

Cash Receipts Basis.

"T. D. R." started practice in 1924, and his returns have hitherto been made (and accepted) on the basis of cash receipts. The inspector of taxes now objects to that basis, and for the current year has added £50 to the cash profit figures as his estimate of the increase in the amount of fees outstanding.

*** There is no legal justification for the adoption of the cash basis; its acceptance by the Inland Revenue is the result of a recognition of the fact that the value of a medical practitioner's debts is difficult to estimate, and also of the consideration that in a normal case the amount of the cash receipts over a period of years will approximate closely to the value of the bookings over the same period. But the latter consideration does not apply if the practice is growing; in that event the amount of the cash receipts lags behind the bookings of the same years, and a return based on cash receipts therefore is less than the true liability. If that is the case with "W. T. R.'s" practice, his only remedy is to compute the value of the book debts outstanding at the beginning and end of the year as best he can; if the income is not expanding, he might point out to the inspector that there seems to be no justification for his departure from a well-established practice of assessment in the case of professional profits.

Retirement of Partner: Succession.

B and C have been in partnership since June, 1929, on a three-fifths and two-fifths basis; prior to that A was also a partner in the firm, the basis of division being two-fifths, two-fifths, and one-fifth. A continues to draw cash representing two-fifths of the receipts from work done before June, 1929. How should B and C be assessed?

*** As from June, 1929, A ceased to be liable in respect of his drawings from the practice, those drawings representing the cash accumulations of earnings over periods for which he had accounted for his income tax liability. Conversely, as from that date B and C are entitled to the whole of the earnings of the practice, and must account for tax accordingly, and not merely on that portion of their earnings which reaches them in cash. Their liability can be computed in one of two ways—either on the basis of the value of the bookings or on the basis of the total cash received—but in neither case can A be charged on his cash receipts. B and C will be paying tax on income earned but not received, but that is in accordance with the income tax rules.

LETTERS, NOTES, ETC.

PATENTING OF MEDICAL INVENTIONS.

Mr. A. HOME-MORTON, general manager of the Hoffmann-La Roche Chemical Works Ltd., writes: In his lecture on "Fine chemicals," reported in the *British Medical Journal* (May 24th, p. 957), Mr. Frank Lee Pyman, F.R.S., referred to "the brilliant work of Harington and Barger in determining the constitution and the synthesis of thyroxine," and the monopoly which a Swiss firm had acquired by securing British patent No. 318582 for an improvement on the novel, but unpatented, method of synthesizing thyroxine adopted by Harington and Barger. I am authorized to make the following statement on behalf of Messrs. F. Hoffmann-La Roche and Co., A.G., of the "Roche" Research Laboratories, Basle, Switzerland, the holders of the patent in question. They write: "Apart from the question of the actual value of the process covered by our patent, it is quite certain that, compared with Harington's fundamental invention, it is of minor importance. By taking out this patent we aspired to no monopoly. We merely wished to manifest to the outer world that our laboratories had been successful in improving the method. In order, however, to avoid any misconception of our intentions, and in view of Pyman's arguments, we have decided to relinquish our claim to the patent, and thus to allow our process to become general property." I should be grateful if you would give this friendly and open-handed gesture the publicity it deserves.

BRITISH-MADE INSTRUMENTS.

SIR JOHN CORCORAN, director of the National Union of Manufacturers, writes: In your issue of May 3rd you were good enough to publish an appeal from this Union to the committees of our large voluntary hospitals to set an example to similar bodies by equipping the institutions under their control with instruments of British manufacture. It will not be denied that by following this course at a time when we have over 1,700,000 unemployed, and when so many of our factories, including those engaged in the production of surgical instruments, are sorely in need of work, they will be acting in accordance with the wishes of the vast majority of their subscribers. I am moved to repeat my appeal because I have recently seen a letter from a well-known hospital asking for prices of hospital equipment in which it was expressly stated that the articles need not necessarily be of British make, and by a statement in the public press that two of the experts from one of the best-known metropolitan hospitals had proceeded to the Continent to select x-ray apparatus. No one disputes that our hospitals must be administered in the interest of the patients, and that if instruments of a suitable

standard could not be purchased in this country they would have to be obtained elsewhere; but where—as in the case of x-ray apparatus—the reputation of British manufacturers is second to none, it is surely desirable that hospital experts should thoroughly explore the possibilities of obtaining what they want in this country before proceeding abroad on tours of selection.

DANISH TREATMENT OF ITCH.

THE following is an abstract of a long report by Mr. G. E. SHAW, B.Sc. (Evans's Biological Institute, Runcorn), on this subject: (1) The only reference to a black form of sulphur is in *Thorpe's Dictionary of Applied Chemistry*, vol. v, p. 296, 1916 edition. Thorpe says that black amorphous sulphur may be prepared by heating sulphur with soda. It is highly improbable that sulphur is the black substance obtained by Dr. Ross (February 15th, p. 320). (2) Dr. A. Cannon does not state whether the 50 per cent. KOH is weight/volume or weight/weight, and I have taken it as the latter. (3) He makes no allowance for evaporation losses, which are bound to occur during a day's heating, even though this heating be "gentle." He also is rather indefinite as to what temperature should be considered as gentle. (4) In the method whereby KSH is first formed and then converted to K₂S, Dr. Cannon does not state whether the sulphur is then dissolved to the same amount as when KOH is used directly. I have, however, read this interpretation into his statement. (5) In using Mr. Cable's technique it is noticed that sometimes a thick crust forms, leaving a deep orange-yellow solution below. This has happened in my experiments, and the crust is obviously very largely sulphur. (6) Marcussen of Copenhagen frequently uses double the quantity of 50 per cent. KOH, and always obtains a clear solution. (7) In the original formula the proportions of potassium and sulphur are 40 to 100 weight/weight. In the K₂S solution the ratio is about 40 to 16 weight/weight. In the K₂S solution plus the full amount of sulphur the ratio would be 40 to 116 weight/weight. Where the amount of KOH solution is doubled the amount of sulphur in unit weight of product is of course halved. In those cases where a crust has been removed the decrease of sulphur per unit of weight is indefinitely lowered. (8) Notwithstanding the points raised in 7, the weight of product incorporated in the ointment does not seem to be changed. (9) Using the technique recommended by Cannon and heating on the steam bath to a temperature approximately 90° C., I found it impossible to make the full amount of sulphur dissolve in the specified quantity of KOH. It was possible to dissolve half the amount of sulphur with comparative ease. No blackening was noted, but a transparent deep orange-yellow solution was obtained. This solution mixed with and dissolved readily in water, giving a clear pale yellow solution. The sulphur added much in excess of the 50 per cent. would not go into solution on a water-bath, even on a day's heating. On allowing evaporation to take place and increasing heat gradually to maintain fluidity, practically the full amount of sulphur could be got into solution as a dark reddish-yellow solution. This product, however, precipitated sulphur on dilution with water. Using double the amount of KOH with the same amount of water, a satisfactory deep orange solution could be obtained which mixed readily with water. This product set to a solid on cooling. (10) The probable explanations of the "blackening" noted by Dr. Ross are: (a) that one of his chemicals contains metallic impurity; (b) that what he has actually observed is the dark reddish-orange colour described above. (11) A further experiment has indicated that a satisfactory reddish-orange solution may be obtained by dissolving the sulphur in K₂S solution prepared according to Dr. Cannon's instructions. A temperature of approximately 90° C. is adequate, but still about 60 per cent. of the total amount of sulphur can be made to dissolve.

DEVELOPMENT OF PHOTOGRAPHS.

THE second of a series of booklets published by Burroughs Wellcome and Co. under the title of "Photography Simplified" has just been issued; this deals with the question of development by the most scientific and safe method—the time and temperature method—as well as the relationship between exposure and development. The after-treatment of negatives by intensification or reduction is also described, the illustrations showing the difference between correct development, over- and under-development, and the improvement in faulty negatives which can be effected by using "tabloid" reducers or intensifiers. Notes are included on developers in relation to particular classes of work. To any reader mentioning this journal the booklet will be sent post free by Messrs. Burroughs Wellcome and Co., Snow Hill Buildings, E.C.1.

THE PETROL ENGINE.

A THIRD and revised edition of *The Petrol Engine*, containing many new illustrations, has been published in the Temple Series of Manuals for Motorists, price 3s. 6d. As already indicated in these columns, this popular handbook presupposes little mechanical knowledge, and covers a wide field from the petrol-driven lawn mower to the latest type of aeroplane engine. The descriptions are concise, well arranged, and readable.

VACANCIES.

NOTIFICATIONS of offices vacant in universities, medical colleges, and of vacant resident and other appointments at hospitals, will be found at pages 40, 41, 44, 45, 46, 47, 48, 49, and 52 of our advertisement columns, and advertisements as to partnerships, assistantships, and locum tenencies at pages 50 and 51.

A short summary of vacant posts notified in the advertisement column appears in the *Supplement* at page 291.