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Φ_1, I have come to town to get the tube of helium from Ramsay. When I have tried it for sparks or glow produced by Hertz waves, I shall let you know the result.

I tried a tube with one sliding electrode, the tube containing air at about $\frac{1}{60}$ atmosphere. This gave sparks nearly 3 mm long at a distance of about $2\frac{1}{2}$ feet from oscillator, while two knobs with ordinary air between them gave only $\frac{1}{20}$ mm (about) at in the same position; but the results were rather fitful. Sometimes the spark would not go at all, & it had to be coaxed. It seems very hard to get regularity with Hertz waves.

By the way, in Poynting's result the flow of energy from the ether towards a wire connecting the two poles of a battery giving a perfectly constant current is at each point in the ether perp. to H and E, where H is magnetic intensity, & E = electric force intensity at the point. But it seems to me that with merely a constant current in the field E must be $=0$ at each point. Am I all wrong? If $E=0$ what becomes of Poynting's theorem. It seems to me that E can exist only when currents are varying with the time or when there are charged bodies in the field.

I must be making a huge blunder, but I don't see it.

I have not yet seen the 50,000 interrupter. Please enquire for a Spelling Book in Dublin. In my time, Spelling used to be taught. Now it is not, & I am determined to keep Neville at it systematically. There used to be some good systematic book on Spelling in Dublin — I think in the National Ed.n series. Please enquire, send it to me with its cost marked, & I shall

indemnify you.

I've got the helium, & now I go
to catch a train back & try the
experiment tomorrow.

I knew that the Boers wd not
leave us on Spion Kop.

What awful idiots our Heads of
Govt Departments are!

M.

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