

none has never full confidence
in the accuracy

I saw Mr. Stoney when
we were in London & thought
him looking very well. I
am very glad to hear that
Maunice is possessing no ground
at Belfast

Yours very sincerely
Charles A. Parsons

LAUDER GRANGE.
CORBRIDGE-ON-TYNE.

March 12 1888

12/81

My dear George

I am very much obliged indeed
to you for your remarks on unipolar
dynamos & suggestions for
constructing unipolar self-exciters
or regulators

As regards the unipolar dynamo
I am very glad you agree with
me as to the prospect of getting
me to work. I have made some

12/81

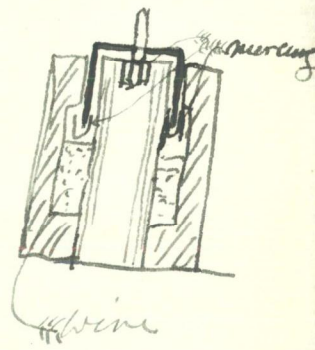
rather careful calculations
as to the probable Σ up at
20,000 or thereabouts it will be
from 20 to 50 volts I hope
it will not turn out less than this

I have an idea that ^{even} should the
rotating cylinder be slightly
eccentric or the field not quite
uniform that there will be
Lorentz currents of small quantity
at all that would neutralize somewhat
the want of uniformity in the
field & would not generate

much heat.

I have seen an electric meter
patented & working on the ampolmer
principle

Some what according
to the sketch



I have also seen
another form of
unipolar meter

but I have never seen a unipolar
galvanometer. Indeed I think
that it would be a splendid instrument
None of the instruments now
in the market are perfect

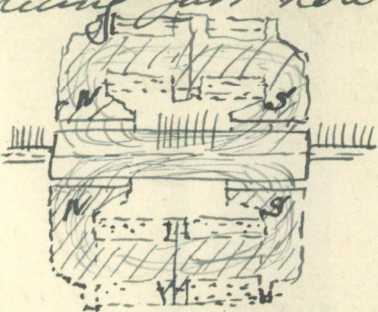
Lander Grange
Cortridge - en - Tyne
Mar 9 / 88

12/81

Dear George

We have now had a dynamo
running at about 18,000 revolutions
for several months & it gives
splendid results for the small
amount of wire & iron employed
& the self induction of the coils
which you thought had got
a serious consideration is
very small in account of
very small number of convolutions
required to get the E.M.F. we

is rather a heavy job now
My idea is
this



a soft iron
cylinder set
within a N polar piece at one end
& a S polar piece at the other,
current enters at ends & leaves
at centre brush

Now if the iron cylinder is of
uniform quality & is truly
central in the polar pieces which
are uniformly magnetised over
their hollow cylindrical surfaces
Will there be Davall's current
produced in the cylinder?

I should like to know what
you think of it

Yours very sincerely
Charles W. Favens

Have 10 sections in the commutator
& 80 wires around the barrel
armature (4 revolutions to each
segment) & the sparking is
almost nil with 60 amps. &
20 volt

We have been using a
steam turbine composed of
a series of 20 journal turbines
on one shaft each turbine
using a fraction of the total
steam pressure & we have
got decidedly good economical
results with regard to electricity
produced per lb of steam
but we have scarcely got the

arrangement of turbines as up
to the best form yet, we may
hope for

12/81

I am thinking of trying a
unipolar dynamo, it ought
to give a fair emf at 20,000
rev^{ns} I believe that this emf.
has always been low whenever
it has been tried, it would
be a great thing to do away
with the commutator, & have
only contact rings & brushes
I have one now half made
but our other work has stopped
it as we are fitting up ships
with the electric light