customs can be changed the birth-rate in wedlock is not likely to increase.—I am, etc.,

Hawick, Feb. 14th.

JOHN HADDON, M.D.

THE FALLING BIRTH-RATE.

SIR,—Why do Dr. J. W. Ballantyne and Dr. Amand Routh deplore the falling birth-rate though it is causing no fall in the population's rate of increase? Even in France the death-rate declines with the birth-rate; moreover, her recently published records for the first six months of 1913 show that there were 8,000 more births than during the same period of the previous year, but that there were 12,000 more deaths—in other words, that a rise of her birth-rate was accompanied by a still greater rise of the death-rate. Dr. Routh says that "every method of artificial prevention of conception is harmful in both its physical and its moral effect." Is there any scientific evidence to support such a sweeping statement?—I am, etc.,

BINNIE DUNLOP, M.B., Ch.B.

Alexandra Court, S.W., Feb. 17th.

THE DURATION OF GESTATION IN WOMAN.

SIR,—In these days of scientific acumen and advancement it is very evident that our present method of estimating the age of a human embryo from the date of the cessation of the last menstruation is not only fallacious but unscientific. The sole reason for thus reckoning is, because menstruation under ordinary circumstances is invariably inhibited by pregnancy.

In a paper in the *Edinburgh Medical Journal* (January) I have endeavoured to prove that fertilization in woman may take place at any time during the intermenstrual epoch—with the exception of the three days immediately preceding a menstrual period—and that when fertilization has taken place gestation does not begin until three days before the time when the first menstrual period inhibited by fertilization would have made its appearance, that is, gestation in every case begins at a fixed and definite time.

Reckoning from the day the menstrual discharge appears until it again reappears the menstrual epoch varies in different women, but these variations have no influence upon the length of time it takes the embryo to complete its development and growth in the uterus. Under ordinary physiological conditions the gestation period for a human fetus is as definite as the incubation period for a chick in the egg.

The duration of gestation in woman is eight months of thirty-one days *plus* the three days preceding the first inhibited menstruation, and the eight months must be reckoned from the day on which the first suppressed menstruation would under ordinary circumstances have made its appearance.—I am, etc.,

London, W., Jan. 23rd. JAMES OLIVER, M.D., F.R.S.Edin.

DORSAL EXAMINATION IN UNDIAGNOSED ABDOMINAL AFFECTIONS.

SIR,—Dorsal percussion, had it not been already available, would have been worth inventing for the benefit of the operating surgeon. His responsibilities teach him circumspection; but the physician's diagnosis is not less dependent upon a thoroughly good look "all round." Any help it could afford is most wanted in the obscure abdominal conditions which fail to yield any evidence to an anterior examination, and for the physician in the large variety of symptoms attributed to appendicitis. If I might venture to supplement my paper on "Pre-operative Diagnosis of Appendicitis"¹ with a brief remark—the uncertainty which often remains after searching abdominal examinations, and which urges the surgeon to operate and silences the physician's objections, suggests the desirability of two further attempts in another direction. The first of these would be to show that in any given case a dorsal examination likewise failed to reveal any abnormal appendicular signs, and that an operation was unnecessary. If, however, that local dorsal test were to prove inconclusive, the second endeavour should be to localize the cause of the unexplained symptoms elsewhere, by a complete dorsal examination in search of some definite abnormality. Both these methods should be tried before

¹ BRITISH MEDICAL JOURNAL, vol. ii, 1912, p. 1741.

any doubtful case is submitted to appendicectomy; but the second one also applies to the entire field of abdominal diagnosis. In many conditions where a thorough abdominal examination is either impossible without an anaesthetic or inadvisable, some information might be obtained from a dorsal examination even by the simplest methods, by reason of the dorsal fixation of all the important organs except the small intestine and transverse colon. The possibility of mapping some of them out by careful percussion is a matter of demonstration. Some practical gain would accrue from the renewed discussion on appendicitis if it could lead to our combining forces for a systematic study of that method.

Apart from appendicitis, the most recent illustration of that need is contained in the "Remarks on Acute Pancreatitis," recently published by A. J. Blaxland and G. P. C. Claridge,² which are of great pathological value, and not least instructive clinically. It does not appear from the notes of their 7 cases that pancreatic disease was suspected in any of them before it was discovered in 5 cases at the laparotomy, and in 2, which were not operated, at the necropsy. Although it is stated that in all of them the pancreas was found after death to be more or less enlarged, the abdominal examination did not yield that chief and almost only diagnostic physical sign; in most of them the abdomen was retracted. It might, perhaps, have been yielded by a dorsal percussion of the pancreas to which these cases point as an indispensable clinical desideratum. This does not seem to have been attempted, except by Piorry, before 1899, when I endeavoured to obtain by dorsal percussion evidence of a suspected carcinoma of the head of the gland.³ Since then I have been able to demonstrate that the outline of the pancreas can be mapped out in any normal subject with greater accuracy than abdominal palpation can define it.⁴ The same applies to the dorsal percussion of the renal dullness for the help which it may afford to the diagnosis of any considerable enlargement of the inaccessible suprarenal gland. The easiest opportunity in all cases is the subacute or chronic stage, but the urgency arises in the acute conditions which exclude any deep abdominal palpation. The information may often prove incomplete and inconclusive, but, so far as it goes, it is always a genuine report of the deep-seated conditions, unadulterated by the pressures and displacements inseparable from deep palpation, and it is obtainable without inflicting any pain or hurt other than might arise from posture.

The method may not be quite easy; but in view of the important issues at stake the technical difficulty ought not to be lightly assumed to be insuperable.

Greater difficulties have been overcome in skiascopy and in most of our modern surgical methods, such as explorations of the bladder or ureters, and many others. The least we can do is to qualify by adequate practice to give it a competent trial as an essential complement to the anterior examination in all obscure abdominal affections, and as the only available substitute for abdominal palpation in the urgency of some of them. The objection based upon initial individual failures in unpractised hands does not stop the teaching of any of our indispensable arts and crafts. With sufficient opportunities students would soon discover for themselves that the more thorough method of percussion is by far the most simple; and that it is the only "easy" one for those who find any special difficulty in acquiring the proficiency required of them as a qualification to practise.—I am, etc.,

London, W., Jan. 21st.

WM. EWART.

CANCER OF THE RECTUM.

SIR,—Will you allow me to make clear my position in respect to the dissemination of cancer of the rectum?

In the game of chess an easy method of securing victory is to move the opponent's pieces as well as one's own. The writer of your leading article on "Cancer of the Rectum" in your issue of January 31st unconsciously adopts this method. He says that Mr. Cole's investigations "refute the deductions of Handley, based on the examination of a single specimen, that the disease in an early stage disseminates widely in lymphatic plexuses in

² BRITISH MEDICAL JOURNAL, vol. ii, 1913, p. 1423.

³ BRITISH MEDICAL JOURNAL, vol. ii, 1899, pp. 1167-70.

⁴ Cf. *Proc. Roy. Soc. Med.*, June, 1910.

the bowel wall." I have not made any such general statement.

Let me recall the circumstances in which my first case was published. I had recently formed the opinion that in the method of staining by mucicarmine I had found an instrument of great potential value for the study of the dissemination of cancer of mucous origin. It appeared likely that my own opportunities of applying the method would be restricted. I published my admittedly incomplete results in order to bring forward this method and to enlist the interest of others in a subject too large to be dealt with by a single worker. It is at least possible that but for my action the work of Mr. Lenthal Cheate, Mr. Percival Cole, and Mr. K. W. Monsarrat would not have seen the light. If so, I need seek no further defence. My only regret is that my observations on the invasion of the anterior abdominal wall in gastric carcinoma, made by the same method and published at the same time, have not hitherto borne similar fruit.

I have found the appearances which, in my opinion, indicate permeation of the mucous lymphatic plexus in two cases of rectal cancer. I have been unable to find them in perhaps fifteen cases. The negative observations made by other observers and by myself show that this method of spread is rarer than I had thought, but they leave my positive results untouched. In the words of Claude Bernard, *Des faits négatifs, quelque nombreux qu'ils soient, ne détruisent jamais un seul fait positif.*—I am, etc.,

February 17th.

W. SAMPSON HANDLEY.

THE INDIAN MEDICAL SERVICE.

SIR,—I am pleased to see that in your memorandum on the causes of discontent in the Indian Medical Service, the Family Pension Fund, as one, is enumerated. On this subject I would like to give you a concrete example in my own case. I married as a lieutenant-colonel, and, what with the donation, "disparity of ages," etc., I was made to pay down a cash sum of over £300, as well as I remember. When I got promotion to surgeon-general, I was compelled to go into Class I and pay the donation of, as well as I remember, over £200. I married a second time, and then again I was made to pay the donation towards Class I, just as if I had not paid it before, and, on account of my age and the disparity of ages between my wife and myself, the total sum I had to pay was, I think, over £500. All this in addition to a heavy monthly tax. This amounted to £50 a year while I was on the active list and now amounts to £25 a year. I may say that the big sums above named can be paid at once if the victim has the money, or can be met by twelve monthly instalments, subject to 4 per cent. interest. It seemed so outrageous that I should be called on to pay the donation for admission to Class I a second time, that I communicated with the Pay Examiner, but got no satisfaction. On arriving in England I wrote to the India Office, but all I got was a gruff reply, the incivility of which offended me, and added to my sense of injustice. In addition to heavy monthly payments, I have had to find sums aggregating something like £1,000; and if my wife died before me, all that would be left would be a pension of £40 a year for my little girl till marriage. If she also died, not a penny of all that money would go to my estate. It would be hard to persuade me that I could not have done better by insuring in a good office, or that I have been justly dealt with. My feeling of injustice over having to pay a second donation for admission to Class I is so great that nothing but a refund of it would remove it. In the matter of the disparity of ages, I feel that in justice I ought only to have been called on to pay the difference.

The memorandum deals chiefly with the point of view of the civil Indian Medical Service, but there is also grave discontent on the military side. I think the chief cause of this is the antiquated regimental system. No self-respecting man can be satisfied with his position in a regiment after he attains field rank. It is bad enough as a major, but as a lieutenant-colonel it is infinitely worse. Apart from this, there is the feeling that the system is antiquated and gives no opportunity for progress, such as has occurred in the Royal Army Medical Corps.

Then there is the question of promotion. Military principal medical officerships are open to men who have spent their lives on the civil side, while no military man can expect to get a civil principal medical officership. There is only one surgeon-generalship open to the military man, but it is also open to the civilian. Further, a man who has spent all his time on the military side can never rise to the top of the tree; he can never be principal medical officer in India (I retain the old titles), for that is reserved for the home service, and he can never be Director-General, I.M.S., for that is reserved for the civil surgeon. Further, no military man has ever been appointed to the India Office Board, so far as I am aware.—I am, etc.,

February 7th.

SURGEON-GENERAL, I.M.S. (RET.)

INSPECTORS FOR SCHOOLS FOR MOTHERS.

SIR,—One may with safety hazard the guess that the medical inspector whose findings are quoted (in the JOURNAL of January 31st, p. 270) by Dr. J. Howard Jones "was never a mother." In their wisdom most Boards decide that posts of this kind, when thrown open to women, shall be the preserve of the unmarried. The policy of the London County Council is particularly flagrant in this respect—witness the school service. One might reasonably imagine that an older married woman would be better qualified to advise the mothers who bring their children up for medical inspection than the most brilliant female celibate direct from hospital, full of scientific information and enthusiastic in her work, but lacking in the more complete formation of character which married life, happy or the reverse, is bound to bring, and often betraying an ignorance of common domestic facts which these mothers are quick to appreciate. They can judge on these matters, and unfortunately base their further conclusions on the inspector's medical attainments accordingly.

It is utterly wrong that celibacy should be thus subsidized. Women who are reputed above the average are carefully selected, given comfortable salaries, and made to sign an agreement that they will resign on marriage. Ex-holders of whole-time inspectorships are as a rule quite unfitted to start general practice, of which they have no experience, so it is tantamount to asking a woman who joins the service either to bind herself to celibacy or to give up her profession entirely at the end of a few years—a sacrifice many do not feel prepared to make, and one which cannot be good for themselves, their husbands, or the nation, if made unwillingly.

Every case should be judged on its own merits. If a married woman be incapable of doing her work, get rid of her by all means, but in many instances she will not only be as good, but better than when single. Why, in the name of common sense, interfere with her any more than with the many married school teachers whose influence amongst children is so entirely for good?—I am, etc.,

February 2nd.

SPES.

INSPECTORS OF THE MENTALLY DEFICIENT.

SIR,—In your issue of the 14th inst. particulars of three posts of inspectors under the Board of Control are given, with salaries attached; namely: (1) £500, rising to £800 by annual increments of £20. (2) £400, rising to £600 by annual increments of £20. (3) £350, rising to £550 by annual increments of £20. The only difference between the first two posts is that a knowledge of Welsh is essential for the first; and between them and the third is that a woman is to be appointed.

Are the mentally deficient more so and more numerous in Wales, and are the duties so onerous in the Principality that there is such a discrepancy in the salaries offered? And, at last, is the candidate with the higher efficiency and greater experience to be appointed to the more remunerative post?—I am, etc.,

February 16th.

W. M. S.

THE RATIONAL TREATMENT OF INCIPIENT INSANITY.

SIR,—Again I must call attention to Dr. H. H. Newington's first letter in your issue of January 31st, in which he asserts categorically that "nowhere, either in the debate