

in building teeth and in uniting fractures, how iodine is used by the thyroid gland, exactly what happens when one or more of the glands of internal secretion starts malfunctioning, how the process of wound healing is carried out."

Such questions and hundreds of others whose answers now are among the secrets of life wait upon radio-active isotopes for clarification, he pointed out. Elements such as calcium, phosphorus, sulphur, iron and a score of others can be "tagged" with small amounts of the isotopes and followed through the body through their emission of beta and gamma radiation. The latter is the same as X-radiation.

The nucleus of an atom is made up of protons, electrons and neutrons. Revolving around the nucleus somewhat as planets revolve around the sun, are electrons. There are precisely the same number of electrons revolving around the nucleus as there are protons in the nucleus which are not balanced by nuclear electrons. The number of outer electrons is the atomic number.

But there may be an extra neutron in the nucleus. It weighs precisely as much as a proton. It is electrically neutral. Hence it does not leave room for an extra outer electron. The atomic number remains the same. Element 92, which is uranium, remains uranium so long as there are 92 outer electrons. But with an extra neutron in the nucleus it weighs more. This heavier uranium is known as an isotope. Chemically it acts precisely the same as any other uranium.

For reasons not clearly understood various nuclear combinations are unable to stick together and break up with considerable violence. They then are radio-active, shooting out radiations which can be detected by means of various devices. Chief of these is the so-called Geiger counter. By means of it the presence of radio-active atoms anywhere in the body can be detected. For example, a person is given something containing radio-active copper, by mouth. The counter will enable a physician to follow the course of this copper through the entire process of assimilation by the body.

LETTERS TO THE EDITOR.

Whilst cordially inviting communications upon all subjects for these columns, we wish it to be distinctly understood that we do not in ANY WAY hold ourselves responsible for the opinions expressed by our correspondents.

Mount Lawley, West Australia.
July 22, 1946.

A Friend writes:—I was indeed very grieved to hear of Mrs. Bedford Fenwick's accident, but hope ere this she is well on her way to recovery. I wrote to her (Air-Mail) last week, so expect you forwarded the letter on to her. Also sent July 18, a parcel containing 1 lb. tea, 2 lbs. sugar, 1 lb. muscatel raisins, 12 oz. tin cheese, 8 oz. apricot jam and packet jelly. Hope she will enjoy them, especially the tea, as 2 ozs. per week is not enough—the same amount here allowed, but fortunately I have a very good friend who gives me her tea allowance. Our Club meetings here are the same, each takes a small donation. The 15 parcels were sent off together and I hope you will enjoy the contents. My nephew's wife types the addresses for Baird's and she did another lot this week. I was told they hoped to send another small parcel this week, probably be a 3 lb. one, containing soap, as nothing else can be sent with that article unless a 4 or 6 oz. tin of meat or jam.

Like the rest of the world, strikes are very prevalent in Australia, and the coal supplies are *not* allowed to accumulate, but last week we were fortunate in receiving $\frac{1}{2}$ ton of coke. None obtainable during the last three years. Coal, of course only for industry but we had a

large gum tree (Eucalyptus) felled in our back garden two weeks ago, and my brother-in-law been very busy chopping it up. Will be dry for next winter's fires.

We were sorry to see it coming down, but it was getting a menace and might have damaged the house in a storm.

Miss Church (our F.N. representative) sailed on the *Stirling Castle* nearly a fortnight ago and on the same ship General and Lady Dobbie travelled; they had a very warm reception in Western Australia—all their meetings over-crowded. Unfortunately it rained incessantly when they had hoped to see something of Perth's beauty spots.

I see your bread rationing is starting to-day. Do hope it will not be for long. How wonderfully blessed we are in this country. Poultry and fish not rationed, but very high prices. Our meat is sufficient, but of course the working man does not seem to get enough unless his wife is a good manager, then she can make up on unrationed dishes. Tinned fish is just beginning to come on the market, think we have had two tins of sardines in four years. All was sent to the troops—they tell you that it was "dumped," like they got too much rice, but none obtainable in the shops. Now, of course, it is all going to the Far East (now grown in Australia) and glad it is available for them—we have so much of other foods to make up any shortages.

Weather seems to be clearing a little to-night—a little sunshine is needed for the gardens. Kindest regards.

Yours sincerely, M.A.

[The generosity of our Australian friends to their colleagues in England, during these lean times, has been perfectly amazing.—Ed.]

BRITISH NURSES SOCIETY,
41, HAILEBURY AVENUE,
BUSH HILL PARK, ENFIELD,
July 10th, 1946.

To the Editor of THE BRITISH JOURNAL OF NURSING.

DEAR MADAM,—At a recent meeting of the Executive of the above society, it was proposed that a letter be sent, thanking you for the article, published in the June edition of THE BRITISH JOURNAL OF NURSING, under the heading: "Wake up Registered Nurses."

The sentiments so admirably expressed, are, we know, echoed by a great many nurses. The granting of professional status to the untrained assistant nurse, not only jeopardises the status of the State Registered Nurse, but also gives a very false impression to the general public, i.e., the patient, who might well wonder, who is the trained nurse.—YOURS FAITHFULLY,

E. SIMMANCE, *Hon. Secretary.*

WHAT TO READ.

MEMOIRS AND BIOGRAPHY.

- "Buxton the Liberator." R. H. Mottram.
- "Spring Sowing." Michael Home.

FICTION.

- "The Flying Horse." Dorothy Hewlett.
- "Lord Hornblower." C. S. Forester.
- "A Flask for the Journey." F. L. Green.
- "Three Sons." Ursula Bloom.
- "The House on Shepherd's Hill." Denise Harding.
- "The Reluctant Widow." Georgette Heyer.
- "World Ever With Us." Ronald Plant.
- "No Promise in Summer." Elizabeth Evelyn.
- "To Save My Life." Theresa Charles.
- "The Other Side of the Moon." J. M. Scott.

MISCELLANEOUS.

- "The Art of the Potter." William Bowyer Honey.

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