In this case the effect was to produce 'stickiness' after a few hours, and at periods of 24-48 hours after treatment, anaphase bridges with and without accompanying fragments: no fragmentation was observed except in association with bridges.

The above suggestions as to the mechanism of action of the nitrogen mustards are put forward purely as a working hypothesis, and as possibly the simplest of a number of alternative explanations consistent with the chemical and cytological data. If, however, it is indeed true that chemical substances of these kinds produce some of their characteristic effects by reacting directly with the uncoiled resting chromosomes in the manner described, a new approach will become available to the related problems of growth inhibition, induced mutation and carcinogenesis. The connexion between these phenomena is now receiving further emphasis from the fact that tumour induction by the nitrogen mustards has recently been achieved both in the aliphatic series20, and in the aromatic series21. Further reports upon this last subject will be published elsewhere.

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OBITUARIES

10/2

Sir Thomas Hill Easterfield, K.B.E.

SIR THOMAS HILL EASTERFIELD died at Nelson. New Zealand, on Merch lagred eighty-three, and on March 18 his asless were scattered in a garden nook at the Carthron Institute. He was born at Doncaster, Yorkshire, in 1866, received his primary duration at the Doncaster Grammar School, and later entered the Yorkshire College (now University of Leeds), where he won a scholarship in geology and gained his first insight into chemical research, which inspired his life-work. From Leeds he proceeded to Cambridge as a foundation scholar of Clare College and gained first-class honours in the Natural Sciences Tripos; this was followed by studies at the Zurich Polytechnic School and at Würzburg. In 1888 he returned to Cambridge as a junior demonstrator in the University Chemical Laboratory, becoming a University extension lecturer in 1891, and in 1894 lecturer on pharmaceutical chemistry and chemistry of sanitary science; he was also a master at the Perse School.

In 1899 Easterfield was appointed one of the four foundation professors of the Victoria University College, Wellington, New Zealand. He held the dual chair of chemistry and physics until 1909, continuing as professor of chemistry until 1920, when he became the first director of the Cawthron Institute, Nelson, from which position he retired in 1933 after a full and active professional career. In 1938 he was honoured by knighthood in recognition of his outstanding services.

Apart from his scholastic attainments, Easterfield was a Cambridge 'miler' and took an active part in athletics. Further, as a churchman he was imbued with, and practised, the principles of Christianity which moulded his outlook and guided his footsteps. Such was this distinguished citizen who carried with him a strong sense of justice, a keenly developed flair for research, and the experienced technique of an able teacher, all of which traits left their mark on the many who had the good fortune to come under his influence.

Though Sir Thomas Easterfield will ever be remembered as an outstanding chemist who created from virtually nothing-much of the equipment was of his own making—the Department of Chemistry at Victoria College, Wellington, successfully fathering such an undertaking through all vicissitudes, it must be stressed that his scientific horizon was by no means limited by chemistry; he possessed a wide understanding of both physical and biological sciences. He held the unshakable belief that fundamental research is the prime factor in scientific advancement; he held an equally strong belief in the necessity for the application of science. It was this broad and tolerant outlook which so fitted him to direct, from their infancy, those physical and biological researches, both fundamental and technical. which, through his foresight and ability, caused the Cawthron Institute to develop so rapidly to a high standing among research organisations.

DAVID MILLER

M. G. M. Mathews

GREGORY MCALISTER MATHEWS, author of "Birds of Augural", died at Winchester after a short illness of Math 27. He was the son of R. H. Mathews, a war known authority on Australian aborigines, and