occasionally illustrated by diagrams of the apparatus employed.

What benefit the student will be able to derive from the technical chapters can only be decided by experience. The value of these is undoubtedly enhanced by the supplementary album containing some 560 excellent diagrams illustrating technical apparatus and actual manufacturing processes. Amongst other processes illustrated are the manufacture of liquid ammonia, liquid carbonic acid, chlorine, ether, aniline, hydrochloric, nitric, sulphuric, tartaric, citric, and carbolic acids. A careful study of such diagrams cannot but be of great service to all intending works chemists.

*The Personality of the Physician.* By Dr. Alfred T. Schofield. Pp. x+317. (London: J. and A. Churchill, 1904.) Price 5*s.* net.

As with all the writings of Dr. Schofield, this present work shows indubitable signs of wide reading and of careful thought.

The underlying gist of the matter is that the most potent factor in a physician's success is the personal equation. Of course, by the word "success" Dr. Schofield does not mean what is sometimes profanely styled "scooping in the shekels"! Nor does he fall into the very common error of confusing *personality* with *prestige*. The latter may, of course, be shared with the physician, who aspires to occupy the most lofty possible pinnacle of moral excellence, by the lowest and most unprincipled charlatan.

Happily, the ethical standard, recognised by the medical profession in this country, is of the highest conceivable type. Nevertheless, any publication that tends to raise, rather than to level down, that ideal is very rightly welcomed alike by the profession, by the Press, and by the people at large.

Some medical men are more comforting than others, and it is quite certain that pessimism more surely empties the consultant's waiting-room than any other quality. If the reviewer, who yields to no man in his admiration of the noblest of all professions, might be for once pardoned for a little private grumble at some of the physicians with whom he has come in contact, it is because of the grudging manner in which certain doctors, otherwise worthy and excellent men, deal out with sparing hand a remedy—Tinctura Spei—which costs them nothing, and yet is probably the most valuable drug ever dispensed!

*Rustless Coatings: Corrosion and Electrolysis of Iron and Steel.* By M. P. Wood. Pp. x+432. (New York: John Wiley and Sons; London: Chapman and Hall, Ltd., 1904.) Price 17*s.* net.

MR. M. P. WOOD may be a good "practical" man, but he has neither literary ability nor a knowledge of science sufficient to enable him to do justice to a subject which demands much more than rule-of-thumb practice to deal with it adequately. His book is a strange medley of so-called scientific statements strung together without any real acquaintance with their meaning. Its appearance of scientific erudition may serve to deceive the unwary, and we quite agree with Mr. Wood that there is much in paint and in things connected with paint that *is* calculated to deceive the unwary. But then something depends upon the guide. Mr. Wood's book is very prettily got up, and some of the illustrations are in the highest style of process-art. But like much of the subject-matter, many of them are wholly irrelevant. Mr. Wood has evidently had the ambition to make a book on a subject with which as a practical man he has been more or less intimately connected, but in this matter his ambition has overleaped itself.

*Ankauf, Einrichtung und Pflege des Motorzweirades.* By Wolfgang Vogel. Pp. xiii+144. (Berlin: Phönix-Verlag, 1904.) Price 2.65 marks.

ANYONE who possesses a motor bicycle or tricycle and can read the German language will find in these pages much valuable information in the form of practical suggestions as to the buying, working, and maintenance of these useful means of locomotion. The author deals fully with every part of the machine, and illustrates the text with numerous drawings which should very much assist the novice in understanding the functions of the various parts of the machine. The great improvement in design of motors, and the growing popularity of this form of transport, will no doubt call for many small treatises on the subject, of which the present one is an excellent example.

## LETTERS TO THE EDITOR.

*The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of* NATURE *No notice is taken of anonymous communications.*]

### Origin of Radium.

APROPOS of Mr. Strutt's letter in NATURE of July 7, it may be recalled that the Curies found that the artificially prepared chalcolite (the uranium copper phosphate) contained no radium, whereas the natural substance did.

It appears to me that if this fact is considered along with Mr. Soddy's result as to the failure of uranium nitrate to generate radium, the *prima facie* interpretation would be that the combined copper atom was in some way concerned. Of course the alternative view is still left that it takes a longer time than elapsed in Mr. Soddy's observations for radium to emerge from a succession of changes taking place in the uranium atom, and that this atom is the sole parent. However, in the present state of our knowledge it seems worth investigating if it may not turn out that radium results from the convection of ions from atoms of higher to atoms of lower atomic weight, producing in radium an unstable or overcharged atom.

On these grounds I have recently induced my friend Mr. Emil Werner to prepare about half a kilo. of the uranium mica or chalcolite with the view of testing at intervals its yield of radium emanation, if any is, indeed, generated. Along with this will be observed the pure uranium nitrate as well as an impure uranium nitrate recrystallised with small quantities of some of the heavy metals. My experiments are on rather a small scale. It is desirable, I think, that they should be repeated by some one commanding larger resources.

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### Electric Wave Recorder for Strutt's Radium Electroscope.

THE periodical discharges of a Strutt's radium electroscope can be arranged to ring a bell or print a record of every contact of the leaves; each discharge from the outside terminal, when the leaf strikes, is sufficient to act on a coherer, if any part of the coherer circuit is connected by wire, so that the discharge terminal of the vacuum tube takes the place of the aërial, as used in wireless telegraphy; the experiment never fails, every discharge producing a ring on the bell or a dot on the Morse tape as desired. For the coherer I use two pieces of No. 16 German silver wire, with nickel filings in the gap, at ordinary atmospheric pressure.

It is sometimes possible to get the coherer to respond by induction without metallic contact with the terminal, but this is rather beyond the sensibility of the apparatus employed.

I am greatly indebted to Dr. W. H. Martindale for the loan of his Strutt's radium electroscope for use in these