Compliance with the regulations in every particular may absolve the various airways corporations from charges of carelessness or neglect when supported by all the necessary certificates required by the regulations, but nobody could possibly claim that they are an absolute preventive. Only quarantine can do that. To insist on quarantine in the case of every passenger is manifestly unnecessary and impracticable. It was to avoid delay and inconvenience to travellers by sea that the system of sanitary surveillance was adopted by the Paris Convention, and on the whole it has worked well. It must not be forgotten that in travelling by sea infectious disease may reveal itself in the course of the voyage. Travel by air, by reason of its speed, is deprived of that natural safeguard to a very great extent.

To conform to the different conditions as far as possible, recourse is recommended to preventive inoculation by the Air Convention. As we know from past experience, inoculation is by no means an absolute preventive. It may, in fact, modify diseases to a sub-clinical and much less easily recognized type, in which the sufferer is just as much a possible source of infection. Moreover, non-carriers may be converted to carriers. This appears to have been foreseen to some extent by the adoption of a form of sanitary surveillance (*vide* "Health Regulations for Entry into the United Kingdom") and the "warning card" to be given to the patient's doctor. This measure is by no means foolproof. Pressure of business and shortness of sojourn are apt to cause the patient to "fight the disease" so that he may be able to get through his work in the time at his disposal. He may try to rationalize his symptoms as "another go of my old dysentery (or malaria)" until it lays him low and he has to call in a doctor, by which time he will probably have spread infection. His doctor may be unfamiliar with tropical diseases and inclined to accept the patient's own diagnosis until the illness takes a more serious turn.

I do not think too much value should be given to "personal declarations of health" for the same reason. It has not been unknown in the past for an individual to make a false statement for reasons of expediency to avoid being held up. Persons who make false statements or fail to comply with instructions may be a great menace, and if detected should be liable to heavy penalties. It would be a sound step if every airport which receives aircraft from overseas had provision for the temporary reception and rapid diagnosis in cases of illness in persons "deplaning." This should have facilities for blood and stool examinations on the spot, and the airport medical officer should be a man with considerable tropical experience. Such provision is a matter for each country to make the arrangements which it considers to be most efficient. It is not uncommon to find that persons who have lived in hot countries are carriers of typhoid or dysentery. I have seen a perfectly fit and healthy person who, in the course of a routine examination, was proved to be a cholera carrier. These are risks that have to be taken.

It would be too much to hope that we may continue to escape from air-borne infection indefinitely. Hence the importance of adequate provision for isolation and rapid diagnosis.

I wonder who invented the horrible words "disinsectization" and "disinsection"? Would not "disinfestation" have served the purpose?—I am, etc.,

Brookwood, Surrey.

H. M. STANLEY TURNER.

Appendicitis in the Young Child

SIR,—Dr. Howard Williams is to be congratulated on his paper (Nov. 8, p. 730) on the above subject. There is, however, a point in differential diagnosis which appears to me to need stressing and which I have not seen pointed out before. It is the inverted respiration (inspiration—pause—expiration—immediate inspiration) which is often found with the onset of peritoneal involvement. This is usually looked upon as a sign of intrathoracic disease and is especially misleading, as some 20% of cases of acute appendicitis in children are associated with or immediately follow upon an upper respiratory infection. The mechanism is the same whether the chest or the abdomen is involved; the breath is held in inspiration in the one case because of the pain of pleural involvement, in the other case because of the pain of peritoneal involvement, and the association of inverted respiration with the latter infection is particularly noticeable in childhood, where diaphragmatic respiration is naturally greater than costal respiration. Movements of the alae nasi are frequently present with the altered respiratory rhythm.

The correct diagnosis depends on the definite finding of focal abdominal tenderness or rigidity. This can be confirmed in cases of serious doubt by aspiration of the peritoneal cavity, a method I have never used but have seen employed in the U.S.A. with satisfactory results. The normal cell content is

about 2,300 per c.mm., and is mainly composed of mononuclears and lymphocytes. The pulse, respiration rate, temperature, and lymphocyte count are of little value, and x-ray films both of the chest and of the abdomen may be misleading.—I am, etc.,

Sheffield.

JUDSON T. CHESTERMAN.

Anaesthesia for Head and Neck Surgery

SIR,—The flexible metal tube with mouthpiece described by Dr. J. G. Bourne (Oct. 25, p. 654) is an interesting piece of equipment. For some time an ordinary Hewitt's airway has been used in the same manner with good results. The fixed curve of this airway holds the tube so as to prevent deviation towards the oesophagus; it obviates the use of introducers, as does the curve given to the tube by storage in a circular tin. When large tubes are in use the airway required takes up a good deal of space, and there may be some difficulty in sliding it along the blade of the laryngoscope even if the Macintosh spatula is in use. Dr. Bourne's tube should be an advantage in these cases.

The use of "tubarine" for intubating cases of head and neck surgery is perhaps debatable, as a suitable dose of thiopentone given slowly, followed by nitrous oxide with a little trilethyl ether by passive ventilation, has been found to facilitate laryngoscopy and intubation. The same mixture is used for maintenance, and local analgesia of larynx and trachea is not required. It is felt that this sequence, using only a small amount of volatile anaesthetic, is less depressing than curarization; admittedly it takes more time.—I am, etc.,

Glasgow.

C. T. BARRY.

Control and Treatment of Diphtheria

MONSIEUR.—Je viens de lire avec un vif intérêt votre "leading article" du *Journal* de March 22 (p. 384) ainsi que la suggestive étude de Dr. James Fanning (p. 371). Cette lecture me suggère les réflexions suivantes.

D'après Collins, 7% seulement des enfants non soumis à l'immunisation contractent la diphtérie au cours des 15 premières années de la vie. Pour que l'immunisation soit efficace, elle devrait donc protéger plus de 93% des enfants inoculés au toxoïde. Or, comme je l'ai montré dans un article—"Fréquence de la Diphtérie chez l'Enfant dans ses Rapports avec la Vaccination"—le pourcentage des Schick-négatives par l'immunisation active ne dépasse pas 85 à 90% (Ramon). La vaccination au toxoïde ne peut donc pas être efficace.

Vous dites qu'en 1947 en Angleterre 50 à 60% seulement des enfants sont inoculés. En 1941 cette proportion était forcément beaucoup plus faible et ne peut pas expliquer la baisse qui a commencé à ce moment. Tous les partisans de la vaccination antidiphtérique (Goldfley, Ramon, etc.) sont, en effet, d'accord pour dire que l'immunisation ne commence à produire ses effets que lorsque 40 à 50% au moins de la population infantile est immunisée. Si la diphtérie a beaucoup diminué en Angleterre depuis cinq à six ans, elle a diminué dans de bien plus grandes proportions dans des pays où l'on n'a pas vacciné. En Suède, par exemple, de 1919 à 1938 le nombre des cas a passé de 40,514 à 113 et celui des décès de 2,000 à 10.

Vous estimez que le renouvellement des injections de toxoïde rendrait l'immunisation plus efficace. L'expérience prouve qu'il n'en est rien (voir mon étude, "La Multiplication des Injections de Rappel Rendra-t-elle Efficace la Vaccination Antidiphtérique?"). Veuillez agréer, mon cher Confrère, l'expression de mes sentiments les plus distingués.

Lyon, France.

ROBERT RENDU.

A Method of Abdominal Palpation

SIR,—I was interested to read Dr. E. W. Price's article (Nov. 1, p. 703) describing his method of inducing relaxation of the abdominal wall, which seems ideally suited to ambulant patients or those already in the erect posture. In this country most patients are already supine at the time of examination, and time would be wasted in getting them up, just as with Dr. Price's ambulant African cases time would be wasted by getting them to lie down.

I have for some years used the following simple means of inducing relaxation in supine patients who, through nervousness

or anticipation of pain, cannot or will not relax, and which has not been, so far as I am aware, described in textbooks or taught in medical schools. The patient is asked to press his head hard back into the pillow. This simple action contracts the erector spinae, and in 19 cases out of 20 the abdominal muscles, which are antagonistic, promptly relax. Moreover, this draws the attention of the patient away from the part to be examined, and a gentle "patter" of conversation on the part of the doctor keeps it away. The principle of contracting a group of muscles in order to relax an antagonistic group is probably also the basis of Dr. Price's method.—I am, etc.,

London, S.E.5.

BERNARD J. FREEDMAN.

"Unjustified" Use of *d*-Tubocurarine Chloride

SIR,—Dr. T. Cecil Gray (Nov. 8, p. 745) has drawn attention to what he describes as the "unjustified" use of *d*-tubocurarine chloride during anaesthesia for operations upon the head and neck. While agreeing with Dr. Gray in this respect I wonder whether he has not fallen into a similar fault in advocating the use of *d*-tubocurarine chloride in caesarean section—a procedure which he describes so ably in your issue of April 5 (p. 444).

To my mind the only possible reason for administering curare preparations to caesarean sections must be for its effect in relaxing the tone of the abdominal musculature, but surely this is quite unnecessary "since the muscles have been well stretched during pregnancy" (H. E. G. Boyle and C. L. Hewer, *J. Obstet. Gynaec. Brit. Emp.*, 1924, 31, 264). This relaxation can be observed quite easily when the obstetrician sews up the peritoneum, which latter can be lifted some inches above the level of the wound.

The increase in uterine tone observed in Dr. Gray's cases is almost certainly due to his use of thiopentone, "kemithal," or *light* cyclopropane, either alone or in combination, as can readily be demonstrated by omitting the administration of curare. Thiopentone and *light* levels of cyclopropane anaesthesia increase the contractility of the uterus, and since 1943, when we finally recognized this effect at King's College Hospital, the routine use of "pituirrin" has been abandoned after the employment of these anaesthetics. The first caesarean section ever to be performed under kemithal anaesthesia was at the same hospital, and the surgeon was Mr. John H. Peel; the date was Nov. 23, 1944, and in that and succeeding cases we rapidly came to recognize that this drug too had a similar tonic action on uterine muscle.

Apropos of the above, I well remember the first time I administered a *light* cyclopropane anaesthetic for a caesarean section performed by the present P.R.C.O.G. Up to that time it had been his routine to inject pituitrin into the wall of the uterus just before making the uterine incision. On this occasion he persisted with the usual routine, but as his scalpel pierced the uterine wall the surgeon was hit smartly in the face by a geyser of liquor amnii and momentarily incommode. Such an exhibition had never occurred while using gas-oxygen-ether and was the first of many instances (such as those attributed by Dr. Gray to the employment of *d*-tubocurarine chloride) which made us conclude that these three anaesthetics were uterine stimulants. Incidentally this property makes them useless for intrauterine manipulations or external version, although *deep* cyclopropane anaesthesia (which would never be used during caesarean section) does relax the uterus.—I am, etc.,

King's College Hospital.

A. H. GALLEY.

Waiting for Operation

SIR,—A. B. is referred by his medical attendant to a particular consultant at hospital. A diagnosis of early carcinoma of the stomach is made and confirmed. The patient is advised to have an operation, to which he agrees, and he is put on the waiting-list for admission. Presumably the consultant has entered into a contract with the patient and his doctor to carry out the treatment. The patient is not admitted for six or even twelve months, and the growth becomes inoperable.

Is this the responsibility of the consultant or the committee of management of the hospital? Should the law decree that the onus is on the committee of management, is it not incumbent upon the committee to review the number of patients on

their waiting-list and to advertise or otherwise make known to all concerned what prospects they envisage of fulfilling the contracts to which they are party? Your decision on these questions is a matter of national importance.—I am, etc.,

London, W.1.

HAMILTON BAILEY.

** Our Legal Correspondent writes: Any cause of action must be founded either on contract (agreement between the parties) or tort (civil wrong; in this case failure to use proper care). In each case the burden of proof is upon the patient. To succeed in an action for breach of contract he must show that an agreement, express or implied, existed to admit him to hospital or to operate on him, or both, while the growth was still operable. If he contracted for operation with the consultant, or for admission with the hospital, on this understanding and could prove it, he might have a chance of success. It is, however, hardly conceivable that either a consultant or a hospital would undertake such an obligation in these days of shortage of beds and would fail to tell the patient that he must wait his turn. Neither the consultant nor the hospital is required to do the impossible. If the patient seeks to found his action in tort, he must prove that the consultant or the hospital, or both, failed to use reasonable care. He might succeed if he could show that it would have been reasonable to warn him of probable delay and that he had not been warned, or that he had been wrongly deprived of his turn in the list, or if there was some other circumstance indicating negligence. Otherwise he would have no chance of success at law; and it may be said generally that in order to succeed he would have to prove a very exceptional state of facts. If he did succeed against the hospital, the committee would certainly be wise to make sure in future that they could not be taken to promise anything they could not perform regarding the interval of time between the acceptance of a patient and his admittance.—ED., *B.M.J.*

Morphine in a Patent Medicine

SIR,—In a medico-legal note (Sept. 27, p. 511) you referred to a case of death in a small child after drinking a quantity of a patent medicine sold for the purpose of relieving infantile disorders. You gave the quantity of morphine in the bottle but stated that it was not disclosed how this figure was ascertained. Actually, the Manchester City Analyst gave the quantity as a result of his analysis, and gave his evidence on oath at the inquest.—I am, etc.,

Salford, 7.

STANLEY HODGSON,
Deputy Coroner, Manchester.

SIR,—Dr. Paul B. Woolley (Nov. 8, p. 747), in quoting *The Chemist and Druggist Year Book* as his authority on dangerous drugs legislation, appears to have misinterpreted the paragraph he cites. Paragraph *e* (p. 339) (so far as it affects morphine) states that any solution or dilution of morphine in an inert substance is subject to the Dangerous Drugs Regulations; other preparations of morphine—i.e., preparations which are not solutions or dilutions in an inert substance—are subject to the Regulations if they contain not less than 0.2% of morphine.—I am, etc.,

London, W.C.2.

O. F. C. BROMFIELD.

Vaginal Temperature

SIR,—Dr. John Hankinson (Oct. 11, p. 574) has drawn attention to the dangers which may accompany the taking of vaginal temperatures. A further similar case has within the last few days come under my care in which a woman had accidentally introduced a clinical thermometer into the bladder. She had been practising this procedure for some twelve months, not for the purpose of birth control, but in an endeavour to become pregnant. No trouble had previously been experienced until one morning she failed to find the thermometer and concluded it had been mislaid in the bedclothes. About midday, however, she experienced a sharp pain in the lower abdomen and some dysuria. It then became apparent where the thermometer was, and she sought medical advice.

An x-ray examination confirmed the presence of an intact thermometer in the pelvis, and the passage of a sound revealed the foreign body in the bladder. After preliminary dilatation of