Examples quoted are many, but space forbids more than brief references.

Ahmose I (1580 B.C.), the son of a brother-and-sister marriage, reigned for 24 years. By his energy and military skill he finally drove the hated Shepherd Kings (the Hyksos) out of Egypt after their domination for 200 years and made his country strong again. Ahmose married his sister Nefertari, who produced their brilliant son Amenhotep I. Incestuous marriages of great-grandparents, grandparents, and parents ultimately gave birth to the beautiful Aahmes. Her portrait, which adorns the walls of the temple at Deir-el-Bahari, shows that "her expression is fascinating; the features are refined and it would be difficult to find a nobler countenance."

Passing on with many notable omissions of kings and queens, mention must be made of the great Queen Hatshepsut, who was also the daughter of a brother-sister marriage but nevertheless an outstanding personality in Egyptian history. The greatest king was Thutmose III, the product of a series of incestuous marriages. Ruffer describes him as a historical figure comparable to any who have lived during the centuries after his death. Akhnaton, the last of the famous eighteenth dynasty, was unique in that, as a very young man, he overthrew the immense power and vested interests of the polytheistic priest hierarchy and introduced a monotheistic worship of the beneficent sun (Aton). Though he was not physically robust he reigned for 17 years (1375 to 1358 B.C.) and displayed an astonishing energy and moral courage in his contest with the priesthood.²

Another long interval brings us to the Greek line of the Ptolemies, of whom there were 16, including Cleopatra VII, the last of the dynasty. The first four sprang from normal marriage, but the rest were nearly all incestuous.

The Ptolemies were distinguished by their moral depravity, which was a feature of the Alexandrian population in general, but Ruffer points out that the latter 12 were no better or worse than the first four and most of them were energetic and able administrators. The extant portraits of the great Cleopatra show that she was not an outstanding beauty, but it seems that she was endowed with an "irresistible charm" which has been romanticized, though perhaps not exaggerated, by William Shakespeare.

There is no evidence of early death of the Ptolemies, sterility, idiocy, or deaf-mutism. The average age of those who were not murdered was 64 years. Indeed, through the centuries of incest in ancient Egypt there is very little record of physical or mental failure, but, on the other hand, a story of great conquerors, temple builders, and patrons of literature and the arts.—I am, etc.,

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London W.1.

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- 1 Ruffer, M. A., *Proc. roy. Soc. Med.*, 1919, 12, 145.
- 2 Weigall, A., *The Life and Times of Akhnaton*, 1922.

Fate of Gräfenberg Rings

SIR.—Amongst those providing medical care for this area there was a few years ago an enthusiastic inserter of Gräfenberg rings. Many of these rings have been removed over varying periods on

account of purulent and/or copious blood discharge. Some have been the probable cause of lower pelvic pain and some have been removed at the patient's request. More remarkably two of the rings have been removed in this hospital from the peritoneal cavity, one by another surgeon and one by myself. It would seem that this must be a rare complication of Gräfenberg-ring insertion and as such worth reporting.

I do not know enough about the other surgeon's findings to detail them, but in my own case the ring was to be removed on account of a purulent vaginal discharge. However, at "D. and C." and after a full-scale intrauterine search the ring could not be found. The position of the ring in a plain abdomen x-ray indicated that it may well be found out of the uterus, and accordingly laparotomy was undertaken. The ring was readily found wrapped in mobile omentum just above the level of the pelvic brim and was, of course, easily removed. A search of the uterus and appendages revealed no spot or scar through which the ring may have come. It would seem to be anybody's guess as to how the ring did in fact get from the cavity of the uterus to where it was found.—I am, etc.,

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Obstetrics in General Practice

SIR.—In 1962 I spent two weeks at Chelmsford attending the course arranged by Mr. David Brown. I have happy memories of the experience, and it has been pleasant to read the many tributes which you have printed since publishing Mr. Brown's article in your Educational Number last September (September 7, p. 597).

Few practitioners, however, are aware of the excellent facilities available at University College Hospital Obstetric Unit under Professor W. C. W. Nixon. Recently I worked for a year as one of the two general-practitioner clinical assistants to his antenatal clinic, and I can testify to the value of this arrangement. Although the posts are scheduled for sessional fees in the future, at present they are unpaid. The appointment is initially for six months, but can be extended for a year by mutual agreement.

The work consists of a weekly session of about three hours. In this time the general practitioner takes a full part in routine antenatal examination. At first this is done under the guidance of the senior assistant. Later a degree of independence is encouraged. Confidence is increased by the comforting proximity of two experienced obstetricians in the adjoining cubicles.

The full facilities of the department are available—library, seminars, tutorials, ward rounds, research, and perinatal mortality conferences. There is also opportunity for limited practical work in the labour wards, if so desired.

The general practitioner's main contribution to obstetrics is in the management

of the normal case. If he is faced at a domiciliary delivery with disproportion, breech presentation, or twins, then his antenatal care has probably been inadequate. Failure to appreciate the early signs of pre-eclamptic toxæmia is even less excusable. His basic task is to exclude such abnormalities; then it follows that he should be welcomed into the hospital antenatal clinics. A maximum of three months of undergraduate training in obstetrics is not sufficient instruction in this form of preventive medicine. Professor Nixon's innovation in providing this type of experience at a teaching hospital must surely benefit all concerned. From the point of view of the general practitioner the stimulus of assisting in the tuition of students is particularly enlivening.

In addition, it is now possible for the general practitioner to reside at University College Hospital so that he may act as locum for the obstetric house-surgeon. Unfortunately the hospital could not make the necessary arrangements during my year, but I hope to do this at a later date instead of one of my annual refresher fortnights.

It is hoped that Professor Nixon's initiative will be widely followed.—I am, etc.,

London E.9.

DAVID G. BERRY.

Intrauterine Transfusion

SIR.—It was with great interest that I read the preliminary communication of Dr. A. W. Liley concerning intrauterine transfusion of the foetus in haemolytic disease (November 2, p. 1107). But I failed to find any evidence in the data presented that an effective foetal transfusion had occurred. That anaemic erythroblastosis have a lower per cent. of Hb F than normal infants is an old observation.¹ Indeed, 43% Hb F in an infant with Hb 6.8 g./100 ml. would be well within the expected range for erythroblastotic infants prior to transfusion² and would perhaps indicate that this particular infant did not receive a significant amount of adult Rh-negative blood prior to delivery.—I am, etc.,

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- 1 Jonxis, J. H. P., *Nature (Lond.)*, 1948, 161, 850.
- 2 Schulman, I., and Smith, C. H., *Amer. J. Dis. Child.*, 1954, 87, 167.

Hand, Foot, and Mouth Disease

SIR.—Two small outbreaks comparable to those described by your contributors. (November 16, p. 1267) have been seen in the Crawley Down and Crawley areas of East and West Sussex.

A provisional diagnosis of hand, foot, and mouth disease was made in the first.