THE QUALITIES OF PARALLEL LINES.

To the Editor of THE LANCET.

SIR,—In the course of his admirable oration (THE LANCET, Oct. 30th, p. 915) Dr. Sidney Coupland states that "yet the two (viz., the psychical and the physical) remain essentially independent, like parallel lines that never actually blend."

May I ask whether the lecturer wishes to imply that parallel lines are "essentially independent"? This would be contrary to the fundamental rules laid down by Descartes, whom Dr. Coupland quotes. By means of the Cartesian coördinates the dependence of parallel lines on one another is shown in the equation $y - y_1 = a(x - x_1)$, or by adopting a system of trilinear coördinates ($mn_1 - m_1n$) $a + (nl_1 - n_1l)b + (lm_1 - m_1l)c = 0$.

In what way else should parallel lines differ, say, from the asymptote to a curve?

I am, Sir, yours faithfully,

Hove, Nov. 2nd, 1915.

NOËL ADLER.

A USEFUL MEDIUM FOR THE BACTERIOLOGICAL EXAMINATION OF FÆCES.

To the Editor of THE LANCET.

SIR,—The media which have been proposed for the bacteriological examination of fæces are numerous. This proves that none of them have decisive advantages. It has been reasonably said that the success of such an examination depends largely upon the capability, experience, and perseverance of the examiner more than on the media employed.

These media can be divided into three categories. Under the first come the media which give to colonies only of the *B. coli* a distinguishable aspect which at once differentiates it from other colonies. Under the second category come those media which either aim at a favourable development of the pathogenic bacteria (I mean those of the typhoid group), or at least act as a preventive, so far as possible, against the growth of non-pathogenic micro-organisms. Lastly, under the third category come those media which are reputed to combine the advantages of the first two categories. But it may be said that whatever the medium, it must be above all easy and non-expensive to prepare, because there actually does not exist a really favourable medium (as, for instance, peptone solution for cholera vibrio), consequently the more cultures of the matter under examination are made the greater are the chances of a successful result. This consideration encourages me to propose a new medium.

It does not present a superiority over the others in so far as the results are concerned, but I am prepared to state it is not inferior. The advantages it offers are the quick and easy preparation, besides which it lends itself to many useful modifications. This medium is analogous to that of Endo, in which the ordinary fuchsin is replaced by the Weigert's acid fuchsin (Grubler), with the difference that instead of preserving its colour, as done by Kindborg, it is decolourised. The process of its preparation is as follows:—

To 100 c.c. of 3 per cent. agar slightly alkaline to litmus are added: (1) $1\frac{1}{2}$ grm. of lactose (or any sugar) dissolved in 4 c.c. of distilled boiling water and further boiled $\frac{1}{2}$ min.; (2) 10 c.c. of $\frac{1}{2}$ per cent. watery solution of acid fuchsin brought to boiling point and decolourised by adding four drops of a

normal solution of sodium carbonate and by boiling again until it assumes a port-wine colour.

The agar thus prepared presents all the advantages and disadvantages of Endo's medium, but also has its own special advantages—namely, it is very easily prepared from staple solutions and is not affected by light. Furthermore (should one wish to make this medium more differentiating), there may be added nutrose or caffeine or malachite-green (in tested solution as for Lentz and Tietz's medium) or crystal violet (10 drops of 1 in 1000 solution). In the two last combinations the background is green (or blue) and the coli colonies are violet (or red).

Fæcal matters artificially infected with bacilli of dysentery or typhoid groups gave the same results on this new medium as on Endo's or Drigalski's media. In four cases of typhoid fever confirmed by Vidal's reaction fæces and urine have been examined bacteriologically by making cultures on the new medium. In three of these cases the fæces only gave a positive result, and in one case both urine and fæces were positive. At the same time similar test-cultures made on Lentz and Tietz's medium gave the same results. One case of paratyphoid B also gave a positive result. On the contrary, in one case of non-amœbic dysentery the cultures on the new medium did not give any result, and a similar negative result was obtained with cultures on Drigalski's medium without crystal violet.

I am, Sir, yours faithfully,

C. G. DELTA,

Oct. 18th, 1915. Chief of the Laboratory of Hygiene, Alexandria.

CHANGE OF NAME.

To the Editor of THE LANCET.

SIR,—I wish to let you know that I have changed my name from Grunbaum to Leyton. The reason for my doing this is a desire to dissociate myself as far as possible from a nation the deeds of which make it lose any right to be included amongst civilised races.

I should like to add that I have not been conscious that my German name has led to my having been submitted to any discourtesy.

I am, Sir, yours faithfully,

92, Portland-place, W., Nov. 2nd, 1915.

O. LEYTON.

THE TRAINING OF CHEMISTS.—Dr. James Walker, F.R.S., Professor of Chemistry in the University of Edinburgh, delivered recently the opening address to the members of the Edinburgh and East of Scotland section of the Society of Chemical Industry. He admitted that we could learn much from the enemy. The connexion between academic and industrial chemistry was not sufficiently close in this country. It seemed to him that we stopped the education of our chemists at a point short of where the education ought to stop. A student got his B.Sc. degree without having done any research. No science degree was given in Germany without the students having done some research. Two years, he said, would be reasonable time to spend in research, and he approved the action of some of the English universities in introducing an intermediate degree of Master of Science between the B.Sc. and the D.Sc. An honours degree in the B.Sc. would do a good deal to meet the difficulties on the academic side. As to the industrial side, he said that in Germany the academic chemist was turned straight out of the university into the works and brought face to face with practical problems. That was a very good way. In America the manufacturer would state his industrial problem to the university and the university supplied the chemists, who endeavoured to work out the practical problem.