4 Papers, Aug. - Dec. 1864

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161a

Boston Sept 9th 1864

Prof Wm. B. Rogers

Owing to some mistake in the mail your letter dated near London August 12th did not come to hand in due time. and when it did arrive I was down the Harbour on Deer Island superintending the recruiting of a cargo of Germans who had just arrived as Emigrants coming here for the sole purpose of Enlisting in the Federal cause I have just now got through with the Second cargo. and am comfortably at leisure waiting for another Ship with 225 mostly Belgians now hourly expected in our Harbour. after disposing of this cargo I hope to be allowed to give up the recruiting business so that I can spend my time in future to the Interests of my family and private business and our Institute — having been instrumental in bringing into the State more than sufficient men for one Regiment I feel that I have a right to lay upon my oars for a while. The fact is the war has not looked up well for some time past our most loyal citizens have been feeling anxious. but now the tide seems to be turning in our favour very decidedly and we are brought with ~~with~~ hope In your letter you ask what is the state of feeling amongst some of our mutual friends I have made it my special business today

to call and see some of them and have had a
chat about Technology and the war. and
I assure that I never have found more
Encouragement about both than I have
this day in conversation with Say Mr Edmands
Mr Lettle. Mr Greenleaf Mr Philbrick
& yesterday with Mr Reuel. Mr Lettle
will join me next week in writing
you another letter. all send kind messages
of Love and regards to yourself and Mr Rogers
and request me to say to you that there
is no reason to feel any anxiety about
the final result of the war
We have had no formal meeting of the Faculty
of the Institute but I have met nearly
all who take an active interest and
find the feeling to be unanimous that
in view of the present high rates of
Exchange that it is not advisable to
make purchase of models & as extensive
as was contemplated when we made
the appropriation by vote of the Government
all seem to think it is better for you
to permit the Institute to pay your
traveling expenses whilst you are in
Europe pursuing your investigations in behalf
of the Institute and then after your
return home. as soon as Exchange
can be purchased at fair rates to order
such models and apparatus as we
may need from time to time
in this way we shall in the End get just
as much apparatus besides paying your
traveling expenses as we should get now
with the same expenditure. the only difference
being a lapse possibly of a few months of
time. and this I do not regard as much
consequence as I don't believe we shall
accomplish very much in the way
of class teaching in the School of
Industrial Science until our new
building is ready to be occupied
yet I am in favour of doing something
in that way if we can the coming
winter. but shall not favor undertaking
very much because I know that
nearly all the hard labor at
first will devolve on you and
we cannot afford to wear you out
so fast as such hard labor would
result in, We are all feeling bright because
we hear of your improved health and
are unanimous in our feeling that
henceforth you must be relieved from
much of the more drudgery of
the Institute Labor to which you
have been subjected heretofore
Dr Walker has recently written a letter to
Mr Burbank intimating that he wants
to do something more for us and
asks if we cant raise $50.000 in
place of $20.000. Mr Edmands
promised me today in conversation

on this subject that in consideration of the services I am now rendering to the cause of recruiting (which he did me the honour of saying were of great value to the country) and which absorbs my whole time that he would put his shoulder to the wheel and endeavour to meet Dr Walkers requisitions and as an evidence of his promise he subscribes himself an additional Thousand dollars. Mr Little is also at work. The summer has been extremely hot and our friends nearly all out of town and various causes at work have prevented us from doing much towards raising funds. I have no fears now but what we shall succeed when we get fairly at work. I am longing for your presence again in Boston and to have my mind again occupied with our Institute plans instead of war matters which as has been the case ever since you left Boston you kindly admonish me to spare my own health and strength. I can truly say that I have never had better health or strength for business than I have had this summer and my family has never enjoyed more health in general comfort than has been our good fortune this summer. I will write you again of the stream of next Saturday in the mean time will see others of our Institute associates. my kindest regards to Mrs Rogers and I am ever truly yours

McD. Rose

11)

Pray set a fast of the President that we may Fast and cultivate Humility as a Nation

Boston August 4th 1864

Prof Wm B. Rogers

My my dear Friend

I am a naughty boy not to have written you before now. for it was a generous act of yours to write me as you did on board the steamer, and cheer me of the good news of your having had a safe and pleasant voyage, and of your improved health; It is very lonesome here without you and your ever cheerful wife, and if I have degenerated and neglected some of my duties to the Institute, it is clearly traceable to the absence of your sphere of good counsel and example. I met Mr Hilland yesterday who informed me that he had heard good accounts of you recently. I also called at No 1 Temple place this morning and had a pleasant chat with your Housekeeper Mrs — — (I cant remember her name) she was bright and busy the workmen being in the house, I think she said painting and paper hangers, I learn from her that all are well and bright at Lunenburg, my own family is in good health and enjoying a most delightful home which we have in the country for the Summer. for myself I have never worked harder nor even had better health than I have had so far this Summer

and yet with being thus surrounded with so many comforts and all that heart could wish. today I feel depressed and cant see that I have done my duty in scarcely a single direction. perhaps this feeling may be partly owing to the fact that I have actually neglected the Institute of Technology and allowed its interests to suffer, whilst I have been employed about other Matters. and now that I am writing you my conscience smites me.

I am hoping to hear from you shortly and have you feel that I have not neglected you since you got to the Industrial School

The fact is the war has gone badly in many respects. and I am on our Ward Recruiting committee. and since about the first of July I have been almost constantly engaged in recruiting; 426 Germans came here consigned to my care and we have just enlisted about 380 of them into our army. about 150 go into the 2d Mass Regiment. Other shipments are on the way here so I shall be absorbed with this kind of business all summer

Grants defeat at Petersburg casts a gloom over everybody about equal to the Bull Run disaster, But the people are not discouraged there is a deep seated determination amongst the people now to carry on the war to a successful termination cost what it may

Although I have given no time directly to the Institute yet I daily meet with our friends and am constantly seeing and hearing of the growth of encouraging Elements and I have never been so well satisfied as I am at this time that our long cherished hopes will at no distant day be more than realized. The Institute has become a fixture in the minds of our best citizens its friends are daily multiplying and its opposers have all disappeared. We have not yet raised the $20.000 to meet Dr Walkers case. the times have been extremely unfavorable for raising money by subscription. Judge French has sold over $100.000 worth of the Land Scrip at from 80 to 85 cents per acre he thinks it will all be sold during this year. Thus the Institute will get from this source this year at least $80.000 in the Income from that fund The Building is progressing very well the 2d floor is now being laid on and begins to make quite a show on the Back Bay to the surprise of croakers. who in the beginning had no faith in us

I expect to call soon to see Mr Preston who has made a generous offer to me to carry to Dr Walker at Newport for the benefit of the Buildings

Mr Runcle is in Vermont with his family where not to be again until September. he writes me about the Institute and is anxious to be at work in the autumn. Watson & Ruggles are wide awake. Dr Webb keeps up a correspondence with Dr Walker which I do not much encourage but fear no serious harm will result from it. Mr Bigelow called on me to say that Congress has imposed the Tariff of 15 per cent on such models and apparatus as you may wish to purchase. this seems like a hard case

Owing to the enormous rise in Gold and Exchange nothing has been done about remitting you funds as voted by the Government for you to use in purchasing models to be of course you cannot purchase so largely as you would have done but for the rise in Gold. Still I think as long as you are in Europe the opportunity to make selections should not be lost Please write to me your views and I will as Chairman of the Finance Com see that the Treasurer places funds at your disposal as you may request

I shall hope to hear from you soon and will endeavour to write you more frequently hereafter and post you on Institute matters more in detail Mrs Ross joins me in sending kindest regards to yourself and Mrs Rogers with hopes that we continue to hear good reports of your health and return home in good time Yours Truly

M D Ross

I am sitting at my window in the Baptist St House writing and I see Queens Rogers Store and office of the Lafayette St Church pay 5 to 6 at least day service as of a clock

J. C. HOWE & CO.
54 Franklin St Boston.
57 & 59 Worth St New York.
230 Chestnut St Philada

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Boston Sept 20th 1864

Prof. Wm B. Rogers.

Care Mess Baring Bros & Co.

London

My Dear Sir

With this I have the pleasure of handing you 2nd B/E. Blake Bros & Co. on Edward Moon & Co. Liverpool. payable in London - 60 d/s - for £ 250. the 1st having been sent under date 13th inst.

Today I have placed to yr. Credit - with Messrs. C. F. Horey & Co. - the sum of £170 - as instructed by Mr. Ross - to be used by you in purchasing models, &c. Mr. Henry Wood will be duly advised of this credit thro' his house - by this mail.

I trust - my Dear Sir, your health has been very much improved by your journey - and that you will not neglect taking the best care of yourself, in yr. devotion to the interests of the U. S. Ty.

Military affairs are bright - the great Victories of Sherman, & the greater pertinacity of Grant - with Farragut's splendid heroism & success at Mobile - have made the Summer Campaign

food up well – Fresh troops are going forward with ample rapidity – & we all look for active operations during the fall.

The new Structure near the Natural History Bldg. is already beginning to throw the latter into the Shade. I think you will be gratified with its appearance.

I remain – With highest respect – Your obt. Serv't & Friend –

C. H. Dallow
Pr. M. I. T.

Boston Septr 20th 1864

My Dear Friend

Your letter of the 2d Inst from Paris is received, and contents duly noticed. I am glad to hear of your improving health, as well as of the good progress you are making in researches for the Institute. Mr Salton sent you last week to care of Messrs Barings, the funds voted by the Government for your personal expenses and he will remit by the same mail as this £170 - to care of Mr Wood of Paris as you request in yours of the 2d. The members of the Government with whom I have consulted all agree that whilst you are in Europe, that it is best so far as the interests of the Institute are concerned for you to remain there as long as your private affairs will allow you to remain from home and all agree also that no better pecuniary investment can be made by the Institute, at this time than for you to spend the sum of money appropriated for your expenses, in traveling from place to place and visiting such Institutions

as are kindred to ours, we hope you will regard this appropriation as an Economical investment - and it remains with you to make it such. and the only way to accomplish what was intended by the Government is for you to spend it in accordance with the vote of the Government - and for you not to decline it, as intimated before you sailed from home.

Dr Webb informs me that he wrote you last week about Dr Walker's new propositions & Having now just got through with the last cargo of German Emigrants I am ready to take hold of Institute matters again and intend to make Dr Walker a visit this week, on my return I shall write you again. I should have written you last week but a ship arrived consigned to me, the day before the mail, so I was off down the Harbour day & night for several days. I called at No 1 Temple Place this morning. found the painters at work in the dining room. Your Housekeeper expressed a hope that you would not come home until early in November as she feared the house would not be ready for occupancy. I told her that I would write you not to be in a hurry about coming home. The fact is we shall be all in a state of excitement here until after the Presidential Election and cannot expect to be calm enough to do much in the Institute before January. in fact as I wrote you in my last. we do not incline to undertake much more this winter than we did last. Partly on account of saving your strength and partly that we cannot do any much in the way of organizing classes until we get into the new building, which by the way is getting along very well I think we shall get the roof on before January

Notwithstanding all that may have been written by Dr Walk

and myself about purchasing medals &c
I am quite sure that should
you make purchases still
more than what you have
named in your last letter it
will be afforded by the
Government. in a word we
shall all heartily concur
in whatever you may deem
it best to do. I will not now
make any detailed comments on
the Financial prospects of the
Institute but will simply remark
that I feel more confident
than ever before that we shall
ultimately be very successful
The war is progressing apparently much
better than it was some weeks since
and in all respects we have
much to encourage us to hope for
a bright future.
Mrs Ross requests me to send her kind
regards in which I join to both yourself
and Mrs Rogers Yours very truly Wm D Ross

To Prof Wm B. Rogers

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Boston Oct 4th 1864

Prof Wm B. Rogers

My Dear Sir

I have been trying all day to find a quiet moment in order to mature some thoughts to express to you in a letter but it happens to be one of the days when everything seems to come up at the same time. it is pleasant to be able to say at this time that the numerous things surrounding me and pressing on my mind and calling on me for work are all of an encouraging character. Genl Grant is whipping the Rebels and President Lincoln is the peoples favorite for the coming election, Gold is declining in price or rather Government stocks are being better appreciated in a word things are looking better in this country I feel greatly encouraged. though I can claim that I have never yet felt discouraged to any great extent.

I went last week to Newport and had a very satisfactory and most agreeable interview with our noble

and generous friend Dr Walker. I spent an evening with him and saw him several times the next day going in and out at his request so as to see him as much as possible and yet not to weary him – I cannot now go into details but the sum and substance of the interview is this The Doctor now proposes to give us $50.000 as soon as we raise a like sum and when that is done he intends to give us more. in fact what he wants is for us to raise funds enough to establish the several Schools of the School of Industrial Science and he will furnish funds to erect the museum building and he wants that building to be commenced next year. he says that he has great confidence in our ultimate success and has no doubt ~~that that~~ if we once get the museum building erected that the public spirit of our citizens is such that means will be freely offered to equip the museum

About the Abertinge the insinuation on the part of the Boston at present this week does not matter nothing will come out right

especially ~~in~~ if the School and Society of Arts is in a prosperous condition. I think he is right about it. at the same I endeavoured to give him an opportunity to say that he would endow the School of Mathematics instead of putting the funds into the museum building but it was of no avail he has got his mind fixed on having that building erected and so I thought best not to disturb him in his plans

Your letter of Sept 16th is at hand I am glad to learn from it of your improving health at the same time I fear that you are working too hard. and will not after all have realized as much advantage from your journey as we had hoped for Funds have been sent to Havre as you requested and Mr Colton has also sent funds for your travelling expenses. and should you think it advisable to prolong

This is an awful letter for a sick man to receive but I can't do as I am full of people talking to me

your stay in Europe for some time
longer than you originally intended
we will send you more funds
all feel that you will greatly
benefit the Institute by your
observations and now is the time
for us to spend what we
have to spare in this direction
Dr Walker hopes we will get
the school of Mathematics under
way this winter as he wants
to see some of ~~the~~ ~~things~~
the departments producing fruit
during his life time if possible
you said nothing about coming
home in your letter of the 16th
Sept. It is lonesome here without
you yet I want you to stay
until you get through your
investigations and get rested also
I am now going to work to see
if I can raise $50.000. with kind
regards to Mrs Rogers I am as ever
your friend & obt servant
M D Ross

I don't think it wise for Dr Walker to be writing
Dr Walker yet I think so far as
has grown out of it

Prepared by WBR for Gov: Andrew's ann: message. Dec. 27. 1864

The M. I. of T. is working satisfactorily in its plans. Its teachings as a Society of Arts are well attended — and by affording frequent opportunities for communing & discussing relating to the practical arts & sciences are helping to guide & stimulate investigation on those subjects.

Though its Corporation & Instruction the institute has passed a programme the Inst: has passed a programme for its Sc. of Ind. Sc. having in view two classes of pupils — those who regret the lack of a Sch. of Des. for such such useful knowledge as they can acquire without instruction & in hours unoccupied by business, & those who aim at a professional & systematic training in one or more branches of applied science, the latter have contemplating the a full course of the study & practice required for the profession of the Mechan: Civil & Hydraul: Engineer, the Builder & Architect, the Industrial Chemist & the Dry. of Mines.

It is proposed to commence some of these courses during the present winter in the rooms of the institute in Summer St & then continue them until the ~~new~~ edifice on the Back Bay especially intended for the Sc. of Ind. Sc shall be in readiness for carrying out the entire plan of Inst. This building is so far advanced in its interior properties, that it may be expected to be ready for occupation ~~today~~ early next winter —

Looking to the importance of early carrying out the entire plan of the Sch: of the Ins: & providing also for a second building to accommodate the Museum of Indust. Arts it is satisfactory to know that the liberality already shown to the Institute by its friends & the public continues actively regardful of its interests and that the ~~public~~ generous donor to whom it has heretofore been so pre-eminently indebted for assistance has recently offered a further large contribution on conditions, which will double the amt, and which are now in process of being fulfilled.

For Sec. Wilson
Aug 4th 1865
Boston Institute
of Soc. Sci. Rec.

Dec 27 1865

The Mass Inst of Tech is making satisfactory progress in the development of its general department. Its meetings as a Society are well attended, — by persons ~~interested in the institute~~ and are ~~already~~ ~~doing~~ ~~most~~ ~~to promote~~ and by communing & discussing on the practical arts & sciences are doing ~~much~~ ~~and offered~~ aid & opportunities for the ~~communing~~ & discussion of new suggestions & inventions ~~in the~~ practical arts & sciences; ~~in the~~ contributing to the ~~prosperity~~ prosperity of the ~~industrial~~ practical arts & sciences

28 [ca. 1864]

151.

Rogers Building

The Government originally authorized the Building committee to go ahead and erect a building the Estimated cost not to Exceed the sum of $151.624.00

Subsequently the Government authorized an additional story and change in roof &c to cost 6.000.00

The Building committee authorized the Supt to contract with the state commission to fill the Lot with gravel and to buy soil &c. This expense may not have been voted by the Government 3.879.48

The Building committee have authorized the Superintendent to cement the cellar which cost 800.00

162303 48

The Building committee have ordered other changes and additions which may have cost 2.696.52

Thus making the Building cost finished sq $165.000.00

The accompanying statement shows that the Expenditures up to Nov 1st have been 160.696.43

Leaving to be yet expended the sum of $4.303.57

It is self Evident that this sum is not sufficient to complete the building

A statement is herewith presented showing the original Estimates for certain parts of the work. and

also showing how much the actual cost has
been up to Nov 1st. In this way it may
be seen approximately why when it is that
so much money has been expended and
yet the building not very nearly completed

151.624
6
157624
200
42376

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Office of the Institute
Boston Aug. 30th. 1864.

Prof. Wm. B. Rogers.

My Dear Sir.

Your kind favor of the 12th. inst. was duly received and its contents were perused with much satisfaction to myself, & greatly to the gratification of those friends who have called to inquire after you.

We feel somewhat uneasy in regard to the punishment to which you have rendered yourself liable, & would venture to suggest more caution for the future. We think it would be much better for the Institute, and infinitely so for yourself, to lengthen out your visit beyond the time originally contemplated, and thus take things leisurely and return with health restored and strength renewed, than to drive hurriedly onward, and get back a few weeks sooner, at the risk of mental exhaustion and physical prostration.

Allow me to say the old maxim is the true one for you to be governed by at present, i.e. festina lente.

As regards the "Model" business, I have had a conversation with Dr. Rolf, and at his request I wrote to

Mr. Ruggles, then in N. H.; I have also since had two interviews with Mr. R., & he has conversed with Mr. Little. Both Mr. Little & Mr. Rolf, I understand, will communicate their views to you direct.

My opinion is that the wiser course will be to defer purchasing for the present, as it will be easy, with the Catalogues & information by you procured, to order at any future time whatever may be desired.

Were our Schools ready to go into operation immediately on your return, there might be a question whether the purchases ought not to be made now, notwithstanding the enormous rate of exchange. But as our Schools are yet in an embryotic state, & no one here has the ability or disposition to impart vitality thereto, months must elapse before any number of Models will be absolutely required; & before they are, there is some reason for believing that, the Money Market will be in a more healthy state. Indeed our new Secretary, Helpenden, is endeavoring to produce that desired condition by paying in advance, the interest due, by Government, in gold in Sept. & Nov. next.

The vote passed by the Directors, you know, is not a peremptory one rendering it obligatory on you to make purchases, but a discretionary one, leaving you to exercise your judgement in the matter, limiting only the amount

which can be expended; but by no means requiring that the sum specified ~~shall~~ be used up.

I believe you already understand pretty well, Mr. Ruggles's ideas in regard to this subject.

He is fully satisfied that a very large proportion of the Models which may be needed, can be as well made here as abroad; and so far as the Institute is concerned more cheaply. He says he is fully aware of his ignorance of Science, but thinks himself well booked up in Mechanics, and therefore qualified to give an opinion in such a case as this.

He also says there are some members of the Institute, who are able and willing, if the Professor & Instructors make known their wishes as to Models, ~~to~~ execute or superintend the execution of the orders in a satisfactory manner.

He evidently desires, so far as practicable that there should be built up an American Institution, & Europeanize only in so far as we cannot, or cannot so well, Americanize.

The times and all circumstances considered, I am disposed that he should have an opportunity to prove the correctness of his positions, or disabuse himself of the notions which he entertains. We can well afford to await the result.

You ask about the Land Scrip. About 100,000 acres have been disposed of at eighty cents per acre, & Mr. French is now advertising to sell, in small parcels of 160 acres, a limited quantity, at 85 cts. the acre. I greatly regret that my project did not meet with more favor; for since conversing, as I did last week, with the President of the Manhattan College, who has the management of the Kansas grant, I am more than ever satisfied, that our Institution could have realized out of the Scrip, at a moderate calculation, $250.000.

Perhaps however we shall do as well some other way.

I would ask, if some of our friends (for I suppose we still have some) in "the old Country", cannot procure for us a Set of the English Patent Office Reports? It would be a magnificent present, and one of great value to us. Cannot some arrangements also be made whereby we can obtain the similar Reports of France, and other European Nations?

I have heard nothing further from Dr. Walker, but have it in contemplation to make him a flying visit next week. Go progress with the subscription, as Mr. Rolf's time is completely occupied with recruits matters. The democracy is under full head of steam at Chicago, & the Convention and ticket will probably be McClellan. Claim fair will be written on Temple Place ere your return. Mr. Ruggles sends respects. Truly yours Thos. H. Webb

5. Montagu Villas

Aug 19 1864

161

My Dear Sir.

I shall be at home tomorrow and it will be a great pleasure to me to see you, at any time, in the afternoon, you can let me know that you can conveniently come.

I shall be glad if you and Mrs Rogers, and any two or three of your friends (our cottage being very small) would take a

family, tea dinner or refreshment with us on your way from New to Richmond say between five and six O. clock, if that would suit you?

Yours Truly

Edwin Chadwick

The social science annual meeting will this year be held at Belfast Ireland, I believe on the 17th of September.

William B. Ayers Esq

Boston Sep. 1. 1864

Dear Sir.

I thank you sincerely for your kind note, and shall not be slow to avail myself of the pleasure which it offers; for I had previously hoped to break in upon you some day before your return to Boston. My arrangements for the month, however, are somewhat perplexing. As I now under two engagements — one positive, the other conditional — to go to New York; and I have one or two little journeys half-arranged with Mr Lincoln of Hingham,

Army absence, of a fortnight or so, as the arrangements was not ~~not~~ prolonged, because I wished to return home with my son, who left us last night for Newfoundland on his way again to Port Royal. It will not be from want of inclination, if I should not visit Lunenburg this summer.

I take the liberty of sending by this mail a sermon which I preached after the death of our friend Dr Lawson; and next week I hope to address to you one which I preached after the death of Mr Downey.

Respectfully
& Most truly
Yours
Jos S. Garnett

Hon. Jas. Savage

12/

X

Boston Septr 10th 1864.
19 Hayward place

Professor Wm B. Rogers

Dear Sir.

I had the honor of being introduced to you by Colonel Francis Lee, some months ago, for the purpose of requesting your advice concerning my plan of establishing a "Polytechnic and Military School" in Boston. You were kind enough, at that time, to approve of my idea and to allow me to apply to you again after your return from Europe.

Unfortunate circumstances have prevented me from carrying my plan into effect, so that I am compelled to seek for employment as a teacher.

I find in the pamphlet "Objects and plan of an Institute of Technology", published by the Committee, that it is intended (page 23) to give regular lessons in Mathematics and (page 27) to institute a course of lectures on subjects not directly provided for in the

school but of a nature to be conducive to the general objects of the institute.

Now, I take the liberty of applying to you for the employment as a teacher of Mathematics (except the Calculus which I have never taught either in England or here) as well as of a lecturer on Physical Geography and such branches of Military Science as would be in conformity with the plan on which the Institute is founded.

If languages should be taught, I am ready to take charge of the German classes.

I remain very respectfully your obedient servant

Wm Steffen

Prof. Stephen

Sept 10. 1864

14) Archives

Boston Sept. 13th 1864

Prof. Wm B. Rogers.

My Dear Sir.

I hope you will not infer that I am infected with an inveterate cacoethes scribendi, fro again thus trespassing upon your time & perhaps patience, so soon after transmitting my preceding Letter of the 30th. ult.; but having a piece of good news, of joyful, indeed encouraging intelligence, I cannot refrain from imparting it to you.

In my last, I stated it was my intention to make a flying trip to Newport for the purpose of visiting our munificent friend Dr. Walker.

I have been, I have seen, I am satisfied.

I endeavored before leaving home for Providence, where I was destined, to participate in the festivities of the Centennial celebration of the founding of Brown University, & on which occasion I met with our Nation's friend Prof. Goldwin Smith of Oxford, Eng., I endeavored, I say, to see Messrs. Peabe & Lobey, in order to procure Letters from them to Dr. W. In this I

was disappointed; consequently I hesitated & deliberated long upon the propriety & expediency of, thus unheralded, breaking in upon the Dr's quiet retreat. Fortunately, the good purpose I had in view stimulated me with an increased spirit of go-ahead-ativeness, & I proceeded accordingly. I called on the Dr. about 11 o'clock A.M., found him alone, & from the manner in which he received and treated me, I saw that he was quite pleased with my mode of self introduction, & I was at once placed perfectly at ease. The fact of my being a Professional brother proved of not small advantage to me. Knowing that he did not tolerate long sittings, indeed that comparatively short ones were apt to be irksome, I ~~[illegible]~~ several times arose to take my leave, against which he strongly, indeed peremptorily remonstrated; so that I dined with him and did not take my departure, until after the lapse of five hours; he still urging a prolongation of the interview. I cannot begin to give you any full idea, on this sheet, of our "sayings & doings"; suffice it to state, that the Institute occupied a large share of our attention. His interest in it, his desire for its success, is not in the least abated. He observed, what he had already done had been a source of great satisfaction to him; he was extremely solicitous that we should secure the last offer he had made;

remarking that he was not set, as to the sum by him specified $20.000, but that we might go on & raise any larger sum we chose, & then advise him what he ought to give, & it should be done. He said, efforts were being made again by Cambridge to reach him. Prof. Agassiz has been sounding Dr. Wyman, & inquired if he, (A.) had not better call on Dr. Walker; Dr. Wyman thought, perhaps he had; but added the Doctor he has not done it; & from the manner in which this was told me, I am satisfied we have nothing to fear if we manage rightly & act promptly. — Towards the close of our interview, Dr. W. said he wished to advance the interests of the Institute as far & fast as practicable both by direct & indirect action; he therefore authorised me to announce to our friends that, instead of twenty thousand dollars, he would contribute

Fifty Thousand Dollars

towards our second building, if we would raise the like sum for the benefit of the Institute.

The $20.000 was by you rightly deemed a "magnificent premium"; what shall this be pronounced?

Furthermore the Dr. suggested whether his proposition could not be used to induce Mr. Huntington to give his $50.000 now, say, on condition that an equal sum were raised towards establishing a School of Mines, or for some other good purpose by him to be designated, & to induce Mr. Slayer to give $50.000 provided another $50.000 be obtained for a School of Design, or for Instruction, &c. in those branches which will advance the manufacturing interest. He requested me to call (as I shall,) & see Mr. Huntington & say, he does not know how happy he will become by giving his money whilst living, & that the sooner he does it, the happier he will be; and that this is not mere surmise with me, for I have tried the prescription & it works well.

Still further and better, or as good, the Doctor, seemingly influenced by the classic injunction or exhortation, "mutate nova virtute", (go on as you have begun) told me that after the proffered sum was secured, he should have something more for us; he could not say how much, but something.

On leaving, he pressed upon me the importance of immediate action, in which case we should secure the funds; otherwise we might lose all; he manifested great anxiety in this respect, being earnestly desirous of having his mind free from all care, perplexity & uneasiness, relative to this matter.

I returned home Saturday night, feeling as though I had been of some service, in despite of being afflicted with an empty purse. On Sunday, I accidentally fell in with Mr. Rogs & told him of my adventure, which I need scarcely add proved gratifying; he is in hopes of being released from drafting business in the course of a week or ten days, when he will again turn his attention to the financial affairs of the Institute. I have made an appointment with Mr. Beebe to talk over our affairs tomorrow. I am sorry to say, I have seen nothing of E. S. Bigelow for a very long time; indeed he has called in but twice since you left us; perhaps the influence of this new proposition he may be induced to lend his aid; I shall endeavor to induce him so to do, if to be found.

J. W. Edmands has pirvinised to double his $1.000 subscription, upon condition that Mr. Rogs will finish up the drafting; — another $1.000 was secured yesterday.

The Letter which I reid from you, I reed to Dr. Walker; he at once, before I could tell him my reply, said he should advise not making any extensive Model purchases at present; indeed he thought most of those which could be manufactured in this Country ought to be, even tho' at a greater cost, inasmuch as it would engoalrage native artisens, & induce them to feel a warmer interest in the prosperity & advancement of the Institute.

Mr. Rogs will write you by this Steamer in reference to prolonging your visit & extending your tour abroad; which I trustly you will do, both for your own benefit & the advantage of our Institution. None of the Schools, excepting in a very elementary way, will probably be started this Winter; indeed the Fall is already too far advanced to send forth a Prospectus as a means for gathering in from surrounding regions, & more distant sections, any great number of pupils, inasmuch as before such a document can reach parents & others they will have made their arrangements for the ensuing session.

As regards our Institute Meetings, there is no necessity for your being in a hurry to get home; they did not commence last year until after December came in, & should it be thought best to commence earlier this, I will engage to gather together material, so that we may get along "after a fashion", for the time being. It is in agitation to attempt again to do something about the Land Scrip. Wishing you renewed health & continuance of absence, I remain very truly yours. Thomas H. Walker.

MASSACHUSETTS
INSTITUTE OF TECHNOLOGY,

BOSTON,.....190

From Charles G. Prescott Esq. Treasurer M.I.T.

160

51 Franklin Street,

Boston, Sept 13 1864.

Wm. B. Rogers Esq.
Care Mess. Baring Brothers & Co.
London

Dear Sir

The Mass. Inst. of Technology at a meeting of the Government June 6th 64 Voted "That the sum of £250. be presented to the President of the Institute towards defraying the expenses of his contemplated visit to Europe." Accordingly I now enclose you herein bill of exchange Blake Bros & Co. on Edward Morris & Co Liverpool (payable in London) 60 d/s for £250. for the purposes aforesaid and beg your acceptance of the same.

Hoping you will derive great benefit from your tour and return with improved health, I remain, dear sir

Yours most respectfully
C. K. Paxton Treas. M.I.T.
by Geo. Mullens.

From Chs. H. Dalton.
Lett. 13th. Rec.d Lett.
29th. answered Oct. 1.
wherein I re-enclosed
the draft for 250 £
herein mentioned -
prefer.d to be there to
my previous decision -
made known to Dr
Webb & Mr. Rogs.

17

Paris Oct 3d 1864

My dear Sir

I have rec'd from my house in Boston for your account a Bill of Exchange for £170. which I have today negociated, producing for the same £4233.25 which am't I have credited to you against the purchases made by you. The Cases from Chwallier were shipped by the Europa from Liverpool for Boston sailing yesterday, and the other articles were forwarded in one of our Cases by same Conveyance. I sent the Invoice to our house who will pass them through the Custom House. The draft of Mr Schanda has been presented & paid - you have therefore still in our hands, here a balance of about £2700 which we keep at your disposal. If you wish to use any part or the whole of it in England please let me know and I will send it to you. Shall we have the pleasure of seeing you here again before you sail? With my regards to Mr Rogers

Prof. W. B. Rogers } Dumain yours Henry Wood

From Henry Wood
79. Rue Richelieu
Paris

170 / 4233 (25
340
833
850

110

4233
2700
25 / 1533 (60
150
33

Regarding funds
deposited & paid for Ret.
Deposited at H.W.
£170 = 4233.25 fr
and paid by him for my
funds on account of Ret.
about = 1533 fr
Leaving in his hands
about 2700 fr

2700 francs = 110 £ about.

For. Expenses from Elliot. &c £25
" Drawings To. Kensett. 20.
" Vol: Inst. &c 20
65

19

Edwards' Hotel –
12 A George St. Hanover
Square.

Octr. 3. 1864

Henry Cole Esq.

Dear Sir

When I had the pleasure of seeing you some weeks ago you were kind enough to promise me for the use of the Mass: Institute of Technology a complete set of the Reports, Catalogues, Programmes Examt. papers &c of the Science & Art Dept. of which you have charge, and to suggest that I might arrange with Mr Bowler for the purchase of copies of the

drawings illustrating the methods pursued in your schools.

As I am preparing to return to the U S this month I shall be greatly obliged if you can find it convenient to let me have the documents referred to before Saturday next. I wish to visit the Museum on Wednesday ~~[illegible]~~ & would be glad to meet Mr Bowler there if you will enable me to do so, or, should thursday be a more convenient time I will defer my visit until then—

With great respect
Yours truly
William B Rogers
Pres. Mass. Inst. Tech.

Lereboura
Deleiul ..
Chevallier –

19)

Boston. Octo. 28/64

William B. Rogers, Esq.
Care Mess. Baring Bros & Co.
London.

My Dear Sir

Yr. letter of 1st inst. I duly rec'd. re-inclosing the bill of Exchange for £250. which amt. for the time being I place to the credit of the M. Institute of Tech'y. Subject to the action of the Gov't. at their next meeting - when I shall submit

(over)

your note to me.

It needed not this new instance of your devotion to the cause of the Institute, for us to understand how faithful a friend it has in you.

I inclose a photo.^h of the new drawing for the seal and hope you will like it.

I trust, my Dear Sir, that you have found health & strength, & will, in safety, return to your home.

With great respect, & kindest Bro^s & Brother

C. H. Dalton

C. H. Dalton
1864

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Office of the Reciprocity Mining Co.
New York Nov 1. 1864

Sir

Your attention is invited to the following statement of the property of the Reciprocity Mining Company now organized, in which a limited amount of Capital Stock may be subscribed during the current month upon payment of Sixty per cent of the par value of $50 per share, thirty per cent to be paid at the time of subscribing.

This property now consists of 14770 acres of land upon and near the Chaudiere River and its tributaries, in Canada East, all of which is owned by the Company in fee simple, except about 2000 acres: Upon this the Company owns the Exclusive and perpetual mining right.

These lands have been selected by competent men, with the greatest care. Every lot is known to be rich in gold and other valuable metals.

They embrace nearly Seventy miles of river frontage, admirably adapted to the work of hydraulic mining, the most economical and productive method of mining now known.

They are located in one of the richest mineral regions of the world. This region has only recently been explored in a way suitable to develop its intrinsic value, but during a portion of the present summer, about four hundred miners have been at work, most of them upon the lands of this Company and though working in the rudest manner and under many disadvantages, have found their labor richly rewarded.

The Company now has on Exhibition at its office about Four hundred Ounces of gold, all taken from its own lands or those immediately adjoining. The pieces vary in size from dust to those weighing ten ounces. By the assay made at the U.S. Mint in Philadelphia this gold is shown to be worth over $18 per ounce in Coin.

The extent of the deposit is very great. It varies from two to one hundred and fifty feet in thickness, besides valuable lodes of Quartz rich in native gold

over

The material is practically inexhaustible. The average production of the deposit is proved by actual experiment to exceed the cost of working by more than twenty five hundred per cent—

This property embraces a very large proportion of the most valuable gold lands of Canada. The Company has competent agents and a first class geologist, now in the field, examining and testing the value of the property in detail. Their reports more than confirm the statements of previous official surveys. The judgment of the Trustees is thoroughly satisfied, that this section of Canada is soon to become one of the richest gold producing localities of the world. They are fully assured that the next season will witness an emigration thither, fully equal to that toward California or Australia at the time of gold discoveries there.

This land may be reached in thirty six hours from the city of New York. It is easily accessible and all persons disposed to subscribe for stock are invited to visit and examine it for themselves.

The attention of the public is invited to the names and business reputation of the promoters of this Enterprise, each of whom has become interested after a careful consideration of the facts, and with entire confidence in its success. They intend to devote their best judgment and energy to the management of the Company's affairs and to the development of the value of its property, and will use every exertion to return to the Stockholders good dividends upon their investments. Actual experiments in the use and leasing of these lands have shown beyond question that they possess an intrinsic and a practical value many times in excess of the Capital Stock

Parties now subscribing have an opportunity of participating in the profits of the original undertaking, which will be lost by delay. Early subscriptions are invited as the books will positively close at the time indicated. A full statement of the property with maps &c in detail may be had on application in person or by mail at the office of the Company in New York

Yours very respectfully

J. Whittenden President

To—

Respectfully
Murray Co. N.Y.

(19)

(X)

NY. Novemb. 7th 1864

Professor Wm B. Rogers.
1 Temple Place.
Boston Mass

Sir, By the Steamship America arrived yesterday from Bremen we have received 1 box Models with instructions to forward the same to your care; we presume you will be able to have this case pass the Customhouse without duty & in that case we require an oath from you that the goods were imported for the use of your Institute (not for trade) the form of which can be furnished to you by your Collector.

very respectfully yours.
Hagemeyer & Brunn.

19)

N.Y. Nov. 30th/64.

Professor Wm B. Rogers
Boston Mass.

Dear Sir

Please remit amount of charges, freight etc. on 1 case Models p Steamer America from Bremen amounting to $ 31.11 as per specification sent I oblige

very respfy yours
Hagemeyer & Brunn.

Hagemeyer & Brun.

$31/100

New York Dec. 18th 4

Circular to the Contributors (Sent Jan 4 1869)

Mass. Inst. of Technology
Dec. 1. 1864.

Dear Sir

I have the honor to inform you that the Mass. Inst. of Tech. anxious to mark its grateful sense of your liberality in contributing to the fund of the Institution has by its unanimous vote elected you a Member of the Institute.

Believing that you will find much to interest you in the Meetings of the Institute as a Society of Arts and hoping that you will be able from time to time to favour us with your presence I enclose a printed statement of the times of meeting for the Current ~~year~~ season.

I remain dear Sir ~~with~~
with the assurance of sincere regard
Your Obt. Servt.
William B Rogers
Pres. Mass. Inst. Tech.

Circular letter
to the Contributors -
Sept July 4. 1845

(Archives) (X)

20/

(x) Archives.

Mass: Institute of Technology
Dec: 1. 1864.

Dear Sir.

I have the honour to inform you that the Mass: Inst. of Tech. desires to mark its grateful sense of your liberality in contributing to the funds of the Institution, ~~at the Annual Meeting held~~ has by an unanimous vote elected you a member of the Institute.

Believing that you will find much to interest you in ~~the Proceedings of the Institute~~ ~~your~~ the meetings of the Institute as a Society of Arts, and hoping that you will be able from time to time to favour us with your presence, I enclose a printed Statement of the times of Meeting for the current season.

I remain dear Sir
With the assurance of profound regard
Your Obt Servt.
William B Rogers
Prest. Mass. Inst. Tech.

To

Boston Dec 20. 1864,

Dear Sir

I have learned that it is in contemplation to establish in the City of N. Y. in or near the Central Park a Comprehensive Mus: of Nat Hist to include a Typical Series of Specs. for general instruction together with detailed collections of objects from each dep't of Nature & from all quarters of the globe and that it is proposed to release & authorize Lieuts established to fit out an expedition under your direction for the purpose of making large collections in the E. Ind. & elsewhere.

Such a purpose & plan of liberality carried out cannot fail to commend itself to the good wishes of all lovers of useful knowledge & especially of those who desire to promote the study of Nat Hist in our country & the value of N. H. museums as part of the machinery of ~~Edu~~ general Educ & refinement is becoming so well understood that we may expect to see in all our prominent cities provision made for the ampliest equipment of such establishments which while vying with each other in acting ~~with~~ can justly have no other rivalry than in doing what shall do the most to enlighten the public & to promote the prosperity of the country.

The plan proposed in R. of founding the Museum Nacional upon the large collection gathered in the Exposition appears to I think the most practical. I know of no other way in which the establishment could be early & cheaply supplied with valuable duplicates of specimens or be soon placed on a footing to exchange with the museums the next getting of duplicates by which to extend & diversify its own collections.

That you & your colleagues in this expedition will be successful in accumulating large materials for the purposes in view, can hardly be doubted in view of the acknowledged zeal & experience in the pursuits of work which will be exhibited in the expedition.

Wm. B. Rogers.

To -- Beckman Esq.

To
A. S. Beckman
Ex Mus. N. H. of N. York

Dec. 20. 64

Nat. Hist. Sticks

21

Bourne Cottage Eastbourhey
nr Newbury - Berks 1864

My Dear Professor Rogers -

I arrived here last night on a short visit to my daughter, and propose to run up to London on Tuesday.

I understand the Artist has had very good success, and has got everything very satisfactorily -

I feel that you will be rather hard pressed for time, and that I cannot help you much, but I will put down a few points, and enclose them.

They must be taken only as suggestions and you will kindly deal with them strictly as such -

It will not do to make the article smack of the "puff" - You will avoid that of course - but there may be a tone, like Mr C Chadwick's, of a hopeful character -

Some of my Durham friends are greatly pleased at the idea, and

and it is in the selection of this motor, with the perfecting mechanical appliances which have been adopted by that Company which has brought an admirable machine out of the confusions and failures of all their predecessors.

The Machine appears to shew some improvements over the old machine, of a practical nature, which will be readily understood by Miners, but there are we understand several subsequently patented arrangements; but as these have reference to the mere increase of capacity for performing work, and not affecting the principle - we do not occupy more time in referring to them.

There is however one feature, which we think of importance, and which will influence materially the applicability of these machines, and facilitate their introduction - to which we will briefly allude.

The systems or plans of working Coal Mines are various, and designated by numerous names, often of local character, but may be distinguished as "Long Work" or "Short Work."

by the character of the machinery - that commercially the latest failed.

Steam is almost inadmissable in a Coal Mine - its condensation interferes with the roof, and chemically - there are serious objections to the mixture of steam with the gases of Coal Mines.

Water power - may have some advantages mechanically - in a few cases, but in other respects it is undesirable -

Electric or Magnetic power, may be made to work, but its cost must be serious, and like water, it will have few advantages, and many defects.

The Vacuum Engine is almost impracticable if not entirely so - from the difficulty of preserving all the joints strictly tight & air proof - but the power selected by the West Riding Company - is one to which not an objection can be found, and numerous incalculable advantages. This is the Compressed Air power, - and its adaptability is everything that can be desired.

Its advantages are most conspicuous mechanical & sanatory - all is favorable not one objection with point of view.

promise to get extracts into their Local papers &c.

I will go up to Town on Tuesday morning, remaining in Town on Wednesday. I will drop you a line on Monday - as to where I shall stay but if I find that I can go into Richmond - I will do so - and call upon you, at Ingbirk park.

Believe me very sincerely
Your most obt
William Smith

Getting Coal by Machinery - has occupied much time & many minds - In 1692, Morton obtained a patent, and since his time upwards of 150 patents have been granted for improvements in machinery connected with ~~Coal~~ mining: There has not however been one out of all those inventions, which fairly succeeded in reducing to actual practice - the operation of heaving the Coal, whereby the mineral could be obtained on terms equally favourable with manual labour. Either the Coal so cut has paltered, and its value greatly diminished, or the Cost has so much increased by

[1864]

this machinery was in its inception regarded as only fitted for the former, or "Long Wall" system - the great bulk of the mines being worked on the "Pillar and Stall," or other modified form of workings.

It is not practicable to turn all the Short workings into Long work, owing to the natural formation; but if it could be so changed the Commission would have been so costly - than many of the old established Collieries, would not have been changed; & to such - the improvements now in question, would have been unattainable.

The West Ardsley Company have if I mistake adopted their plans to "Short" or pillar & stall work and indeed to almost every Character ~~of~~ and Condition of Mining. In the present article however we cannot go further into these matters. Nor are they material for the purposes of this Article - it being sufficient that we have got the principle established as an institution - which will never be again excluded from our Coal mines - and

looking to its almost universal applicability - its salutary - health sustaining - and ameliorating Conditions - We hope with the Poet - that it may be "ever blessed" - and that those who have given it may meet with a suitable recompense for their labour, patience and enterprise - &c &c -

= My time for post is up.

P.S. perhaps I may go back to the Westmorlands Palace Hotel - where Mr Dimethorpe is staying, or I may go to the "Great Northern" at Kings Cross - but if I don't Call at Sudbrook on Sunday - I could meet you at 1.30 at the Law Societys Club - Chancery Lane - in which Case ask for Mr. J W H Richardson of Leeds - with whom I shall be

=

Supplemens au traité de mecanique celeste

Depuis l'impression du traité de mecanique celeste, j'ai publié sur les divers objets de cet ouvrage, un grand nombre de recherches insérées dans les memoires de l'institut et de l'academie des sciences et dans les volumes de la Connoissance des tems. je vais ici reunir ces recherches dans l'ordre qui me ~~paroît~~ semble le plus convenable, et en leur donnant toute la generalité dont elles m'ont paru susceptibles. je vais commencer par ce qui concerne la figure des corps celestes, et les oscillations des fluides qui les recouvrent.

Autographe de Laplace

Cette note, écrite de la main du célèbre géomètre français a été donnée à Mr. Watson par Madame la Marquise de Laplace sa veuve, qui en a certifié en ma présence la parfaite authenticité.

Ch. Delaunay

membre de l'institut de France.

[1868]

BRAYTON'S

PATENT

STEAM GENERATOR.

THE Steam Engine, and cheap motive power, is something which interests all persons; for power is now used in manufacturing all kinds of goods, and the cheaper the motive power can be applied to machinery, the cheaper the goods can be manufactured. Consequently, all persons are more or less pecuniarily interested in motive power.

The greatest objection to a Steam Engine is the boiler, from fear of explosion, and the continual want of repairs. All of these objections can now be removed.

GEORGE B. BRAYTON, after twelve years of close application to the study of the application of Steam as a motive power, together with a great outlay of money, in experimenting on the best and cheapest method of so applying it, has at last been rewarded by the invention of a Steam Engine worked without a boiler, perfectly safe, and not liable to explosion. Mr. BRAYTON has secured five separate patents on his inventions, which have just been issued by the Patent Office at Washington.

This invention is superior to all others, for the following reasons:—

1st. The Safety of this Engine proves that there is no probability of an explosion, thereby discarding the prejudice of putting it into any building or horse-car from fear of explosion, this alone proves it of great value. The rate of insurance would be much less by the use of this Engine, than it would be by using an engine with a boiler.

2d. This machine requires but little tending, and the services of an Engineer can be dispensed with, thereby saving considerable expense.

3d. The economy in the saving of Fuel, as will be seen by the annexed letters, of parties who have these machines now in use. Also, the saving of expense and delay in repairing boilers.

4th. The cost of this machine is lower than the ordinary Boiler and Engine of other manufacturers, is much easier and cheaper adjusted in a building and very easily kept in repair.

Annexed are letters from parties who are now using Mr. Brayton's Engines. Some allowance should be made, as these were not so perfectly manufactured as they will be in future, it being Mr. Brayton's intention to personally superintend all machines made under his patent.

The much smaller space taken up by these machines than the others now in use, and the less proportion of weight, must commend them to the notice of parties using them for horse-cars, transporting to the oil regions, also to the gold regions of Colorado and California.

Providence, August 22d, 1864.

Dear Sir:

We have one of Brayton's Patent Engines (three-horse power,) in use. Ours is the first one made, and not a fair criterion to judge by. He has made some much better, and we prefer to have judgment passed on them rather than on ours.

The principle is, in our opinion, a great invention; and, as soon as possible, we hope to have another one, of the latest improvements. We think it very economical and safe. We estimate the cost of fuel, using coal at the present high prices, at about fifteen cents per hour.

Yours Truly,

[Signed,] C. W. JENCKS & BROTHER.

Providence, R. I., August 26th, 1864.

Dear Sir:

We have used one of your Patent Safety Generating Steam Engines (five-horse power,) for the space of six months.

We consider this Engine perfectly safe, no possibility of explosion, it being used without a boiler. It is very economical in use of fuel; ours costs about fifteen cents per hour. We can confidently recommend the principle used in this machine as the best to our knowledge, for safety and economy, of any Engine in use.

Yours truly,

[Signed,] WM. C. DAVENPORT & CO.

Providence, September 11th, 1864.

Dear Sir:

We have in operation and daily use one of Brayton's Steam Salvo Motors, five-horse power, and works very satisfactorily. We are using Coal for fuel, and at the present high prices, we estimate the cost of running our Engine at fourteen cents per hour. We are of the opinion that there is no danger or possibility of an explosion in using this machine.

[Signed,] WESSON & PHILLIPS.

Providence, September 28th, 1864.

Dear Sir:

The cost of running our five-horse power Brayton Engine is eighty-four cents per day, using 120 pounds of coal. This is cheaper than caloric or horse power, having used both. One of our regular cake hands has the care of it, while doing his ordinary work. We

feel no risk in leaving it to take care of itself; for, if the water should fail, the Engine would soon stop for want of steam to run it, without any liability to explode. I am perfectly satisfied with the principle and working of this Motor, and hope Mr. BRAYTON will reap the reward he so richly deserves, in devoting his time and talents so long and ardently to the accomplishment of so desirable an object as a safe Steam Engine.

Yours truly,

[Signed,] W. L. HAYWARD.

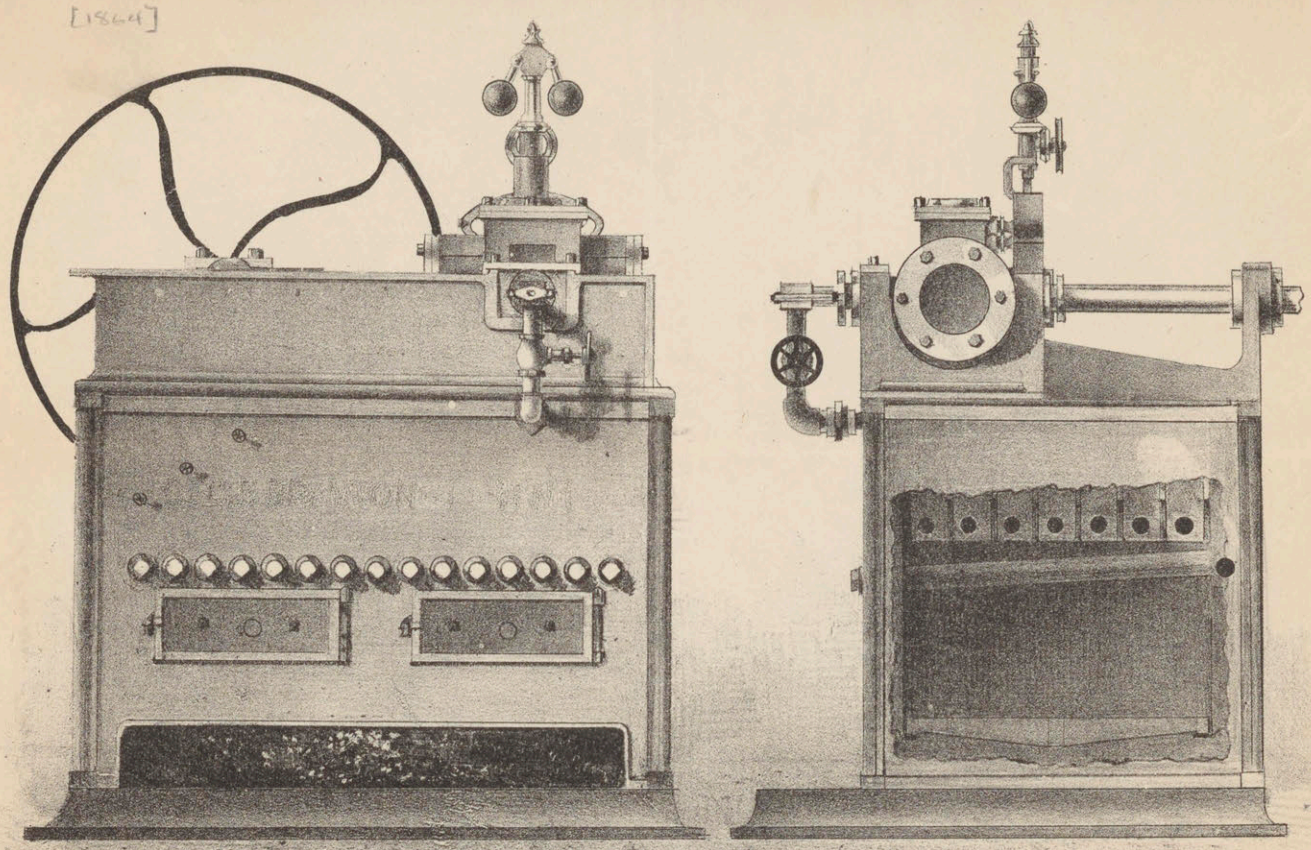
One of these Engines is now in working order, and can be seen, and all information given in regard to it, on application to

GEORGE WOODMAN,

No. 104 STATE STREET,

BOSTON.

[1864]



IT is proposed to form a Joint Stock Company, under the name of the AMERICAN SAFETY STEAM ENGINE COMPANY, for the purpose of manufacturing Steam Engines under the several Patents granted to GEORGE B. BRAYTON, with a capital of $350.000 3500 Shares at One Hundred Dollars each, $100.000 of this amount to be placed in the hands of the Treasurer, as a working capital. Said Company to be organized as soon as the Stock is all subscribed for.

It is estimated that there will be required for the Oil regions of Pennsylvania, Ohio, Kentucky and Western Virginia, the next season, at least two thousand Engines, from five to twenty horse power each, an Engine being required to each Well. For the Gold regions of Colorado, at least one thousand Engines will be required, as the Mines are worked. The cost of transportation from the Mississippi River to Colorado, (over 700 miles,) is from twenty to twenty-five cents per lb.—merchandise being transported principally by ox-teams. Brayton's Patent Engines weighing not more than half as much as the ordinary engines and boilers, could be transported at much less expense. Scientific persons, who have examined Brayton's Engine, pronounce it the best and most economical Engine for use in the Oil, Coal, or Mining regions. The cost of these Machines, complete for running, is not more than three-quarters of the expense of the ordinary Engine and Boiler. It must therefore take the preference over all others, by coming into general use.

A recent trial of a ten-horse power Engine resulted as follows: — Worked twenty-five hours; consumed of coal, by actual weight, 920 lbs., evaporated 1062 gallons of water, worked up to 10½ horse power, by actual test, making the cost of running per hour, of coal at $14. per ton, 22 cents.

One of these Engines is now running, and can be seen and explained by the inventor, Mr. Brayton, at No. 15 HAWLEY STREET, BOSTON, MASS.

☞Subscription Books now open and full explanation given by the Subscriber, at his OFFICE, No. 104 STATE STREET, BOSTON.

GEORGE WOODMAN.

Orders are being and will be received for building Engines, previous to this Company's being organized.

Brayton's Patent
Steam Generator