist. I am now again developing some of the new ground, also with an intention here after to sink that shaft lower. You can therefore perceive of what importance it is for me to obtain this most reliable information, amongst the mass of most unreliable which can be obtained here from the miners. I therefore apply to you again to see if you could and would be kind enough to send me either a full list of your records or at least if this should be to much trouble for you, or otherwise not consistent with your views, at least a list of those missing samples of which I give you a list; viz.

want of No. 1, 2, 3, 4, 5, right from surface, the next sample I find here is a soft, buff colored conglomerate with gravel pebbles cemented by talcose and feldspatic cement. Then again is missing

want of No. 35. preceded by No. 34 dark grey slate with grains of quartz and succeeded by No. 36. grey argill. sandstone with fossil impressions. Then again

wanting No. 38. and No. 105.

I am now exploring by boring with Diamond drill the stratification which must lay below the bottom of said shaft and as a discreet compensation for your kindness, I would be glade to send you a complet list of the borings, or if you desire specimens of the cores.

I am also glade to informe you that I have been able to procure two specimens of Astrea, resembling almost entirly „ Astrea limbata and Astrea confluens „ of our german jurassic formation. So far I have not found it mentioned anywheres, and I only obtained them by chance.

I hope you will not consider me to intrude to much upon your valuable time, by my bringing this subject up again befor you. But I am sure you will appreciate my anxiety to keep a correct record of our strates, which I may now be able to complet for nearly 1580 ft. and which, if kept up closely at other places will throw much light upon our formation and may in future save a good deal of money in locating shafts.

Anxious to give me an opportunity to do likewise in case my experience can be of any avail to you

Yours most respectfully
Oswald J. Heinrich

Supert. Engineer
Mid Lothian Colliery.
Chesterfield Co.
Va.

Mid Lothian P.O.

for Oswald Heinrich.
Nov. 1. 1873.

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Newport — Nov. 28. 1873.

My dear Sir.

Your letter of the 1st Inst. is at hand. Arrived during my absence from my Summer home in this place. While in Boston ~~during~~ this Summer I found, among ~~the~~ miscellaneous unpacked during my absence, a number of rock-specimens belonging to the Middlebrook State to which you refer. They were however mingled with other

Mr.

materials in the Cabinet, and I cannot without a careful examination ~~of my Collection~~, know to what extent the series is complete.

On my return to Boston next week, for the winter, I shall at once investigate the subject, & shall promptly give you all the information in my power.

I am glad to know that the exploration of the Mid Lothian Coal field is in such able hands, and shall anticipate from your work with the Diamond Drill valuable results in a scientific as well as economic point of view.

What you say of your discovery of Juraspic fossils in these rocks is very interesting to me.

Intending to write you again after the examn. of the Mid Lothian Specimens, I remain

Yours truly

William B Rogers.

Oswald J. Heinrich Esq.

Office of the Chief of Engineers,

Washington, D. C., December 10, 1873.

Prof. W. B. Rogers,
Newport, R. I.

Dear Sir:

In reply to your letter of October 25th, it affords me pleasure to inform you that there will be forwarded to your address by Major Wm. P. Craighill, Corps of Engineers, specimens from the Artesian Well at Fort Monroe between the depths of 150 and 210 feet.

Very truly yours,

A. A. Humphreys

Brig. Genl. and Chief of Engineers.

740-F-1873.

Dec 10, 1873
Gen. E. O. Z.

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3 Fairfield Street
Boston Dec. 22 1873

My dear Sir,

I beg you to believe that nothing but the pressure of numerous duties, since my appointment upon the new Fair Board, could have prevented my acknowledging promptly your very kind letter and thanking you for the very friendly manner in which you are pleased to speak of me.

I owed my appointment at the Institute originally to

your favorable estimate of my abilities and attainments and I am the more gratified by your letter as I am about resigning. I have at all times tried faithfully to serve the Institute and leave it now with regret, ready always to do what I can in the future to further its best interests.

My new position offers a life more active and not less useful, under the circumstances, than that of an instructor.—

I can only hope that the future will show that the Mayor made no mistake in his appointment.—

Very respectfully, Your obedient servant,

Very Respectfully Yours,

Prof. Thos. D. Rogers.

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American Social Science Association,

5 Pemberton Square,

BOSTON, Dec. 30. 1873

Prof. W. B. Rogers
Boston.

Dear Sir:

A section of this association has been organized with its committee which when full will consist of twelve members to consider questions of Social Economy and to be known as the Section or department of Social Economy. The members already chosen are yourself, Dr S. G. Howe, Dr S. A. Greene, Mrs Parkman Mrs Henry Whitman, Miss Mary H. Parker and Mr John Ayres, all of Boston, and myself. It is hoped that you will accept the appointment, and be able to meet with the committee certain after-

noons at 3½ o clock, which will probably be our time of meeting. If this is not a convenient hour for you, will you please name one that will be, and also say whether any particular day in the week will suit you better than another?

The next meeting of the Committee will be on Tuesday, Jan 6. 1874, at 3½ P.M.

Yours very truly
F. B. Sanborn
Sec'y Amer. S.S. Associa.
p/r c'l'k.