

NEW YORK, November 21, 1865.

GENTLEMEN: In compliance with your request, I address you the following remarks on the nature and scope of my photo-lithographic invention, which is patented in the United States, and to secure the adoption and development of which I have visited this country.

This process, as its name indicates, has for its object the production of lithographic work by photographic means. The manner in which this is accomplished may be explained as follows:

A photographic copy of the original upon a peculiarly prepared paper is first obtained, which differs from a common photograph, inasmuch as the lines forming the picture are capable, under suitable treatment, of receiving and retaining upon them a certain description of lithographic ink. This ink, known as "Transfer Ink," adheres strongly to the paper, but it has a still greater affinity for the surface of a lithographic stone, and, therefore, when a photograph of this nature is placed with its face in contact with a polished slab of lithographic stone, and pressure applied, the chemical ink passes from the former to the latter, upon the surface of which it will be found when the paper is removed.

This operation of transferring has long been known in the routine of lithographic work, and when a delineation is thus "transferred" to stone, even though its origin was photographic, and not by the educated hand of an artist, the printing from it proceeds without further difficulty. By this means the wonderful powers of the camera as a copying agent are called into requisition; the labors of the lithographic draftsman are dispensed with, and fac-simile, as well as autographic, reproductions may be made at a great saving of time and money. All pen drawings, line engravings, wood cuts, maps, typographic work, manuscript, music, etc., can be multiplied by this process with absolute fidelity, the beauty of the originals being retained without change or deterioration.

By applying this process to the reproduction of existing originals, or to those which, like pen-and-ink sketches, are drawn for it, I believe a very successful business might be developed. Such an enterprise would enjoy a wide field for its operations, and be susceptible of almost unlimited extension, while the capital required to commence and sustain it would be relatively inconsiderable. My confidence in the prosperity of a photo-lithographic establishment in this country is based, firstly, upon the large quantity of work which may be taken up and disposed of by the process I have just described, and that in a much cheaper, more expeditious, and often better manner, than by any of the other known methods; and, secondly, upon the great demand which exists for works of art, if the price be not so high as to exclude the mass of the public. It is believed that, by taking advantage of photo-lithography, copies of classic engravings, book illustrations, maps, etc., may be furnished at prices so moderate as to secure a very great sale, without making necessary an undue reduction of profits.

The value which Photo-lithography has for the artist who draws with pen and ink for publication cannot be overestimated, for in availing himself of that process he becomes, as it were, the publisher of his own conceptions and creations, which come before the world bearing the stamp of his genius and individuality upon them, and not distorted by the commonplace rendering of the copyist on stone, or the engraver on copper, steel, or wood. Of greater importance still is it to the educational interests of the general public to have placed within their reach not only the works of living artists in a profusion commensurate with the facilities offered by such an invention, but also to have circulated among them a generous selection from the inexhaustible store of classical engravings and etchings, which, since the introduction of copperplate printing, have descended to us from the great masters in art.

Before concluding, let me say a few words on the history of my process, and what has already been accomplished with it. The invention was made in the Colony of Victoria, in the year 1859. At that time I was in the service of the Government, and my process was instantly adopted by the Department of Lands and Survey, for the publication of maps. This application of it proved eminently successful, and several thousand maps have, since that time, been issued by the Department, at a great saving to the Government.

In the year 1861, the Parliament of Victoria voted me, unanimously, a reward of £1,000, in consideration of my services, and about the same amount for the erection of a permanent Photographic Bureau, to be built according to my plan, and placed under my control.

In the year 1862, I visited Great Britain, and went in the following year to Germany, for the purpose of improving my process, and developing it still further by the reproduction of artistic subjects. The progress I made in Berlin, during the year spent there, fully answered my expectations, and I was so fortunate as to have my method of reproduction adopted for the publication of a long series of pen-and-ink drawings, which the Prussian Government were about to publish in a work on the National Expedition to Japan, China, and Siam. The first part of this work has appeared, and with the plates accompanying it you are already familiar. I do not think it necessary to add to the length of this letter by enforcing the merits of these and other productions of mine; let me trust, however, that the reasons and arguments I have adduced will, in your opinion, justify my faith in the success of a photo-lithographic business, placed in the hands of capable and earnest men.

I am, Gentlemen,

Yours, respectfully,

J. W. OSBORNE.

To S. H. GAY, Esq.,
SAMUEL SINCLAIR,
THOS. N. ROOKER, and
GEORGE H. POLLOCK.

Copy

State Asylum, Utica N.Y.

Nov 21st 1853-

Hon. Mr. Kelly,

Rhinbeck

My dear Sir,

At the meeting between the Trustees of the State Agricultural College and myself at Bagg's Hotel during the State Fair, I promised to inform you of any action the Commission of the Willard Asylum might take, looking towards a site, other than Auld, the site then under consideration and concerning which by direction of our Commission, I met the Trustees. I then expressed the opinion of the Commission that no other site could be acted upon until after the 1st of November, the date fixed by our resolution of July but that after that period had passed, if no price was previously agreed upon for the Agricultural Farm, between the Trustees and our Commission, we should feel free to act upon any location offered. You then proposed that the Trustees should meet our Commission at Utica before that date and if possible agree upon

a price to be paid in case of purchase, to which proposition I cheerfully assented. This was considered by all present a proper course to effect an agreement, or if no agreement should result then the Trustees would have time, if desirable, to postpone the sale of the property, if necessary to protect the interests of the College.

We were all under the impression then that foreclosure proceedings were well advanced though in fact at that time proceedings were not commenced.

At the same interview in discussing the relations of the Commission to the Trustees. I stated that the Commission did not hold itself bound to the Trustees or responsible in any degree for what was said or done at Judge Folger's office between Mr Sheldon & myself & Mrs. Chapin & Williams. That there was no meeting of the Commission called at that time and I was not aware of the interview until some time afterwards. I also said that Mrs. Chapin & Williams seemed to understand the conversation at that time differently from Mr Sheldon & myself. I reported our interview fully to my associates who still adhered to their previously expressed opinions & repudiated all intent & thought of official action or responsibility of the informal meeting which they

said was not of their motion but at the request of Judge Folger.

They pressed upon me the duty of making this clear to your mind which I said I thought I had, but that in order that they should be fully satisfied they should communicate in writing their own views that I might present them to you which they promised to do at once. — Not hearing from them I wrote them on the subject & received a reply from Mr. Chapin dated October 2nd in which he says "I did not write you as requested, as from a remark made by Mr. Williams I inferred that you might not think it necessary, after our full conversation. I think you should disabuse Mr. Kelly's mind of the impression he seems to have that the Commission stands pledged to pay any definite sum." Then of this meeting at Judge Folger's says "The meeting held at the Office of Judge Folger was at his request and not of an official character and one to which you were not invited. It was an informal interview and probably suggested by the accidental presence of Mr. Williams & Mr. Kelly in Geneva. The conversation was general in its character & the purport of it was that Mr. K. would see Mr. Winston and unofficially would ask the consent or willingness of Mr. Winston that foreclosure proceedings should

commence, for this was uncertain. I have no recollection that any price to be bid by the Commission was mentioned or that the Subject was alluded to. Nothing transpired that was to interfere with our future action in any way, beyond the fact that as soon as the way opened for us to act with some definiteness upon the Orid Site we were ready to do so." I did not communicate this at the date of its reception because I thought you understood the matter probably from my statement and considerable time had elapsed, and it did not seem worth while to bring the matter up again, especially as in looking over your letter to me on the Subject dated Aug. 23^d your expression "we have no legal claim on them &c" seemed conclusive as to the question of responsibility & I had nothing in fact to do with any other question & neither had the Commission.

This morning however in looking over my papers I find a letter from you to Mr. Chapin dated Oct 14th which begins thus Since the interview held by my colleague James O. Sheldon Esq and myself with a majority of your Commissioners at Judge Folger's Office, Concord. This letter was enclosed to me by Mr. Chapin I came when I was in great affliction owing to the illness

11/21/1865

and subsequent death of one of my children, was not
therefore brought to my attention. As it would seem from this
letter to Mr. Chapin that you still entertain the idea that the
Commission is responsible for what was said at that interview I
deem it my duty to say distinctly that we differ with you
in this & I have quoted from Mr. Chapin's letter to show the
agreement on this subject & I would further state that the de-
clarations of Mr. Williams have been equally emphatic as those
of Mr. Chapin. It is evident there was some misapprehension
or misunderstanding at the time, though not suspected by
either party, of the object and character of the meeting.

We took no action in regard to other locations until after
the 1st of November although after we discovered proceedings had
not been taken until in October towards foreclosure we talked
the probabilities and duties of the Commission over to Mr. Chapin
looked at some sites with a view of obtaining refusal & also
talked with Judge Folger on the probable action of the Commis-
sion after the 1st of Nov. On the 16th of October he wrote me thus
"Now I hold that under our resolution, we are bound in good
faith to the said location till November 1st after which we

were free to act elsewhere. The bill directs us to give preference to this locality - provided it is suitable, it cordently being the object to take a property for which the State already had paid a part of its value. Therefore should a location just as desirable be presented or offered for the use of the Milledale Asylum as a free gift, the question would properly come up whether the Commission should not proceed to act upon it. This was also my opinion of our liberty to act and our duty also to the welfare of the insane and the financial interests of the people of the State.

The Municipal Authorities and the people of Buffalo have made the municipal offer of not less than 300 acres of land as a free gift to the people of the State as a site for the Milledale Asylum and the Commission at a meeting on the 17th inst. resolved to visit Buffalo and examine the site or sites offered & have named Tuesday the 28th inst for the purpose.

I deem it my duty under the promise made, to inform you of this action. The other matter of this my long letter I have thought it right to communicate in view of our relations & in response to yours to Mr. Chapin sent to me by him.

It would be far more agreeable to me could I spare the
time to go and see you & talk the matter over and certainly
it would be more satisfactory. I may be able to do so before
long -

Very truly yours

John P Gray

Nov. 24th -

My dear Sir,

After writing this letter & thinking the matter over
I was called to Albany and thought I would try to see you and
telegraphed you from there. Receiving no reply I feared you were
not at home & returned to Utica that night. Afterwards I thought
I could so arrange my duties as to get away but find I cannot
before the latter part of next week I therefore send the letter.

I have your letter mailed this morning informing me of your efforts
to meet me. This makes me regret still more my leaving Albany
before hearing from you. I would also thank you for your kind
expressions as to receiving me as a guest at your house in which you
say Mrs Kelly unites. I hope I may soon be able to accept the
kind and cordial invitation which your note would imply.

Yours very truly John P Gray

Illinois & Mississippi Telegraph Company

SECRETARY'S OFFICE

Ottawa, Ill. Nov 22 1865

E Cornell Esq
Ithaca N-Y

Dear Sir

Enclosed find N-Y Draft
payable to your order for 5710 ⁵⁰/₁₀₀ Dollars.
amount of your dividend (5732⁰⁰) less exchange.
Please sign the enclosed receipt and return
it to me & oblige

Yours &c
Thos B. Catlin
Sey

E. P. PRENTICE, Pres.
W. L. M. PHELPS, Secy. & Tr.
C. W. WENTZ, Chief Eng^r

Albany & Susquehanna R.R. Co.

Inc. of C. Rochester, Albany, N.Y.

Albany, N.Y. Nov 27th 1862.

Hon Ezra Cornell

My dear Sir

On my return I rec^d 9 yours of the 23^d and enclosed you will check oc. with thanks for your long suffering and kindness in the matter,

Who will be Speaker is rather difficult to tell at present. I suppose Alvord of Syracuse thinks he has the inside track, while Audrus. of Franklin through his friends is making some effort with some prospect of success. - Whether either would be the best man for your particular interests, is somewhat doubtful, - will do any thing I can to aid in obtaining your Canal Charter the more I think of it the more I am satisfied the interests of the State, as well as your own locality and our R.R. interests are & will be largely promoted by it, You will probably be on hand a few days before the organization of the Assembly. to look after the Speaker and other matters connected with your interests, when I shall be happy to see and confer with you -

The work on our road is progressing but not as rapidly as we could wish. The business of that portion is operations exceeds our anticipations, Remember me to your family in which Mrs Ramsey joins,

Truly yours &c
J. M. Ramsey

Rhinebeck NY

Nov 28 1865

The Hon Ezra Cornell

My dear Sir

I hand you copy of a letter this evening received from Dr Gray, by which you will see the apprehensions expressed in my letter of 25th were well founded, and that in all probability our proposed sale will amount to nothing.

I enclose also copy of the reply which I have just sent to Dr Gray, and I do this that you may understand the ground on which we complain of the action of the Commissioners.

It is barely possible the interview which I ask for and which was promised at Ithaca shortly before the sale may be conceded, and that we shall then see each other - but of the Commissioners do not consent to meet us; we must arrange to see each other that yourself Mr Sheldon and the writer in order that we may determine what is best to be done.

I have little doubt but that the President of the

Insurance Co. will consent to such postponement of the
Sale as we may ask, yet as this is not absolutely
certain I felt at liberty in my letter to D. Gray to
speak of "perhaps a sacrifice".

I shall be glad to have a reply with any suggestions
that you deem the case to call for.

Very truly and respectfully

Yours old Ser

W. Kelly

Copy-

Ellis W. Rhinbeck

November 28 1883

John P. Gray M.D.

Dear Sir,

I have to day received your communication in relation to the action of the Commissioners for locating the Willard Asylum, and cannot refrain from expressing my disappointment at the action they seem to contemplate. Before replying at length to your letter it is proper I should confer with my colleagues, yet it seems proper I should at once say something in regard to the interview held at Judge Folger's office on 11 July last, that the position taken by Mr Sheldon & myself may be better understood.

In the conversation held at that time (Mrs Chapin Williams, & Judge Folger assenting) expressed the intention of the Commissioners to purchase the Coia property for the Asylum provided foreclosure proceedings could at once be commenced (it being understood that in no other way could a proper title be obtained,) and it was further understood, between us that the price should be sufficient

to pay off the College indebtedness, stated to be not over \$75,000 — something was said about a higher price, so that the College Stockholders might realize a partial dividend — We did not make a point of this, but I stated on behalf of the Trustees that whatever Judge Folger should deem to be just in the premises would be satisfactory to us.

Mr Sheldon & myself left that meeting with the clear understanding that if we could induce Mr Winston President of the Company holding the first lien, to place the Mortgage in suit immediately, that the Commissioners would purchase the property at a price that would cover its liabilities — Nothing was said as to a limit of time — either 1st November or any other date, though the Commissioners urged that no time be lost.

Within a week thereafter I had seen Mr Winston had represented the chief facts above stated, and had his assent to immediate foreclosure. Special instructions were given from the Attorney in the case, and more than once my agent called on the Attorney of the Company, to ascertain the progress made and to urge all possible haste. In the beginning there was some short delay in making necessary searches to learn the names of all the defendants

in the case, but suit was actually commenced as I am informed about 1st August — The delay in the proceedings, ^{which} has caused all the embarrassment, was owing to an error on the part of the Attorney, which compelled him to amend proceedings. You are therefore under a mistake in saying that suit had not been instituted at the time of the interview held at Utica by yourself with Messrs Cornell Sheldon & myself — for suit had been begun nearly or quite six weeks previously.

The Trustees have fulfilled all the promises made by them at the Geneva interview in good faith — they have no legal claim on the Commissioners but they think they have an ^{equitable} ~~actual~~ claim that ought not to be ignored.

How the Trustees are to justify their action in thus voluntarily bringing the College property to a forced sale perhaps to a sacrifice, I cannot see, unless by a statement of all the facts in the case, whenever it may be necessary to give them. Without some explanation we should hold a most mortifying position, if a sacrifice of the property should be the result of all our negotiations.

The day fixed for the sale is 15 December at Waterloo — I shall continue to hope that the Commissioners will accord us

an interview at Utica or elsewhere before that time; and
that it may result in the purchase of the property
for the Pelland Adyfun

I am dear Sir-

With great respect

Yours - Oth. Davis

Wm. Kelly

N. Y. Dec. 1. 1865.

Hon. E. Cornell,

My Dear Sir,

I was in hopes by this time to tell you something definite as to what can be done in regard to a sale of our Gel Line to the U. S. Gov. But the absence of Reed has prevented any thing being done. I expected him back the last of this week, but have just learned that he will probably be absent for yet a week.

A little matter like this - to you a drop in the bucket, but to me a thing in which much of my comfort in old age depends - doesn't at all disturb your nerves or your rest; while I have had no little anxiety about it for years.

At one time I feared that all was gone, & would have sold out my interest for a song. But a search into the records of the court & into the legislation as to the formation of the new Reel Road Co. gave me hope, & I determined to exert whatever ingenuity I could command

to save something for myself & others.
 Of course I must take all the risk on my-
 self, since the Co. if defeated, would be in-
 solvent. Now if we can make such a sale
 as I think we ought, I shall feel that I have
 done well both for the Co. & myself, charging
 what is usual with the profession here where the
 lawyer takes the whole risk on himself, &
 which I mentioned to you some time ago.

I think we ought to be able to sell our
 stock & the franchises of the Co. for \$100 per
 share or

\$110.200

Add to this rent up to 1st of April

next - say about — 19.500

\$ 129.700

1/3 off for my services (a contingent fee — 43.233

86.467

This will give to each stock holder the following
 sums, within fractions

Mr. Cornell - 905 shares	71.010
" Lickson 110 "	8.631
" Chester 55 "	4.315
" Hopkins 22 "	1,726
" Bennett 8 "	628
" Williams 2 "	157
	86.467

I have good hope from all I can learn
 that such a sale can be effected. I have en-
 deavored to secure some aid in carrying it
 this, by the promise of a consideration, to be
 paid by myself. (This must be confiden-
 tial between ourselves.) If it can be I shall
 be paid for my nervous anxiety about the
 matter for years - those who have known
 nothing & done nothing about it will get
 much more than they could ever have cal-
 culated on, & will be but too glad to receive
 the money, while as to yourself in the prosper-
 ous & fortunate position that a kind Provi-
 dence has placed you, \$70.000 more or less
 will have a very inappreciable influence on
 your happiness & comfort.

With me the time has come when it is
 essential to my comfort to have something
 that I can rest on, & the more so with my
 two widowed daughters, who, tho' not des-
 titute do not abound in this world's goods.
 I beg you therefore by the ties of friendship
 that you will help me to effect this sale

I not to let your Western Co. thwart me.

With the legal capacity that I am conscious of, & especially in the management of complex knotty matters - in which allow me to say, in my vanity, I have never yet here or elsewhere found one of my profession an overmatch for me, tho' many with vastly superior speaking talents - I feel that I ought before this time of life to have made a better provision for old age. But my circumstances have not been fortunate. I was thrown into Georgia where there was little of that kind of business to which my talents were adapted. I could have whatever of difficult business arose in my vicinity - & that even when most cordially hated by those who employed me - but of this there was no great amount. And then my moderate accumulations there, together with my whole professional business, were swept away by my embarking in a cause where the state & all the individuals of the state were arrayed against a defenceless people - the Cherokees.

I understood the case & carried it
through successfully so far as the U.S.
courts were concerned - knowing full
well what would be the consequence to
myself. I would have been glad not
to be called upon, for with a young
family, I could not afford the sacrifice
- but being called on no personal con-
siderances to myself could have prevented
my undertaking the case. And so in
middle life I sat down in this city
to begin life anew - have eaten the
bread of carefulness - and under all
the circumstances of my life I am not
ashamed to appeal to a friend to help
me thus with this matter, more for my
sake than his own, tho' he has the larger
interest - that interest being in his circum-
stances of so little comparative impor-
tance. In your kindness I am sure
you will not regard me as importu-
nate beyond measure. If I can succeed
in my purposes I shall feel that I have

done well for the stock-holders, & my own share, added to my share of the recovery against Smith, after paying the mortgage on my house & some other debts will leave me with my economical habits, comfortably independent.

In looking this over I see I have given you no reason for this appeal. I must explain. In the attempt to negotiate with the U. S. Co. I have been met with this objection - Mr. Cornell is interested in the other Co. - he will never ratify any arrangement you make with ours - He controls your Co. & will not let its line go into the hands of a Co. that is in rivalry with one in which he is so largely interested.

This objection stands out prominently in my way. I have no objection to your Co. having the line if they will pay as well as the U. S. but I don't want to be crushed under this mill stone.

I rec'd your letter from Albany & immediately answered it directed to the DeLam House. I suppose you intended I should so direct my answer. If it should happen that you had left there, it of course will be forwarded to you.

Yours truly

E. W. Chester

Pardon all the egotism in this.

Ithaca N.Y.
Dec²⁴ 1/1865

Mr E C Cornell

Dear Sir

A little
over one year ago in company with 80
others sick and wounded soldiers we
arrived at Oswego late one Saturday night
just before Election (the Saturday before) the
good people had made preparation for us
but we were all anxious to get home
some a few were very sick others suffering
from old wounds. Most had sent
their votes home and the fear of their
being changed was another powerful
reason. To try to get through as soon
as possible as every man was a thorough
Union man and not a copperhead
among us. We feared that some
of the sick might not get through to
their homes in time to vote. We
tried to hire horses and carriages that
might at Oswego and failing in that and
being very tired we gave it up for that
night the next day (Sunday) the good

People of Onego told us that it was impossible to get a train to come over the road on that day as it had never been done but we were all anxious and knowing you to be a man of influence and the Soldiers Friend so as soon as the telegraph operator came in your humble servant the undersigned in behalf and by the direction of the Soldiers immediately telegraphed to you for you to use your influence to send us a train Well the train came in due time many thanks to you. and a happier set of men is not after seen it would have done you good to have heard some of the expressions after we were on the cars such as God bless Mr. Cornell - hully for Cornell - Three cheers for Cornell &c &c but it would have paid you for all your trouble if you could but have seen the homes made happy that Sunday night by the arrival of the loved ones at home

Excuse this tardy acknowledgement of your services but not having

the honor of a personal acquaintance
and being confined to the house
part of the time from the
effects of an old wound have
neglected it till now

myself and in behalf of the ^{For}
Soldiers

Please accept our sincere
thanks

Respectfully Yours

L. F. Palmer (and others)

Co. C 146 N.Y. 37th Regt. Inf.

Phil Case
Dec 2. 65

Ithaca Dec ^{2nd} 1865
E. Cornell Esq

Dear Sir

I received your letter of the 30th in due time & really Ezra I was somewhat confounded on reading its contents - you must of answered it without consideration & reflection you consider the contract broken on my part because I did not - deed you one half the land, in the first place you took my deed & said you would have the ~~necessary~~ necessary papers made & I have never seen that deed from that day to this, I being always ready & willing to make the deed to you on your making the agreement papers which you agreed to have Boardman & Finch make out & at the time we agreed to sell 50 acres for \$500.00 per acre - I told Esq Finch it would ~~not~~ ^{be} necessary to make the deed to your Honor before we made that paper & Mr Finch told me to not make the deed to you till after the 50 lots had been deeded & let the deed to them come immediately from me, that as you was at Albany it would be attended with more expence & be troubling you to sign all the deeds & having to be acknowledged to the same with your wife

but to leave it as it was it would only
require my name & that of my wife, & the
Contract was therefore drawn pledging one
half the land to you & making your Honor
& myself the parties of the first part & (Mr
Delano & others the parties of the second
part. This paper or agreement was
Signed by me & in behalf of Ezra Cornell
Drawn up by Mr Boardman your Attorney
at his & Esq Finchs own suggestion in
accordance as I supposed with your
advise to them, but in that Contract under
Seal I gave you one half the land. you say
you supposed on your consenting to that
agreement that you would be free from
bearing on the land why my dear Sir that
agreement was made expressly that you should
bear one or more wells on the land at your
own cost & expence & made by Esq Boardman
one of the very men which was to draw the first
agreement your own Attorney. This paper or
agreement as in my hands & I think ~~think~~
A copy was retained by Esq Boardman of
this however I am not certain. Then Again -
Ezra if you considered your self out of the ring
& the contract brokers last winter why in
conscience have you not told me so during
the entire Season? That I have ^(been) bearing you
as you term it for Ezra you know I have been

waiting for you to go with me & start a
well & you have promised me several times
& set days when you would go & finally you
sent me out to make the arrangements -
myself & telling me to in making any arrangements
not to draw on you till after the first of Sept
as you had no money till your quarterly returns
came in. & when I asked you for expence money
why did you tell me to furnish my own money
& keep an account of it all together, again
if I had of had the least intimation that
you was not going to bear on the land do you
suppose I would of refused the twenty thousand
Dollars offered me for the land no Ezra I
should of taken it quick & then if I had
not depended on you to bear the land would
I have thrown up my business here & been
idling away my time throuout the season &
hiring men to go down with me to be in
readiness from week to week waiting for your
money to come No No Sir, I have really ~~small~~
Smell So Strong of Petroleum the entire
season through your promises to bear for
oil that - I have really been afraid you -
would apply the pump to me & I swear by
the powers above you had struck oil &
finished your contract, I have ^(had) several talks
with Esy Finch during the season & he has

always assured me you would bear at least
one well in any land but the multitude of
business on your hands & mind kept you back
& so I have rested as easy as I could expecting
a call from you almost every day through the ^{entire}
season or at least from time to time as you
have set the different times to go with me, & you
you will please to look this matter over more
carefully & let me know the result hoping you
will see the thing as I ^{do} & help me out
of the fix you have got me into. believe me as
Ever your Friend Ever More

Philip Cane

Potato Rot

Ulysses Dec 5, 1865
Dr Brother.

Enclosed I send you a statement of my experience with the "American Compound" which I obtained from you last spring on trial.

I planted about $\frac{1}{2}$ an acre of potatoes $\frac{2}{3}$ of which were the Albany seedling and the balance were made up of the "English Adonis," the old fashioned white, and Dutch York.

The season of growth was rather unfavorable for potatoes, it being a groundy season and rather wet.

I used the compound on my alternate 5 Rows and planted the 13th of June.

I think the rows upon
which the compound
was used came up first
but aside from that I
did not perceive any difference
in the growth during the summer.

My potatoes all rotted more
or less but those upon which
none of the fertilizer was
used were in the worst
condition. I dug the 30th
of Oct. I do not consider
that I gave the fertilizer
a fair test as the kind of
ground was not at all fit
for Potatoes.

Yours Respectfully

J. H. Cornell

E. Cornell Esq
Athens

Moths, Corners, Dec 6th/65
Mr E Cornell

Dear Sir

By your request I send you
a statement of the result
of the Chemical experiment
on potatoes

I put it on one row of my
last planting on the 23rd May
one gill in a hill that
row did not yield quite as
well as the rest of the
piece $\frac{1}{4}$ acre there was
in that row three rotting
potatoes and two in all
of the rest

Yours truly

Johnson Luick

Ithaca Decr 9, 65

Dear Sir

I have a letter from one of the Old Creditors of the N.Y. & Erie Telegraph Co, claiming \$31. which should have been paid to him by Mr Marcus Riggs more than Ten years ago.

Riggs is now here and I called his attention to it, and he says that he only drew from you and Mr Tichnor such amounts on that bond as he was called on to pay creditors. and that about one thousand dollars remained in your hands. Do you know any thing about this? I paid to you & Tichnor the full amount, and there was enough to pay all the debts of the old Company. Who has the money to pay this debt with

you or Mr Riggs? -

Please inform me as early
as convenient -

Yours Respectfully

E. Cornell

Mrs N. Thomas Esq

Ms.
Kc4 81

Shawnee Kansas Dec 9th 1865
My Dear Uncle

Your favor of 30th
Nov I recived last evening you
wanted to know if I could locate
some of the college land scrip
on Govt lands that would sell
readily, or would be worth holding for
advanced prices I could locate a
large amount of scrip on Govt lands
that would pay to hold ^{for} ~~at~~ an advanced
price, if there was no tax to pay on the
lands There is a large amount
of homesteads being taking up on the
Govt lands in Kansas this fall
which would be rather a 'damper' on
the ready sales of unimproved lands
at present If I understand your
letter this scrip can be located on any
Govt lands in pieces of 1/4 sections or 160
acres and do not propose to locate
it in a body but to pick out choice
pieces of lands by personal inspection
wherever I could find them

tt
com
E. C. Chase
9 Dec 65

Kansas is, what the settlers call a "spotted country". The lands are divided into three classes the upland prairie vally lands and river bottoms.

The upland is light soil often intermixed with small stone and invariably lime rock as it commences to slope down to the vally lands.

The vally lands are rich lands and without stone except in the bottom of slouch and creeks and are the lands which are taken up by the settlers; about one third is upland and is not settled up but very little and is considered worthless by the settlers who do not care who owns it as long as they have a free range of it for stock to pasture on.

The river bottoms are very rich lands and some times ~~very~~ ^{very} ~~large~~ ^{large} considerable heavy timbered and are therefore valued higher than any other lands.

On the republican fork of the Kansas river there are large tracts of beautiful bottom lands (from 3 to 5 miles ^{wide}) so I have been told which are open for settlement.

It is the intention of the Pacific
rail road to run up the republican
fork and they have every alternate,
or odd section of land within ten
miles of the rail road. The Pacific
road is ^{finished} within 6 miles of Topeka.

There are some very good Govt land
in the neosho vally in Coffey Co
Woodson Co Allen Co. and Anderson
Co. I have been through those ~~counties~~
Counties and consider the land as
good as any in Kansas.

This strip of land was left and not
surveyed but settlers are going on to it
in the hope it will be surveyed this summer.

There is a strip of country ^{wide} 2 1/2 miles
and 30 miles long in Cherokee Co between
the Cherokee treaty and the south line
of the state of ~~Kansas~~ Kansas, which is
represented to be very good lands
and abundantly timbered. The spring
river which heads in Missouri runs
through this land and on that stream
there is the finest chances for water
power there is in the west. A friend
who lately visited that country says
that there can be a good water power
got on every mile of that stream.

There is one difficulty in taking up timbered

to hold any length of time, that is
the settlers "stump" or chop the timber off
to improve there own lands with and
for fire wood There is some very good
~~cote~~ coal lands which belong to Govt in
Borbon Co. west of Fort Scott

The land offices are, Fort Scott
for all lands in Kansas south of third
Parallel. Topeka second Parallel
and Atchison all lands north of
first Parallel. It is 80 miles to Fort Sco
70 miles to Topeka and 40 miles to Atchison

I could fix up my business in about two
weeks as I could leave home And should be very
happy to accomodate you in locating what
script as you saw fit in Kansas or
in the west In the winter is the best
time to hunt lands, after the prairie fires
have burnt the lands over and leave the
corner stones viscible We are all well

Respectfully your Nephew
Elijah C Chase

to Hon E Cornell

Observatory
Ann Arbor 1865 December 13

My dear Sir

About ten days since I received a letter from my friend Prof. White enclosing one from Cooke of London to you giving the terms on which the construction of the great telescope could be undertaken. I immediately wrote to Prof. W. giving him my views, and by the same mail I wrote to Clark, to learn whether his views had moderated any in regard to the price for which he ^{would} make such a lens. To expedite the receipt by you of the information which I have obtained from Clark, I take the liberty to address you directly. Clark says, that Chance & Co have put the price on their list sent to him for the rough discs crown and flint optical glass, warranted, at £500 each for 24 inch discs and £625 each for 26 inch discs. He says that a 25 inch clear aperture would require 25½ inch discs. It seems however that they have offered the discs for a 25 inch clear aperture to Cooke for £1000, being the same as Clark supposes he would have to pay for 24 inch discs, and this advantage if accorded to Clark also would in some degree diminish his estimate.

Clark thinks he could not venture to contract such an object glass for the price named by Cooke. He says that if the discs of glass are furnished him he would be willing to undertake to work them into the object glass for \$11,000 and in case of accident his loss only to be his labor & not the cost of the discs also. Messrs Chance & Co warrant the discs which they furnish to be perfect, and in case veins or other imperfections are detected they furnish others until perfect ones are obtained. The only risk therefore ^{in the} ~~in the~~ part, if you should accept, this proposition would be the risk of breaking in the course of transmission, ^{or working} which I presume could be covered by an insurance. If therefore Chance & Co should charge £1150 for the two discs, the cost of the lens complete according to this proposition would be about the same as offered by Cooke viz \$17,500. If the glass can be obtained for £1000, as stated by Cooke, the cost would of course be about \$450 less, no loss by accident being taken into account.

Clark says further that for \$14,500 in addition to Chance & Co's bill for the glass he will contract to make a 25½ inch object glass, clear aperture, to be delivered in perfect order, assuming all the risk of breaking, &c. himself. According to this proposition the certain cost would be somewhere between \$20,000 and \$20,500.

I told him that Cooke had offered to construct for £3500 an object glass of 25½ inches clear aperture "as good as can be produced of such dimensions", and he thinks that Cooke here virtually states that a lens of this size cannot be worked to the perfection of smaller

glasses. He goes on to say: "Now a point just readable at four feet with the naked eye, you can read at 10 feet with a telescope one eighth of an inch aperture; 20 feet with one fourth; 40 feet with one half and 80 feet with one inch. With the 25 inch aperture, he should be bound to read a sentence or column twenty-five times the distance at which it is possible to read it with any telescope of one inch aperture. He will engage to do it, and nothing beyond this can possibly be done!"

Such is the substance of what Clark has written me in a letter received to-day, and I think he has now come to consider the magnitude of such a work, as regards compensation, in about its true proportions. The duty & insurance on the lens if made by Cooke will probably amount to at least 15% on the cost and it may be 20%. I am not advised as to the duty but suppose it to be about 10%. The cost of the lens therefore would be from \$20,000 to \$21,000, not differing much from Clark's second proposition as given above. When I first heard of his price \$29,000 I thought he was wild, and so wrote to him, and gave my reasons for thinking so. It is course of a great undertaking and one which on his part will be one of great anxiety. I am free to say that I consider \$21,000 a reasonable price for a 25 inch clear aperture objective of first quality. Of course I shall not presume to urge that the order be given to Clark in preference to Cooke with any considerable disparity of price against him. But Mr. Cooke has made some excellent object glasses of 8 inches aperture, according to the testimony of Dawes & others who have used them. In fact his skill as an optician is unquestioned, and it would be perfectly safe to intrust the order to him. I regard Clark as unequalled in the perfection of the correction of his lenses. His mode of local polishing to correct for want of homogeneity in the entire disc of glass must necessarily be of inestimable value in the construction of so large an objective. It requires the most delicate perception to detect the irregularities of correction due to the want of homogeneity of the disc, and still more extraordinary skill to make the necessary compensation by the local polishing, and thus bring all the various parts of what must, in some degree, be a heterogeneous lens into harmonious action. It is precisely here that Clark has excelled, and this accounts for the wonderful performance of his large object glasses. Very many opticians can make excellent objectives of smaller sizes, but utterly fail in the large ones. Clark's success in the great telescope now about to be sent to Chicago is a sufficient guaranty of his ability. Other things being equal I would prefer him to Cooke, but with any considerable difference of price I would not hesitate to order such a lens from Cooke.

Allow me further, on this occasion, to express to you how deeply I was gratified when I first heard that you had definitely decided to order the most magnificent instrument in the world. It will be a long while before another such will be constructed, & I shall be proud that America shall possess the Chef-d'oeuvre in this line. Nothing will do more to give your University immediately at its inauguration a world wide reputation than the possession of an observatory such as you have in Contemplation. There are many unsolved questions in astronomy within the reach of such an instrument as you are about to purchase ~~which will~~ the solution of which will shed much light in regard to the Constitution of the material universe, and will further aid the perfection of the resolution of those great practical problems which astronomers have in charge.

Doubtless now that Clark & Cooke are so near together you will speedily determine to which one you will give the order; and I should consider it desirable to have it under way while the facilities are certain of having the requisite number of discs of glass for a proper selection; and besides the construction of the lens will necessarily require considerable time.

The proper mounting will be an after consideration, for which there will be abundant time before the great object glass is ready. When you shall have definitely fixed upon your plan, the other instruments might be ordered. The meridian circle will require some time for its completion, but will not cost more than about \$6000.

Whatever I can do to aid you I shall be most happy to perform, and I pray you not to hesitate to call upon me at any time. To have had some share, however small, in the development & founding of a temple of science which ^{will} do us infinite honor as a nation, and which will be a crowning exemplification of enlightened civilization, will be reward enough for me.

I will please pardon the infliction upon you of so long a letter on this occasion, but to use a homely phrase, 'it has grown upon my hands.' I shall be glad to hear that the work on the great lens will soon commence, & meanwhile I have the honor to remain

Yours Very Truly

Hon. Ezra Cornell
Ithaca
N. Y.

James C. Watson

P.S. I must not neglect to thank you for your subscription for five copies of my work on Theoretical Astronomy about to be published.

Illinois & Mississippi Telegraph Company
SECRETARY'S OFFICE

Ottawa, Ill. Dec 14 1865

E Cornell Esq
Ithaca N.Y.
Dear Sir

Enclosed find Statement
for October Profits were smaller that
month than usual. Hope to show a little
better profit for November and much better
for December.

Yours truly
Thos A. Catlin
Secy

Ithaca Decr 18. 65

My Dear Sir

I now have 100,000
acres. College Land scrip.

Please inform me
what Opportunity you
now have for making
desirable locations
at this time, and what
you will charge me
to locate a few thousand
acres, and take the care
of it and sell it after
located =

Also please name
a price by the year
that you will allow
me to employ you to
work at hunting lo-
cating and carrying for

for land, I shall
have about one million
of acres to locate in all
I locate it for the "Cornell
University"

Address me at "Senate
Chamber" Albany N.Y. "after
1st Jan^y - next -

Yours Respectfully
E. Cornell

Ira Millard Esq
New London
Wis