

When the directions of \mathbf{i} , \mathbf{j} , \mathbf{k} correspond with those of the axes x , y , z , then

$$\begin{aligned} \mathbf{A}_x &= A_x \mathbf{i} & \mathbf{A}_y &= A_y \mathbf{j} & \mathbf{A}_z &= A_z \mathbf{k} \\ \mathbf{A} &= \mathbf{A}_x + \mathbf{A}_y + \mathbf{A}_z = A_x \mathbf{i} + A_y \mathbf{j} + A_z \mathbf{k}. \end{aligned}$$

Supplement. In certain cases the scalar components are indicated by other suitable Latin or Greek letters

$$\mathbf{r} = x\mathbf{i} + y\mathbf{j} + z\mathbf{k}, \quad \bar{\omega} = p\mathbf{i} + q\mathbf{j} + r\mathbf{k}.$$

G. WINDRED.

MISS L. M. SWAIN

It is with very great regret that we record the death of Miss Lorna M. Swain, Fellow and Lecturer of Newnham College, Cambridge, and a member of the Mathematical Association since 1920.

Her life as a University lecturer, member of a Faculty Board and Director of Mathematical Studies at Newnham was a busy one, yet she readily added to her work an active share in that of the Mathematical Association. She was elected to the Girls' Schools Committee in 1923 and was one of the original members of the General Teaching Committee constituted in 1923, she was a member of the sub-committee on Mechanics which, in 1930, produced the Association's report on the teaching of mechanics; she also shared in the production of the report on mathematics in girls' schools. She became a member of the Council in 1927, retiring by rotation in 1931, and being re-elected in 1935. She was still serving on these three bodies at the time of her death, and also as secretary of the committee which draws up the programme for the annual meeting of the Association.

Whatever she undertook was carried out quietly and effectively. In discussion, though never anxious to put her own views forward, she was always ready to give to the committee the results of her knowledge and experience and her clear thinking and unbiassed judgment, combined with her impersonal outlook, were of great value. Mathematical teaching in girls' schools owes much not only to the scholarly and thorough training she gave her students but also to her influence on their after careers, for she took great trouble to keep in touch with them and readily gave them help and advice when asked.

Modest about her own achievements and appreciative of those of others, generous in thought and action, naturally reserved and dignified, yet friendly and understanding, she will be much missed by all who knew her, old and young. To her mother we would like to offer our deep sympathy and to express the gratitude of the Association for the service her daughter so ably gave it.

M. J. G.