We may use this fact, together with the rapid initial convergence of the iteration for $\hat{\omega}$, to obtain quickly a reasonable approximation to $\hat{\omega}$.

Table 2 gives the number of iterations m required to obtain a value ω_m which is sufficiently close to $\hat{\omega}$ so as to minimize $N1$ when solving the model problem to the accuracy specified above. Using the values of ω_m, λ_m so obtained, N_m gives the number of iterations of the Chebyshev accelerated SSOR method required to solve the model problem to the same accuracy. It is seen that the values λ_m are lower than the true values given in Table 1, and this will reduce the convergence rate of the Chebyshev accelerated method.

In conclusion, we note that in our experience the method of optimization described in this paper makes it possible to take advantage of the superior convergence rate of SSOR for certain problems, in cases where no prior estimate of the optimum parameter is available.

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Fig. 2

Table 2

Approximate parameters for model problem

h^{-1}	m	ω_m	λ_m	N_m
10	2	1·566	0·557	9
20	3	1·740	0·781	12
40	8	1·876	0·889	16

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Book Review

Russian Supplement to Elsevier's Dictionary of Automation, Computers, Control and Measuring. By W. E. CLASON, 1962; 90 pages. (Amsterdam and London: *Elsevier Publishing Company*, 60s.)

This supplement is valueless without the main volume, which is in six languages and costs £7 (and was reviewed in this *Journal*, Vol. 4, No. 3). In use, one looks for the Russian term in the first half of the supplement, and obtains the serial number, with which one enters the principal section of the main volume, to find the corresponding term in English, Dutch, French, German, Italian and Spanish, and also a rudimentary definition in English. In reverse, one seeks an English term in the principal section of the main volume (which is in English alphabetical order as well as in order of serial numbers), obtains the serial number, and enters the second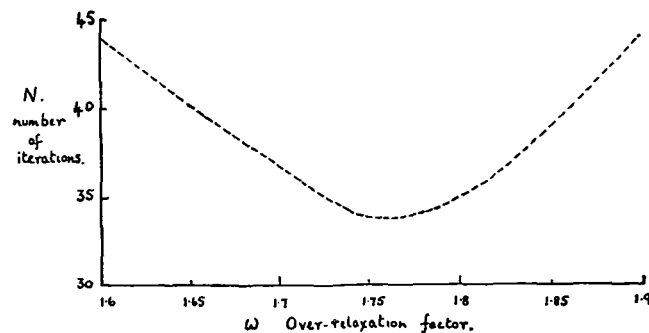 half of the supplement to find the corresponding Russian term. This supplement system is a good one, as it results in a monolingual volume—the supplement under notice is set entirely in Cyrillic and decimal digits, apart from the title pages. In fact, it would have been better if the main volume had been produced in six parts on the same system, as this would presumably have made it cheaper for the person who is interested in two languages only.

Like the main volume, the supplement is to some extent oversimplified, since dogmatic equivalent terms are quoted, with very few synonyms and homonyms. On the whole, however, the equivalent terms are very accurate, and the type-setting and production are also of a high standard. The Russian supplement shares with the main volume the distinction of having the largest number of terms (1,400) in automatic data processing of any available dictionary.

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