OF TECHNICAL LITERATURE.

By W. M. M., IN Electrical Review.

Not with blinded eyesight poring over miserable —Tennyson

On occasions, mostly after dinner, the Nestors of on occasions, mostly after diffier, the Nestors of our profession are wont to give counsel and advice to the rising youth thereof, and sometimes to tell stories of their early struggles. Then we hear how they weltered in the sea of ignorance, and hewed their way with difficulty through pathless forests, with no guide, or, at best, few, and those of doubtful knowledge of the country.

The almost universal dulness of technical literature is a phenomenon which calls for some expan-ation. It is certainly not due to the subject matter; science and engineering are not only of absorbing interest in themselves, but also touch modern life at so many points that few people are lacking in curiosity respecting them. It may be lacking in curiosity respecting them. It may be in part owing to the technicalities of the language in which it is written, but that ought not to be a drawback to engineers. The cheap retort that the dulness is in the reader cannot pass muster for a moment. No doubt if a man tries to read what he does not written the interview he is not written to the contract of he does not understand he is not much interested in it; it were an abuse of terms to say that Homer is dull to the man who knows no Greek—it is merely unintelligible to him. But anyone could name half a dozen technical works which he can understand words. The real explanation is, in all probability, that, even when the authors are engineers, that, even when the authors are engineers, experts in the subject matter, they are amateur writers. They know what they want to say but they don't know how to say it They lack skill of expression and arrangement, and especially the knowledge of what to omit Often material is collected from various sources, and thrown at the reader without any attempt at harmonising or assimilating it. Occasionally, of course, a man with a natural talent for writing produces a technical book, and then, provided he is not too hurried and has no pressure put on him to spoil it, a really nical book, and then, provided he is not too hurried and has no pressure put on him to spoil it, a really readable book is the result; but in general the books are dull, not because the authors are either dull or ignorant, but because they have not learned to write. Fortunately they are rapidly teaching their readers the most important lesson in the art of reading, how to get at the pith of the matter while rejecting the rind; and if well indexed, so that the search be not too tedious, they do more good than harm good than harm

Another, unhappily far more numerous class is that of the professed writers of text-books. These have learned to write, only by taking thought could they achieve the execrable style which jars could they achieve the execrable style which jars on every nerve. The usual formula for the composition of such books is —An introduction exhibiting appalling confusion in elementary mechanical ideas; water analogy in excess, enough to drive the student to drink—anything but water; substitutes for Ampere's rule—right hand rules, left-hand rules, corkscrew rules and tendrils of the hop and vine—till the reader hardly knows his right and vine—till the reader hardly knows his right hand from his left or can draw the cork of the next bottle; a maodicum of very elementary mathematics, mostly misapplied, the preface usually boasts that nothing beyond simple equations will be demanded; the rest nearly all descriptions of dynamos and motors, or of instruments and switches, or padding about engines and turbines, boilers and central stations, switchboards photometres, and lamps testing joint boxes joint making and so forth Hardly ever is the information to be relied on implicity, hardly ever is it full enough on any one point to be of any use to anyone generally it con-cerns things much better learned otherwise than cerns things much better learned otherwise than from books, but its total mass is enoimous and stupefying. The authors seem scarce to know anything thoroughly but they know enough to make them rather exceptionally good wiremen (given the manual skill) or perhaps even foremen in works—but as writers!—"Break their pens, O Lord in their hands."

And it is on this hogsword, appeletable and any anything the perhaps with the pens, or the hogsword, appeletable and any anything the pens, or the hogswords appeletable and any anything the pens, or the hogswords appeletable and any anything the pens of the pen

And it is on this hogswash, unpalatable and innutritious, that our rising engineers are to be fed, it is for this that they are asked to renounce art, science and poetry, polite literature and romance, everything that gives flavour and beauty to life

There is a lower deep still—books written by the ignorant for the ignorant which, notwithstanding, command a large sale. In writing for the leaders of the Fletrical Review it is hardly necessary to do more than refer to their existence. to do more than refer to their existence they do but little harm, and are an indication of an unsatisfied desire for knowledge in itself prais worthy If a workman or shopman prefers to spend his leasure in reading "All about Wireless Telegraphy," "The story of Radium" or "Elec-

*These titles, so far as I am aware, are imaginary.

tricity in the Service of Man,"; it will probably be better for his health and pocket, and not much worse for his nitellect than if he were to spend it discussing labour questions, or the odds on the next horse race in his favourite bar.

The technical literature crystallized in liberary

form, however, is only a part of the technical literature of the world. With an army of clever men engaged in research, in engineering practice, and in design throughout the civilised world, it is only to be expected that the mass of such current literature should be great. Anyone who invents a new switch, a new meter, a new clamp, wants to talk about it, and that not merely to his chums which is praiseworthy, but to the whole world of engineers. No wonder that the grains of wheat are apt to be lost in the heaps of straw and stubble. It is as though every doctor were to ask that every case he treats were to be discussed in the Lancet; imagine the result if even a hundredth part of them could

get a hearing for a tithe of their communications.

Technical literature being what it is, the question remains what to do with it, since we cannot do without it. A few hints to young readers may be

If you find a technical book which it gives you pleasure to read, read it and re-read it, and recom-mend it to your friends You have found a pearl

of great price.

If you find a book dull, don't attempt to read it. It is nearly as wicked to read a dull book as it is to write one and much more unprofitable. No doubt you might learn something from it, but the moral and intellectual damage on the other side of the account is incalculable. Consult its index and table of contents to see if it has anything you are likely to want, and, if so, put it aside for reference, provided it is well indexed. Otherwise let the second-hand bookseller have it well within six

But do not mistake difficulty for dulness. Dulness is an irritant poison, difficulty a stimulant and a challenge Put it aside for a while and strengthen your attack; next time, probably, the difficulty will vanish

Read an old book (written before the tradition that an engineer should be a cultured gentleman was obsolete) rather than a new one; if you have the luck to find such a thing A very casual acquaintance with current journalism will save you from acquiring from it other obsolete ideas. Also read a big book rather than a little one on the same subject. It saves time in the end and worry But if the bigness be that of a windbag, throw the thing away

original authorities whenever practicable rather than to compilations abstracts and text-books; you will have to go there in the end if you want really to know, and it saves time to begin with them

Cultivate the habit of tearing the heart out of books on some special subject. Take up one for practice, say, transformer leakage, and see what you can find out about it on your shelves. That is one way of relieving the tedium of technical liter-

Read critically, and never take anything for granted Be especially cautious when a statement begins with "It is evident," or "It is easy to see that" These expressions are danger signals, indicating that the author cannot prove the statement or has taken it second hand Prove it vourself or distribute it. Sometimes you will find you can disprove it

Glance at the papers read before the Institution, and if they attract you read them—If not you can safely put them by till they appear in the Journal, by which time you will know whether they are worth further notice Presidential addresses can always be passed over, save in the rare cases where they set everybody talking Then look to see what the fuss is about

Take and read some electrical journal but don't think of reading it from cover to cover Read what takes your fancy. Technical journalism, in one respect is the ideal technical literature in that it lets you know what is going on and leaves you to pick and choose.

Lastly, read what you must and, what you likethe two will be nearly synonymous if you really love your profession—and let the rest go

To make a top or reamer cut larger than itself, put a piece of waste in one flute, enough to crowd it over and cut out on one side only. In large sizes (1 inch or over) put a strip of tin on one side and let it follow the tap through. You will be suppressed at the treat surprised at the result.

†There are two books with this title, the author of each will kindly suppose I refer to the other matter of fact, I have not read, and have no desire to read either.

Applications & for Patents.

THE following list of applications for Patents, filed in New Zealand during the month ending 15th March, has been specially prepared for Progress.

22432-P. Bevenot, Paris, France, and E. de Neveu, Ashieres, France Extracting solid particle from fluids.

J. Hubbard, Wellington: Method of

22435—E. J. Hubbard, Wellington: Method of advertising.
22434 G. Reisler, Shotover River: Propeller.
22435—J. Stewart, Gore: Draught attachment for reaper-and-binder.
22436—G. Hutchinson Wellington: Seed-sower.
22437—J. S. Kirkpatrick, Pukekohe: Door or got footbreef.

gate fastener. 22438-A. H. Byron, and R. R. Richmond, Wel-

lington: Sewing machine. 22439—A. H. Byron, and R. R. Richmond, Wel-

lington: Vessel for heating purposes, 22440—J. H. J. Bowater, Wanganui: Castratingtool.

22441-F. de Lautour, Auckland: Marine propul-

22442—T. Morris Dunedin: Body-heat producer. 22443—E. Sprey, Dunedin: Loose sock for boots,

22444—L. T. Reichel, Wellington: Baled-goods indicator.

22445-V. T. J. Abraham, Wellington: Preparing extract of meat.

22446-A W. Carpenter, London, Eng.: Elastic

tyre.

22447—F. E. Gard, Paddington, N.S.W., A. R. Polley, Woollahra, N.S.W., and L. C. R. Jones, Sydney, N.S.W. Mail bag fastener.

22448—C. E. J. Wilkinson, Sydney, N.S.W.: Englesconfastener.

velope-fastener. 22449-D. E. Amesbury, Rongotea,: Spiral wire

plug for tobacco pipes.

22450—A. J. Bergin, Rozelle, N.S.W.: Motor cycle belt

22451—T Rolley, Brisbane Q.: Operation case-

ment-window, fanlights, &c.

22452—T. W. Macintosh, Penshurst, N.S.W.:
Sheet-metal lathing.

22453-R. M. Smith, Auckland, N.Z.: Field drainpipe

2245—J. R. Henderson, and W. G. Thomas, Fitzroy Vic Lifting-jack. 22455—Checkogram Limited, London, Eng. Check-

ing and registering issue of tickets. J. J Stockall

22456—Checkogram Limited, London, Eng.: Delvery and registering tickets checks, &c. 22457—H J. A. Pike, Auckland Purifying and

solidifying kauri-gum 22458—G M Nicholl, Hauiti Wedge for securing ave-handles

22459-T. Lane, Wanganui · Securing rubber heels

to boots or shoes.

22460—G E Bretherton, Makirikiri,: Plough.

22461—J. E. Holland, Kaiapol; Mowing machine.

22462—E F Woodley, and C. J. Brogden, Masterton Divisional blocks for straw baling press.

22463—T. J. Gilfedder, Athol Speed indicator. 22464—W. McCallum, Blenheim Automatically Automatically

placing windwills in and out of gear. 22465—W. G. Barger, Melbourne, Vic. Disc plough. 22466—A. Beaton, Barrington, N.S.W. Judging

machine for foot runners
22467—T Warner and J. Kannuluik, Melbourne,
Vic Drawing off fumes or gases from urinals, &c.
22468—H. R. Smith, Christchurch: Cutting the toes of boots or shoe sole

22469—J. H., D., and J. McEvoy, Sydney, N.S.W.:
Boots for diggers &c.

22470—Checkogram Limited, London, Eng.: Count

ing and registering device for turnstile.

22471—Societa di Esportazione Polenghi-Lombardo,
Codogno, Italy: Treating skimmed milk and Codogno, Italy . milk serum

22472—A. W. Stone, Fitzroy, Vic.: Hide or skin measuring machine

22473—A Gillies, Heidelberg, Vic.: Teat cup. 22474—W G. Crosthwaite, Leeds, Eng.: Fire bar for furnace.

22475—W. H. Mence and W. R. Stewart, Latrobe, Tas.: Corrogated from ridge capping. 22476—G. E. Bunning, Dalween, Q.: Fence dropper

and wire retainer.

22477—R C. Gardiner Johnsonville: Incandescent petrol gas burner
22478—J W Wood and C. J. Ward, Christchurch,

Shifting tramway rail points into position from moving car. 22479-A. J. Davey, Westminster, Eng.: Military

equipment. 2480—La Societé Anonyme Westinghouse, Paris:

let or surface condenser.