LETTERS TO THE EDITOR.

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Radium and Cancer.

IT has occurred to me that perhaps you would care to publish the enclosed letters, and thus start some one experimenting with the radium rays in the manner suggested.

Dr. Sowers is a distinguished physician of Washington, D.C., now spending a portion of his summer vacation in Baddeck, Nova Scotia.

ALEXANDER GRAHAM BELL.

Baddeck, N.S., July 21.

Dr. Z. T. Sowers,
1707 Massachusetts Avenue,
Washington, D.C.

Dear Dr. Sowers,

I understand from you that the Röntgen X-rays, and the rays emitted by radium, have been found to have a marked curative effect upon external cancers, but that the effects upon deep seated cancers have not thus far proved satisfactory.

It has occurred to me that one reason for the unsatisfactory nature of these latter experiments arises from the fact that the rays have been applied externally, thus having to pass through healthy tissues of various depths in order to reach the cancerous matter.

The Crookes's tube from which the Röntgen rays are emitted is, of course, too bulky to be admitted into the middle of a mass of cancer, but there is no reason why a tiny fragment of radium sealed up in a fine glass tube should not be inserted into the very heart of the cancer, thus acting directly upon the diseased material. Would it not be worth while making experiments along this line?

Yours sincerely,

(Signed) ALEXANDER GRAHAM BELL.

Baddeck, N.S., July 21.

Dr. A. Graham Bell,
Baddeck, N.S.

Dear Dr, Bell,

The suggestion which you make in regard to the application of the radium rays to the substance of deep seated cancer I regard as very valuable. If such experiments should be made, I have no doubt they would prove successful in many cases where we now have failures.

Yours sincerely,

(Signed) Z. T. SOWERS, M.D.

Baddeck, N.S., July 21.

The American Tariff and the St. Louis Exhibition.

As a member of the Royal Commission appointed to make a success of the British Section of the St. Louis Exhibition, I have, in common with some of my colleagues, been met by the difficulty, which for a time seemed an insuperable one, that our manufacturers could not be prevailed upon to send their goods to this exhibition, even though they would be admitted duty free, because the tariff had practically killed their trade with the country.

Even in the subject in which I am interested, instruments of precision, I have been met with this answer to such an extent that for a time I feared that the formation of a representative collective exhibit would be impossible.

I wish, if you will afford me the space, to point out to our manufacturers that in our class the incidence of the duty need not be so disastrous to trade as it must be in many others. Not only will instruments and other goods sold from the exhibition to public institutions in the United States be allowed to be sold free of duty, but instruments and other goods sold to public institutions in the United States from this country are also admitted free of duty. (See extract from Tariff Law below.)

As in the case of instruments of the highest class the requirements of public institutions are necessarily large in comparison with the demands of the public, more especially, I believe, in a country like the United States, where institutions of this kind are so liberally supported, and as this disparity is probably greater in the case of goods in this class than in any other, I hope you will enable me through your columns to urge our makers to reconsider any refusal to assist the Royal Commission in the formation of an adequate collective exhibit that may have been made on these grounds, and to avail themselves of such advantages as we are able to offer.

Section 638 of the Tariff Law of 1897 provides as follows:—

"638. Philosophical and scientific apparatus, utensils, instruments and preparations, including bottles and boxes containing the same, specially imported in good faith for the use and by order of any society or institution incorporated or established, solely for religious, philosophical, educational, scientific or literary purposes, or for the encouragement of the fine arts, or for the use or by order of any college, academy, school, or seminary of learning in the United States, or any State or public library, and not for sale, subject to such regulations as the Secretary of the Treasury shall prescribe."

It should be noted, however, that surgical instruments are not classified as philosophical or scientific.

C. V. BOYS.

The Eucalypts.

YOUR reviewer of two recent works on Eucalypts (April 2, p. 524) seems to require correction on certain points. *Eucalyptus globulus* cannot be considered as the first in economic importance amongst the Eucalypts. In almost every shade of extra-tropical climate there is to be found a Eucalypt which will grow as well, or better, than *E. globulus*, and yield a far superior timber. It is generally held now that Eucalypt planting has suffered by the indiscriminate praise showered on *E. globulus* by the early Eucalypt enthusiasts.

Your reviewer says, further, that Eucalypt plantations now exist in Italy, France, Algeria, California, and other countries. He does not appear to be aware that there is probably more Eucalypt plantation in South Africa than in any other country, and that at the present rate of progress there will, in a few years, be more Eucalypt plantations in South Africa than in all the other countries combined. There is no group of trees in the warm temperate regions of the world that can produce hardwoods of good quality so rapidly and so cheaply as Eucalypts, and their cultivation bids fair to become the central factor in the forestry of these regions. At this moment train-loads of Eucalypt timber are pouring into South Africa, Eucalypt sleepers displacing metal and creosoted-pine sleepers. South Africa will soon be paying out something like a *quarter of a million pounds yearly* for Eucalypt timber imported for railway sleepers and mining timber (little or none of this, by the way, *E. globulus*), so that any delay in the prosecution of Eucalypt planting in South Africa would be a most expensive proceeding. It is noteworthy that, so long as the Eucalypt is properly fitted to its climate, it seems to grow better in South Africa than in Australia, the explanation being probably that all the Eucalypts in South Africa have been raised from seed, and are thus growing in South Africa free from their Australian pests, both fungoid and insect. With the view of preserving this happy immunity from disease, the importation of Eucalypt plants into Cape Colony is placed under stringent restrictions.

The meritorious work of Messrs. R. T. Baker and H. G. Smith, if carried to a conclusion, should be the classic for many years on Eucalyptus oil. Your reviewer is mistaken in saying that practically all the Eucalypt species indigenous to Australia are included in their work. Practically, all the Eucalypts are indigenous to Australia, but they are not included in Messrs. Baker and Smith's work, which em-