they require, at this juncture, examination by all those engaged in the practice of industrial medicine and interested in juvenile health.

Many of the suggestions made in the report are excellent, and industrial medical officers will welcome the proposal for a closer liaison and freer interchange of records and information with the school health service. It is indeed unfortunate, however, that the Central Advisory Council should make such sweeping and novel recommendations on the supervision of juvenile health in industry without examining the many excellent schemes already in operation and without full discussion with the doctors administering such a service. The complete supervision by one doctor from the nursery school age till the age of 18 years is an admirable conception. This should be the joint responsibility of the family doctor and the school health service. The Council propose that the medical officer in the school health service be required to obtain a specialized knowledge of child life to carry out work in school clinics, to be attached to a children's hospital, and to maintain close liaison with the school nurse. If these services are to be efficient, then they will constitute a wide field of study and a whole-time specialty. To widen such a field, by adding to it the supervision of the health of the juvenile in the factory, suggests that the Council do not appreciate the conception of a doctor in industry and fail to realize that he is not only a works doctor but an important member of the personnel organization.

In order to play his full part in such an organization the doctor requires a thorough postgraduate training, with experience in general practice and in hospital. It is preferable that he should hold a higher medical qualification or the diploma in industrial health. He must also have an intimate knowledge of the factory environment, of the various manufacturing processes carried out, of the industrial hazards involved, of the financial inducements and other rewards for the day's work, of the home environment of the employees, and of a multitude of other factors.

It is essential, as in the case of the school child, that the responsibility for the juvenile in industry be a joint one with the family doctor and the industrial medical officer working in close liaison, but because of the latter's experience and position in industry I believe that he is best suited to maintain that close liaison, so essential to the success of any scheme, between the family doctor, the certifying factory surgeon, the school health and education services, the specialist hospital services, and the executives of industry. In the light of those conceptions I suggest that the supervision of juvenile health in industry be entrusted to the medical and welfare services already in existence. —I am, etc.,

Glasgow. WILLIAM HUNTER.

History of Arab Medicine

SIR,—I read with interest what Prof. Major Greenwood had to say (March 8, p. 314) about my comments (Feb. 1, p. 202) on the late Dr. Neligan's quotation of Browne's *Arabian Medicine*. Permit me to use the same source, from which I cite the following: P. 26: ". . . he who judges Arabian Medicine only by the latter [its Latin translations] will inevitably undervalue it and do it a great injustice [Leclerc]." Browne states that during the period of translation the Arabs already possessed a copious anatomical vocabulary (p. 30). This would suggest an advanced stage of medical knowledge; and (p. 112), ". . . still the question remains whether the Arabs did more than transmit the wisdom of the Greeks, and whether they added much original matter to the scientific concepts of which for some eight centuries they were the chief custodians." This, Browne believes, is not an easy question to answer, and much laborious research is needed ere it can be answered definitely (such research work is being sponsored by the Palestine Arab Medical Association). P. 113: "And it must be said once and for all that no just idea of Arabian Medicine can be derived from the very imperfect Latin renderings of the standard Arabic works;" and p. 115: "On all these grounds, then, even if we rate the originality of Arabian Medicine at the lowest, I venture to think that it well deserves more careful and systemic study." Thus does Browne himself modify the statement requoted by Prof. Major Greenwood.

From *The Arab Heritage*, Faris (Princeton University, 1944, p. 243): "It is now generally understood in certain specialized circles of competent historians of medicine that the early patterns of hospitalization and hygiene in Europe received their energizing impetus from Arab medical science." In *Meet the Arab* the well-known Arabist, my learned friend Dr. Vann Ess, of Iraq, referring to Arab contributions to science says, "A very substantial achievement which has in fact put all of us Occidentals permanently in debt," and "A century of translation, though itself conspicuous for marked achievement, was but a prelude to the original contributions made by the Arabs." Works of many of these Arabs were of such significance, as they, in the words of Van Ess, "By their own efforts contributed in making medicine a science indeed."

The second point raised by Major Greenwood was that I assured him that the Christian church regarded belief in infection as heretical. The passage reads: "such heretical statements in Europe might have brought on the vengeance of the Church and perhaps cost the life of such a heretic." There is nothing new in this statement. Disease being a visitation from God, it would be heretical to attribute it to other mundane causes. The Church maintained, for example, that even the prevention of pain during childbirth was contrary to religion and the express command of the Bible. This conception the staunch Scotsman Simpson in 1847 fought; and his "Answers to the religious objections against anaesthesia in midwifery and surgery" is a masterpiece. Simpson maintains that opposition on theological grounds had been presented against every humane innovation in medicine, such as vaccination. Smallpox, they said, "is a visitation from God, but vaccination is produced by presumptuous and impious man: the former Heaven ordained, the latter a daring and profane violation of our holy religion." And lastly Servetus, a contemporary of Vesalius (16th century), because of his courage to maintain that the blood passes from one side of the heart to the other, through the lungs, as in fact it does: in consequence of this heresy his books were confiscated, and he was himself burned at the stake.—I am, etc.,

Jerusalem. I. B. GEORGE.

Lectures from Edinburgh

SIR,—In recent years great stress has been rightly placed on the need for closer links between the preclinical and clinical parts of the medical training, and among other things one assumes that these include some reference by the clinical teachers to those physiological findings which have a direct bearing on their subjects. Some questions of interest with regard to this are raised by the letter of Dr. Edwin Bramwell (May 24, p. 741) on the *Edinburgh Postgraduate Lectures in Medicine*, in which Dr. Bramwell reveals that the Edinburgh lectures are published with the aid of a grant from the trustees of the Honyman Gillespie Fund, under which animal experiments may not be referred to.

As it is not altogether clear what is implied by this statement, I would be grateful for some enlightenment on the following points. (1) Is it to be understood that, although the Honyman Gillespie Fund cannot ordinarily be used for reference to animal experiments, special permission has been granted in this case, or was the Honyman Gillespie Fund available for publication of these lectures because they were considered to be free from the offending references? If the former interpretation is correct no further explanations are necessary, and Dr. Bramwell is to be congratulated on overcoming a prejudice so detrimental to progress in medical science. If, however, the second interpretation is the correct one the following further questions arise. (2) Does the present volume contain only those lectures which do not refer to animal experiments, omitting those which do, or are all references to animal experiments in the postgraduate teaching at Edinburgh forbidden? (3) Does this mean that clinical teachers who wish to refer to animal experiments are prevented from taking part in the postgraduate teaching at Edinburgh? (4) Since in fact reference is made to animal experiments in some of the lectures, does this mean that the lecturers are prevented from describing only their own animal experiments? (5) If one of the purposes of the publication of the lectures is to enable practitioners "to keep abreast of the times," why does the Edinburgh School place itself under a censorship which prevents reference to modern physiological progress?—I am, etc.,

Sheffield. D. H. SMYTH.