

Torpedo Station
Feb. 12th 1874.

Friend Pope,
Your favor of 7th inst.
was duly rec^d.

I was very glad
to hear from you, &
hope to have the plea-
sure of seeing you
before long. With refer-
ence to Duplex - I have
a Model of one on
hand that has been
built at least three
years, which makes
me of a peculiarly
constructed polarized
relay - was either the
continuity-preserving

key or not at pleasure -
Sends one message
in one direction, & the
other in the opposite
or at pleasure sends
both in the same
direction - a way
station can send
to a terminal station
while that terminal
is sending to or
receiving from the
other terminal -
or from another
way station -

I had a full
sized instrument
constructed about
a year since -
& its relay has
been in special
(not duplex) service
ever since - & has

not required read-
yument since the
first time it worked
at least two others
have been constructed
for similar service
because its performance
is so much like it -

This service (as I
said above) is not
duplex - but special
& secret -

I have delayed
applying for patent
on acc. of the
Secrecy which
is desirable - If
Mr. Harkins should
be different - I
should not make
my application
for patent at
present - I would

be very glad to have
him get a good
price from the W.
U. & be assured I
will not let my
price down to his
injury. — I have
not yet set a price
though I have in
my own mind what
figures I would take
they are But Nominal
however. —

I have noticed
that the Compens
wire does not break
at glass insulators
very badly — I think
the hook (like Brooks)
is severe on the wire

Jespele Station
April 13th 1874.

Friend Naps.

I must
ask pardon for not
replying to your queries
about the Sackwood
patent before - but we
have had so much
sickness & anxiety in
the household for the
last 7 or 8 weeks that
I have felt obliged to
neglect everything that
it was possible to do in
matters of business - we are
a little better off now -
& hope to continue im-
proving -

Impedv Stettin
Newport R. I.
Dec. 8th 1873,

Friend Papa

How soon

now Can you & Mrs. Papa
Make us that visit - we
will be greatly delighted
to see you - we pretty well
for us - I am at Boston
every Saturday & some-
times on Thursday - but
if I knew in season
when you would come -
even it if were an hour
of this day I would
arrange to be at home -
am very busy - never
more so - & would

like to enter into
conversations with you
with reference to
writing up the duplex -
How comes on the new
cork? how signals?
&c &c.

Ever M. G. Farmer

Our Cousin Alfred with
the Manning is now at
Brooklyn & we expect
him here the last of this
week or first of next -
& we would like to have
you & Mrs. P. meet
him here. Please
tell us when you
will come -

F.

was Acknowledged as
of the spiral antecedent
to Grove's form - ? &
was it antecedent to
the cross form of copper
at the bottom of the
Calland Cell? - in
other words - did he
first use a copper Electrode
reaching near to the
top of the blue vitriol
solution - if so then
I should think that
that fact might be
made the basis of a
good claim - I do not
clearly understand the
reason of the complete
deposition of the two
liquids - it appears to
occur equally well
whether the spiral
turn one way or the other

whether a plate be used
as Edison uses it - or
as in fig 5 of the patent
or whether a copper
hoop be used as I use
it - & I must confess
I do not understand it -
I have not tried the
cross of copper - but
have seen them in use
& noticed the solutions
clear - I must get
a copy of the Calland
patent - & look it over -

I did think to
apply for patent on
the hoop form of the
electrode - but scarcely
think it worth the
while - I like it
better than the Edison
plate - & tis less trouble
to make & put in place

than the Seehorn
spiral - & gives less
resistance than any other
form that I have tried

I think I write you
that we always had a
ground wire in the signal box
& after used it ~~temporarily~~
temporarily when the circuit
was interrupted - but
never as a matter of choice
that I remember of -
we also had a third wire
to connect to, in our early
experiments, but it was
was abandoned - I have
not seen either Carter's
or Mr. Cullough's patents
Will hope to see you before long
Bring regards to Mrs. Dicks
Yours truly
M. G. Farman

Imperial Station

Feb. 26th 1879.

F. L. Peck Dear friends,

Yours res^d

On the pamphlet -
I would not like a
g^o's testimony until I
have time to look the
matter up more
fully - I would like
a copy of your patent &
of the various others ever
referred to - also my
previous testimony - I
am not very well - my
head is weak - & I
fear I would make
a poor show at

I shut mine - even
if I do not after a
longer contribution of the
matter - I am almost
unwed to the business for
nearly two years & have
been very ill & weak
in the time - so if
you do not come this
week or next - for
this purpose I shall
be glad.

Mr Field has
invited me to his anniversary
March 10th - it is possible
that I shall be there - if
so could you not take
my testimony in N.Y.

I wish to do the best
that I can for you - &
in order to do this properly
I need a few letters from
you -

Please let me
hear from you early

All your love

Yours truly

M. G. Farman.

Jersey Station

Feb. 27th 1875.

My dear friend Pat.

I think that I

can help you - when

I was yesterday I
was very tired - & the
labor seemed like a
mountain - but after I
had rested awhile - the
"seam" seemed to rise -
& the part liquor seemed
more clear below the
surface - It appeared
then, now that I shall
think of what an elec-
tric engineer. Skilled
in the art can do.

to put your Systems
into operation by the
application simply of
Constructive Skill - I am
as an engineer or
bridge builder would con-
sult the Construct a
Horse Run bridge after
Horse's Patent - or without
the exercise of the in-
vention faculty - whether
the span was 20-40- or
60 ft. long he would -
knowing the strength of
material etc. proceed
to calculate the dimensions
of his timbers - frame
the truss - & set it

all ready - carefully
examined when it was
put together into its
proper place - it makes
satisfactory the desired book
So I would thank the
intelligent electrical engineer
for published data - Calcul-
ate the dimensions of the
various parts of your
apparatus - put them together
& expect them to work - &
they would if he were
satisfactory skilled in the
art - & if he would
refer me of such skill.

I need copies of
your patents - they are

that I had seen
of them, but cannot
by my hand upon them
I have sent them to me

I am to all
my best
Mrs. F. F. F.

Inspected Station
March 27th 1878.

Friend Robt.

I should have written
sooner but I have
not been well since
my return - I took a
very violent cold on Monday,
17th, but for you - I
am scarcely over it yet - but
am getting better - tis
well we embarked the
Cross on as I could not
have gone on with it at
this time - I send you
today five of the Sawyer
& Sawyer & Mrs. Petrol
for you & Callie as you
desire to write thoughts

-for Mr - No. 205305
is essentially in My
model - & was used by me
prior to 1867 -

Claim 2 anticipated by
me -

No. 205309.

Anticipated by me -

No. 199117.

Anticipated

No. 196834

Switched out Pump instead
Wg. Chs?

Anticipated

No. 210152 Perhaps

with reading in same

Would it not be best
to make two or more
Cases in the Matter -
Claims in 205305
will cutting your own
interference - If any
Claims can be made that
will not run into
Conflict just such
into one Case - & show
that will conflict
just into one or more
different Cases - I
shall make other proceedings
& applications - Perhaps
put Claims for steps
of widest breadth in the
middle into several Cases -
I will write you again
on the Matter -
Please let me

3
Dear you & yours.

all better -

Love & all

Mary Guss.

M. G. Farmer

Forpeck Station
April 25 1879

Friend Mr.

Gen. Ser.

I have
looked over the Model
& made three sketches
one of the screw cups on
the base board (1) Base

Second of the top board (2) Top
board (3) - I find that
the supplementary levers l_1 &
 l_2 are useless - but I did
sometimes connect l_1 & l_2
to F - or rather to C_3 (on
your sketch) & connect f_1 to
 W_2 & b_1 to W_3 , disconnecting

f & b; --- I also
at one time, thought of
using the Contacts [b b, ---
[f f, to work a sort of
vernier Rheostat - &
using the contacts B b, &
B f to work the heavy
Rheostat - I think that
was the original intention
of them - but it is so
long since the Model
was made & the Specifi-
cation written (which
is lost) that I don't
remember why this
Model was so made -
I have used the
regulator both ways -

As far as you can
simply say that
the Supplementaries

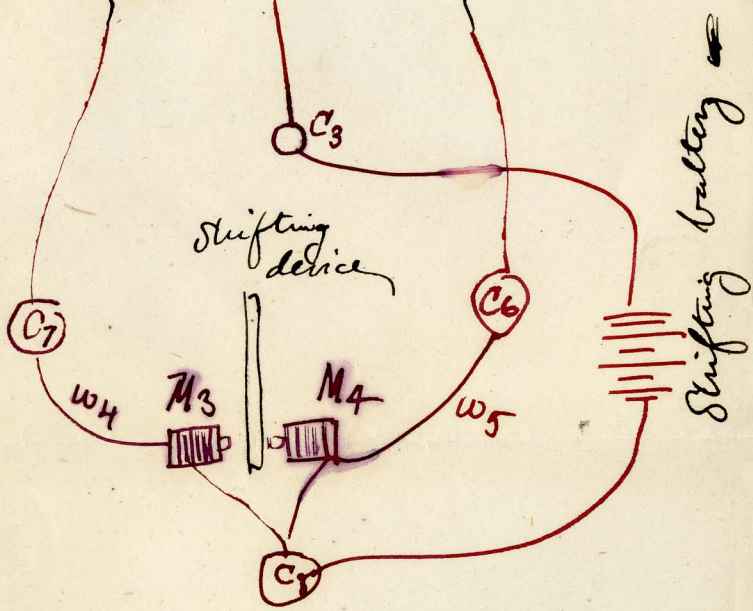
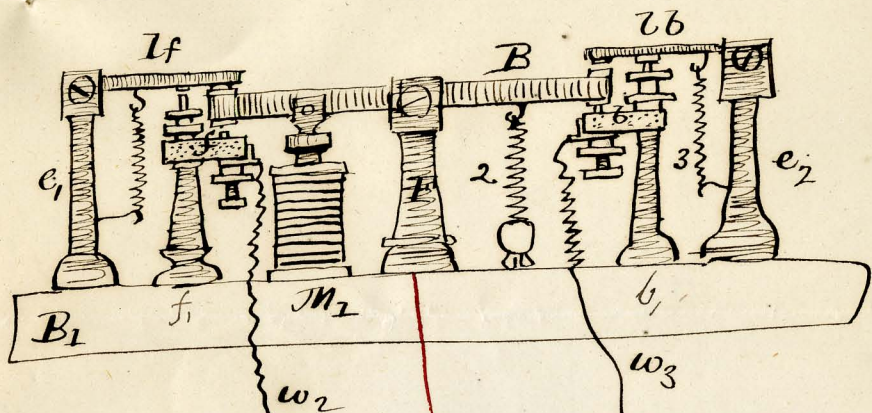
learn of it. as an
alternate way of clearing
the contents -

Mr. Smith was
here part week - &
said he should be
in N.Y. taking De-
aphne testimony -

Please hand the
enclaves to Mr. Ashley
or to Mr. Hamilton.

Very yours.

J. G. Farmer.



Forfeited States
April 25th 1858.

Friend A. A. Phelps
of Hamilton.

I would
be glad if you could get
to send me one of
the interesting? Pam-
phlets issued by
the "American"
"Papist?" "
"Delegated" "
"Company" "

Very yours,

W. G. Farmer.

90

Cup 10 is connected by wire to Cup 5

Cups 8 + 6 receive main current.

Cups 1 + 7 receive local battery to work the engine.

Cups 9 + 2 receive ~~total~~ local battery to work shifting magnets of the Rheostat.



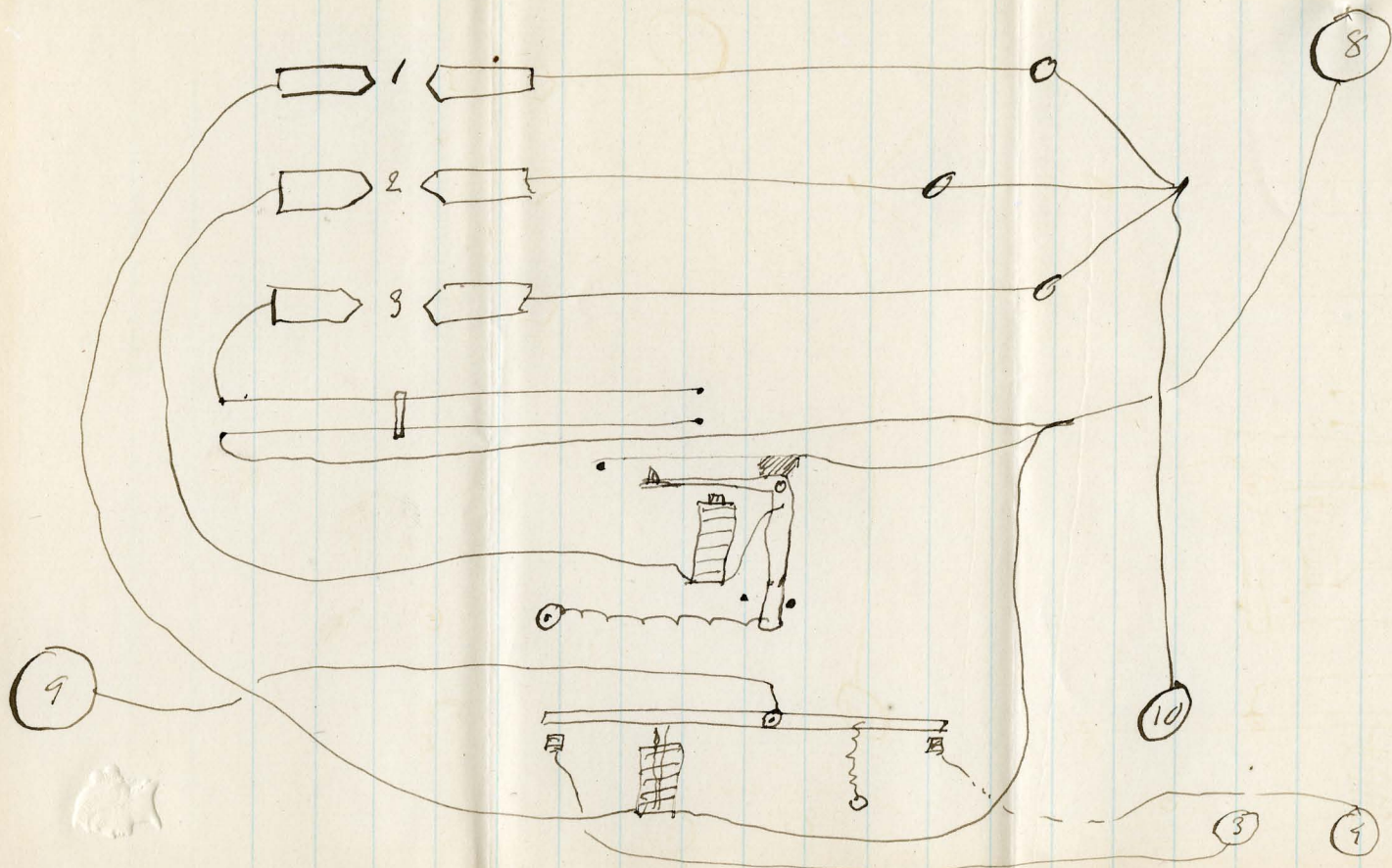
(Main Circuit)



8

100

Back side of Top-board.





10



07

20

Bar

30

40

Back side of Base.

5

6... Main Circuit.

Jersey Station
Newport R.I.
Oct. 1st 1873

W. H. Sawyer
Dear Sir

Please send to me
at this place six
of the glass jars
(such as you sent
me two of for the
Sesewood) I
wish to use them
for a Bichromate
battery where I need
a deep Cell -

Also if you can
give me an approx-
imate price for the
Sesewood Cell.

Complet - I
could in a way an-
swer more satisfacto-
rily those who ac-
casionally inquire
of me as to its price -
I hope to get
to summing soon
the two I have &
give them careful
tests -

Yours truly
W. G. Farnor.



Inspector Station
 Sampson. R. I.
 March 20th 1882
 Ft. L. Dak. &

Dear Men's
 I don't get out of patience
 with you - I am begging
 at your quarters as I
 feel able - have already
 answered about half of
 them & will have to make
 some further progress
 next week - I feel my pay
 going in strength - some-
 what by resting - I am
 trying to get what rest I
 can - two are all pretty
 well for us - that is
 as to average -

Res. getting from the
Patent Office as follows.

Week. March 17 1880

Mar. 17 1880

Systems of lighting by
Electricity No. "925" filed
Jan. 15 1880.

Claims 1-2-3-4-5-6-7-8-9-10-11 are
fully met by Eng. Pat. 124772 &
4022 of 1878 -- Claim 13
by Eng. Pat. 8022 of Wheaton
& Eng. Pat. No. 4689 of 1875 -
Claim 17 by same & by Sawyer
& Man 205903 of Jan 25
1878 - Claims 5-6-7-8
are distinct in subject matter
from the other parts of the
Application & must be elimin-
ated -

The above is about what
we had a night & expect. Now
who shall do the work
of separating this into two
things - or four separate ones -
you? or some or other
I would be glad to hear you
do it had you time - The
first meeting Sawyer & Mann
should go into one & be first.
The new matter into one
that may go through things
The next disaffected Clavis
viz 4-12-14-15-16 into one
which may go through things.

The kernel of the thing is
Mr. Sawyer & Mann - & must
be first through - I shall
look up Mr. Gyles's picture
then send for copies of them.

How are you & yours
getting along -

We all send
thanks for
your gift
D. G. Farmer.

Lospeck Station
Aug. 2nd 1882

My dear friends

We all congratulate
you on the appearance of
the "little stranger" &
wish him the best
day - wish you the
best things for Father -
Mother & Sister -

I shall

be glad to see you any
day that you can come -
& think the change
will be good for you -
& we can certainly
do a lot of business more
rapidly here -

When you come
please bring a hard
basket of miss peaches
if not too much
trouble - we do not
get miss our share -

All pretty well
& send love.

Ever yours
J. W. G. Farnsworth

To F. L. Phelps &

Inspektor Station
May 4 1895.

Friend Aho

I am much obliged for your letter & the description of the Quast. Perhaps you omitted the ground content attached to the upper Key but never mind. I understand its working & am much obliged. I am sorry to hear of your ill health. You will do well to be careful & abstemious in all things. I doubt not the work required of you will

be at times perplexing
laboring & wearing -
& a trip to Europe ought
to do you good - if you
could go unencumbered
with care - I hope
soon to hear of your
improved health -

I am greatly
obliged for your efforts
to obtain Chemical
paper for Mo - perhaps
they fear that I too
am at work on Auto-
matics - but that
is the farthest horizon
from my thoughts -
it is simply an ex-
periment for a tempo-
rary chronograph -



Alene give My
kindest regards to
Mrs. Stapp - -

Also remember
me to Mr. Percott - -

Yours truly
M. G. Farmer.

Inspects Station
Oct 14th 1884.

Friend Pope -

I would like
to have you - (when in
N.Y.) get me one or
two copies of the
Army & Navy Journal
for Sept. 5th 1884 -

You will find in
it quite an interesting
acc. of the Torpede
Experiments which
took place here before
the Senate Committee
in Aug. -

I wish
you would write &
tell me what place
in Conn. it was
where you & your wife



spent the honeymoon
 I have forgotten -
 but think it was
 Hitchfield Conn. -

I will write
 you again in a day
 or two -

W. U. Report
 looks surly? but
 A & N. Stocks don't
 look very flattering
 to them -

We will be
 very glad to see you
 here when you & yours
 are able to come -

Yours truly
 M. G. Farmer