

but it combines with magnesium
again - we are concentrating it
there. The ammonia is ab-
sorbed on the way with H_2SO_4 .
It is possible that the new stuff
may remain with the MgO , if
it forms an acid hydride like
 Hd . In which case it will be
liberated by H_2SO_4 , added to
convert the MgO into sulphate.
I think it is unlikely to give a
basic hydride. If the density is
 $20 = X_2$, then there should be
0.25 p.c. of it in the nitroge;
if $40 = X_1$, then 0.05 p.c. &
the latter would agree with the
small yield we got: we should
get 18 cc. from 150 grams. We
shall see in a few days.

Kindest regards to you all.

Yours sincerely
W. Ramsay

8/79

8th March, 1898.

My dear Fitzgerald,

Many thanks for your letter.
Huntley has found that the faces
of his cubes are not quite right,
& has sent them to Swift & Hilger's
to be made parallel & plane. He
got them from Swift, who is not
so good a workman as Hilger,
even though the Hilger is now no
more. It is very mysterious why
they don't work in a way, & give
some signs of bands, even though
they might be poor. One sees
nothing but the reflected image
of the slit, no matter what light
is used, or how wide or how
fine the slit is. Turning the cube
round merely shifts the position
of the reflection, which still keeps
quite sharp.

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My object in writing, however, is not to tell you this, but to ask you for a judgement, so far as you know the men, on the relative merits of Gray, Callender, Threlfall, & Kueven; also of Woodington & L.P.S. I am afraid however that the sense of the meeting was against the last two. Against L.P.S., because what he has done has been technically electrical, & Fleming objects to his appointment; against Woodington, because he doesn't appear to be as heavy metal as Gray, Callender, or Threlfall.

Would you write me such a letter, as I could read to my colleagues on the Committee?

Similar letters are being written to J.J. & to Harker, & I believe also to Darwin & to Forsyth.

You know we must take all qualities into consideration. We want a man who will keep research going, who will lecture & teach well, & who will take a position among us. In many ways J. P. J. would fulfil these conditions, though he is weak in the first respect.

I am busy (in confidence) hunting the new gas down. It must be there. We (Miss Aston & I) have now worked up 450 grams of magnesium nitride, & liberated the ammonia from it with water in vacuo. The gas remaining comes to about 18 or 20 cc. per 150 grams; I don't know what it is yet,