passed. Among his contemporaries he was perhaps the only one who might be compared with Osler, in his range, his enthusiasms, and his power of making friends. A.G.N.

Proceedings of the University of Otago Medical School

An interesting little volume captioned as above (No. 9, 1932), has reached us from its Editor, Prof. D. W. Carmalt Jones, who is also a special correspondent of our Journal. The volume consists in the main of scientific articles reprinted from the New Zealand Medical Journal, the British Medical Journal, and the Journal of Pathology and Bacteriology, which first appeared during the years 1929 to 1932. Certain of the articles are illustrated. The topics considered are:- Hay Fever in New Zealand; Cholecystitis; Low Visceral Tone; the Use of Vitamin B in Cases of Œdema; Some Points in the Treatment of Pneumonia; An unusual Manifestation following Intrathecal Administration of Serum; Radioactivity; Complications of Pregnancy following the Radium Treatment of Menorrhagia; Generalized Osteitis Fibrosa with Parathyroid Hyperplasia; Anterior Sacral Meningocele; and Impacted Cyst in the

Third Ventricle of the Brain. Then follow four letters by Prof. Carmalt Jones which appeared at various times in the *Canadian Medical Association Journal*, dealing with New Zealand and its Medical Enactments, Medical Education in New Zealand, Public Health in New Zealand, and Medical Research in New Zealand. A number of valuable papers by members of the University staff are thus brought together in a convenient fashion for reference, as well as much information on the subject of Medicine in our sister Dominion.

Professor Jones and his school have our congratulations on the completion of a useful bit of work. A.G.N.

Erratum

We regret that an error appeared in the paper of Drs. Neil H. Blakie and J. C. Hossack, entitled "The Treatment of Migraine with Emmenin", which appeared in the July issue. On page 146, column 2, line 35, the sentence beginning "We do not know, etc., is incomplete. It should read — "We do not know what the minimum dose may be nor what the number of such doses may be, nor at what time in the menstrual cycle such doses should be given in order to ensure freedom from attacks."

Retrospect

HUMAN TUMOURS AND THEIR INHERITANCE

By MADGE THURLOW MACKLIN

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Cancer, using the term to include all malignant growths, claimed in 1928 one of every thirteen persons of all ages who died in Canada; it was the cause of death in one of every seven adults who died after they were 40 years old, ranking second only to diseases of the heart as a cause of death in this group. It is stated that every year sees an increase in the number of its victims, not only in Canada but throughout the world. This statement is subject to some modifications. which it would be out of place to discuss in this paper. Nor do we know what causes cancer. When we review the literature there emerge several main trends of thought as to its etiology. There are even yet those who consider it to be due to a parasite, but they are in the minority. There are those who adhere to the idea that trauma, either of a physical or chemical nature, initiates the growth. These persons, it is safe to say, are in the majority. There are, finally, those who hold that it is an expression of tissue capacity for overgrowth, and that this expression is an inherited one, a capacity that is handed down from parent to child in the germ plasm.

There is so little proof that cancer is due to a parasite,* that we will consider the evidence only for the latter two theories, namely, that cancer is due to chronic trauma, and that it is due to heredity. We find the idea that injury is a basic factor deeply ingrained in the profession as well as in the laity. Indeed, one physician said that "chronic irritation" made a good talking point and was as valuable as anything else as the cause, since we do not know the underlying basis of cancer anyway. Now it is quite right and justifiable, as we shall see from the evidence shortly to be presented, to urge persons to avoid chronic irritation, to have their jagged teeth attended to, to have sores that will not heal looked after, to have a source of chronic irritation removed if possible. On the other hand, such an insistence upon chronic irritation as the etiological factor gives a false sense of security to those who have

^{*}This statement, of course, refers only to those theories that cancer is dependent upon some hitherto undiscovered endocellular parasite. Loeb¹ states "Recent investigations do not support the view that micro-organisms are of any significance in the etiology of cancer." Cases of cancer of the human bladder due to Bilharzia, of cancer of the liver in cows or rabbits or rats due to infestation with some parasite, are to be regarded as coming under the theory of chronic irritation, not the parasitic theory.