THE USE OF PHENYLHYDRAZIN IN THE EXAMINATION OF URINE.

To the Editors of THE LANCET.

SIRS,—Dr. P. J. Cammidge in his recent paper¹ discourages the use of the water bath in using the phenylhydrazin test. This is an attitude not to be lightly assumed by one in the position occupied by Dr. Cammidge, for the water bath method has been so strongly insisted on by von Jaksch, Hirschl, and other authorities as a means of preventing the osazone compound of glycuronic acid from being precipitated in a crystalline form—a compound so likely to be mistaken for dextrosazone. According to Dr Cammidge this adventitious precipitation occurred in 4 per cent. of his cases when the water bath was used and only six times with the free flame. This experience is quite contrary to mine, for although I have not kept statistics on this point I find that I practically never meet with it since using the water bath, whereas when I used the free flame I used to meet with it occasionally. That the water bath method has advantages over the rapid method he admits when dealing with the microscopic examination of the crystals, for in referring to lactosazone he says: "In preparations made by the rapid method the individual crystals are not usually as distinct as those formed after prolonged heating in the water bath," and with regard to maltosazone he also says "preparations made by heating in the free flame are less characteristic." Both of these statements I can vouch for; indeed, the same is true of all the sugars. Surely the method whereby the best crystals are obtained is the one to adopt, for the identification of a sugar by means of the microscopic appearance of its osazone is practically relied on by clinicians. This, I need not add, does not apply to lævulosazone, for lævulose is the isomer of dextrose and their osazones are indistinguishable.

Dr. Cammidge also says that "in the water bath even an hour is not sufficient to obtain a satisfactory yield with maltose, lactose, and pentose, an hour and a half or two hours being required to demonstrate their presence satisfactorily, especially when the solution is weak." Here I quite disagree with him, for I find that half an hour in the water bath gives a good crop of crystals on cooling with aqueous solutions of these bodies of only 0.3 per cent. strength. Dr. Cammidge contradicts himself when dealing with the rate of osazone formation, for he says that "the osazones of maltose, lactose, and the pentoses only form after much more prolonged heating," whilst in the next sentence he says: "In my experience the rapid method of performing the phenylhydrazin test gives a reaction with all sugar." In dealing with the melting points Dr. Cammidge omits to give that of the glycuronic acid compound and the comparatively low melting point of 115° C. is one of its most distinctive features.

I am, Sirs, yours faithfully,

L. C. S. BROUGHTON.

Langley Green, Birmingham, July 11th, 1905.

MOTOR SIGNALLING.

To the Editors of THE LANCET.

SIRS,—Will you give your valuable help towards getting an extended mode of signalling between drivers of motors and riders and drivers of horses? At present, in the day-time, there is only one signal—the uplifted hand. At night, the most important and dangerous time to the medical profession, there is none. When riding or driving a nervous horse in the day-time one does not want to bring every motor-car to a dead stop. It is often easier to drive such a horse past a slowly moving car than past one which is stationary and which has its engine going. I suppose the horse, like some sanitarians, thinks a moving smell less objectionable than a fixed one. In the day-time when meeting a driver I know I extend my arm at right angles to the trunk if I want him to slow down. At night the best way I have found for attracting a driver's notice is by covering the right lamp with the hand, using it like a "flash light" at sea. When meeting a motor in the dark this could be made to signify: right lamp covered once, go slow; twice, stop. In the case of a car coming up behind, the red light at the back could be used in the same way. It should now be made compulsory for all gig lamps to show a good red light behind. By a very simple method the

driving lamp could be made to show a very coloured light "fore and aft" and could be easily worked by the driver. There is no reason why good feeling should not exist between all users of the King's highway. Motors mean to stay, so we must make the best of them. If we can create a healthy public opinion the road hog (the present curse) will die of inanition.

I am, Sirs, yours faithfully,

Thrapston, July 17th, 1905. T. W. BUCKLEY, M.D. Durh.

THE PREVENTIVE TREATMENT OF CONSUMPTION IN AUSTRALIA.

To the Editors of THE LANCET.

SIRS,—I ask for a small part of your space to correct an error in the letter of "your own correspondent" in Australia published in THE LANCET of April 22nd. In a paragraph headed "Prevention and Treatment of Consumption" he writes, "Dr. Philip Sydney Jones recently gave an address ..... in which he advocated the isolation of every consumptive." I did not recommend so sweeping a measure as the isolation of *all* consumptives. What I did say was that the Government of the State should make provision for the isolation of advanced cases occurring among the poorer classes of the people and thus remove from our midst dangerous foci of infection. Your correspondent probably derived his information from one of our local newspapers which fell into the same error.

I am, Sirs, yours faithfully,

Sydney, May 30th, 1905. P. SYDNEY JONES, M.D. Lond.

FREEMAN v. APPERLY.

To the Editors of THE LANCET.

SIRS,—I am anxious through the medium of THE LANCET to thank most heartily those members of the London and Counties Medical Protection Society who have so kindly contributed to the fund raised to help me with the very heavy expenses entailed by the recent action for damages brought against me in the Gloucester county court. Though not a member of the above society until after the operation which resulted in this action I received most valuable help from its officers, both in advice and in the matter of witnesses, and now the society, though not liable in any way, has raised a fund among its members as a help towards my expenses. I do not wish what I intend as a letter of simple but warmest thanks to the generous members and officers of the society who have done so much to help me should resolve itself into a eulogy of the society itself, but I feel that it is only right that I should publicly acknowledge the kindness and generosity of its committee and officers, especially mentioning the names of Mr. A. G. R. Foulerton and Mr. C. W. Glassington, who have given so much time and have taken so much trouble on my behalf.

I am, Sirs, yours faithfully,

Mandeville-place, W., July 12th, 1905. E. APPERLY.

THE INFLUENCE OF FRUIT ON THE PRECIPITATION OF THE URIC ACID OF THE URINE.

To the Editors of THE LANCET.

SIRS,—I shall be much obliged if you will do me the favour of allowing me to state in your next issue that, through an oversight on my part, the word *is* appears instead of *may be* in the passage "the quantity thrown down *is* independent of this" (page 142) in my article with this title.

I am, Sirs, yours faithfully,

Oxford, July 17th, 1905. WILLIAM J. SMITH JEROME.

MOUNT VERNON SANATORIUM AT NORTHWOOD.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of July 8th you say with reference to the report of Dr. A. W. J. MacFadden, medical officer of health of Edmonton, that "it seems almost a pity that some of the beds at the Mount Vernon Sanatorium at Northwood cannot be utilised by the sanitary authorities in Middlesex." As there it is, it does seem a great pity for some reasons that the whole of the Northwood institution is not set apart for

the county in which it is situated. Middlesex could support it if it were placed under the management of its supporters but such control is a *sine quâ non*, as without it the support could not be obtained, nor if the money were available could the desired end be carried out. The worst of it is that Northwood is not an "open-air" sanatorium properly so-called; it is far too sumptuous to be suitable for working-class patients and it must be far more expensive to carry on than a more suitable building.

I am, Sirs, yours faithfully,

GERARD CLARK,

Honorary Secretary, Middlesex Open air Sanatorium.
Ealing, W., July 12th, 1905.

PREGNANCY LATE IN LIFE.

To the Editors of THE LANCET.

SIRS,—Your article last week has suggested this communication, bearing mainly on the legal side of this matter.

Contrary to many foreign codes the common law of England allows no presumption that a woman (be she a spinster, a wife, or a widow) has passed an age when she can procreate and bear children. To the physiologist this is a matter of fact, dependent in most cases upon the menstrual climacteric, a phenomenon which is never "judicially noted as the invariable course of nature." For the purposes of forensic construction a woman, like a man, must be treated as capable of procreating children all her life, for the courts boast in this matter that they will never deprive a single living person of a possible interest or benefit. Lord Coke in 1624 stated a case relative to certain dowers which accrued if issue was born "albeit the wife be 100 years old ..... or the husband at his death was but four or seven years old, so as she had no possibility to have issue by him; yet seeing the law saith, that if the wife be above the age of nine years at the death of her husband she shall be endowed, and that women in ancient times have had children at that age whereunto no woman doth now attain, the law cannot judge that impossible which by nature was possible. And in my time a woman above threescore years old hath had a child—*ideo non definitur in jure*." Lord Coke would have us refer apparently to Genesis xviii. 11, and I. Timothy v. 9. In legal practice the question arises to-day in several classes of cases. It may be requested that money shall be paid out of court to those contingently entitled to it in the event of a certain woman not having children, she being well past the alleged age of child-bearing; as a matter of practical convenience the court has gradually recognised the high degree of improbability of issue and early last century, in the case of a woman aged 69 years, a trust fund was disbursed, "the parties entering into sufficient security by recognisances." Gradually the age limit has been reduced until it is now about 54 years and lately security has been dispensed with. The plea, however, is never allowed to infringe the inviolable "rule against perpetuities." A similar question arose in the old ecclesiastical courts where a husband pleaded sterility in his newly married but aged wife; he was not allowed a decree of nullity of marriage, as it was affirmed that he had presumably taken her *tanquam soror*. Actuaries meet the problem in insurances against child-birth and policies taken out by women under 50 years of age. Cases of pseudocyesis are pertinent, as with Joanna Southcote in 1814, who was 64 years old when she claimed to be supernaturally pregnant. Disputes as to legitimacy and supposititious children occasionally occur in connexion with women past mid-age. To the medical mind it appears *primâ facie* that a medical certificate could, as a rule, summarily settle the facts. But the legal mind considers the admission of such a practice as well indecent as capable of too wide extension. In 1787 Lord Kenyon, then Master of the Rolls, when asked to declare that a septuagenarian couple were past the age for procreation, declared: "If this can be done in one case it may in another, and it is a very dangerous experiment, and introductive of the greatest inconvenience to give a latitude to such sort of conjecture." He was evidently suggesting that should medical evidence be admissible the principle could be applied to much younger women, sterilised perhaps by surgical means, and *pro tanto* to men. In matters marital the law will not often inquire beyond *habilitas ad matrimonium*, the practical test of which is mutual ability to consummate marriage.

I am, Sirs, yours faithfully,

LEGALIS.

July 18th, 1905.

DAVOS-PLATZ.

PRIVATE SANATORIUMS; PUBLIC AND POPULAR SANATORIUMS.

(FROM OUR SPECIAL SANITARY COMMISSIONER.)

II.¹

IN dealing with the sanatoriums at Davos it is not my purpose to criticise at any length those numerous and luxurious establishments which cater for paying patients. Doubtless they are open to not a few abuses but in any case if, in the desire not to displease good customers, patients are allowed more freedom than is good for their health, the law, as already described, takes care that they shall not injure or imperil others than themselves. There is at Davos-Platz and Davos-Dorf a great variety of hotels and sanatoriums. There are, as already mentioned, hotels for the exclusive use of healthy travellers and tourists, and these may be distinguished by the fact that they have no verandahs or broad balconies for patients to lie out in the open air and sunshine. Indeed, what is called at Davos "the cure" seems to consist, in the main, of what on the Riviera is called "a sun bath." The principal difference is that in the former place there is generally an accompaniment of snow. As a consequence, the method of taking the "sun bath" differs. On the Riviera the patient simply strolls out, generally to the sea front, takes his seat on a bench, faces the south, and allows the hot rays of the sun to pour down upon him. At Davos there is a verandah or balcony which shelters him from the cold wind but is open in front to the rays and the heat of the sun. Therefore the sanatoriums have to be built facing the south. Then in the verandah there are deck chairs or couches. But the cold is so intense that ordinary rugs do not suffice and very generally a sort of fur bag is employed in which the patient places his legs. The lying out in the cold, freezing air, with the bright sunshine in mitigation, is the main feature of the cure. There are therefore hotels and boarding-houses which simply provide their lodgers with board, bedroom, and a balcony or verandah where the patients may lie down in the open as long as they like. Such places can hardly be called sanatoriums. A patient may do well there if he receives good advice and carries out the instructions but there is no discipline or surveillance. These are merely hotels which admit patients. Other establishments are genuine sanatoriums under the direction of a medical man who has a staff of medical men and trained nurses to assist him. In fact, they are hospitals, luxurious hospitals, with drawing room, billiard room, music room, and library, with everything that can help to render life pleasant, but where, nevertheless, a strict discipline is enforced and the patients are only allowed such pleasures and relaxation as will not interfere with their cure.

Of these, one of the largest and best known is Dr. Turban's Sanatorium. Here every minute of the day is provided for. When not taking his prescribed walk the patient must be lying down in one of the "cure galleries" or sitting out in the garden, or else he is partaking of one of the six meals served during the course of the day. Of these two are heavy meals and, contrary to the practice at Nordrach Colonie, no exercise is allowed immediately after the more substantial meals. The *régime* is one of moderate overfeeding. The galleries, or verandahs, where the patients lie and breathe the open air measure in all some 330 feet in length. In front there is a band stand, so that occasionally music is provided as a diversion. Some years ago the air in these "cure galleries" was examined and it was not found to be affected by the presence of the patients. The ideal gallery is that which is built away from the main building. (Fig. 1.) On the southern side there are blinds only; on the northern side there are wooden partitions or shutters that may be lowered or closed according to the weather or the condition of the patients. In one part of the shelter the back wall, so to speak, may be lowered altogether, so that the patient may be left with only the roof over his head and the dry wooden floor beneath his feet which is raised a little above the ground. The next patient may have the partition raised above his body but still open overhead and this opening may be more or less wide or closed altogether. At the two extremities there are glass windows which may