extra-professional activities, but this address is already sufficiently long: Questions of certification; of keeping of records; of reports; of associate action with approved societies in regard to suspected malingering; of co-ordination of professional work; of the establishing of clinical centres and small observation hospitals; of the encouragement of scientific work and laboratory investigations, and, above all, of the establishment of county schemes of nursing of the sick upon a national basis. These are all questions of two-edged import, and in those bodies which possess the power to unduly sharpen or to blunt the edges great good may result from the presence among the councillors of members of our profession whom we may reasonably regard as at least holding a watching brief in the interests of the profession.

From activity within the sphere of our own profession to an activity within a sphere which engages in the solution of questions of national and local importance appears to me to be a normal evolutionary step, and it is one which members of our profession should be more and more prepared to undertake. The inspiration of the scientist, together with the legislative effort of the statesman, but map the road the nation travels. It is for us to aid in the construction of the road; it is for us to test and strengthen its "macadam," and it is for us to make it easy of gradient and smooth of path for those who travel it. And in all this, not "harnessed like yoked oxen to some difficult task" (Bergson), but cheerfully giving our best efforts in the interests of humanity in the true spirit of Terence's words—"Homo sum, humani nihil a me alienum puto" (Nothing which relates to humanity is alien to me).

REFERENCE.

¹Osler, *Man's Redemption of Man*, p. 15.

EAST AFRICA AND UGANDA BRANCH.

OBSTETRIC MEDICINE IN UGANDA.

By A. R. COOK, M.D.,

President of the Branch; Senior Physician to the Mengo Hospital, Uganda.

GENTLEMEN,—Before commencing this paper I must thank you heartily for the honour you have bestowed upon me in electing me as the first President of the newly constituted Branch of our great parent Association, an honour which is all the more welcome because I know it is for no personal reason, but rather an expression of your kindly interest in the work of this hospital which my colleagues and myself delight to serve. And let me add that the very inauguration of this the latest Branch of the British Medical Association is in itself a sign of the times. When Speke and Stanley first made known to an astonished world the great lake regions of Central Africa, at a point of time so little removed from our own day that it is within the memory of middle-aged men, who could have foreseen that this little kingdom of Uganda would become one of the brightest and most valuable assets of the British Crown in the whole of the vast district known as Central Africa? Politically, commercially, and from a missionary standpoint, not to say geographically also, it may be looked upon as the hub of the continent of Africa. What so fitting, then, as that our premier Medical Association should have a Branch in this remote but important spot? Placed as it is upon the intersection of the great trunk roads from north to south and east to west, it must inevitably have an important say in all matters of continental hygiene and epidemiology. No greater tribute could be paid to the present medical advisers of the Government in Uganda than the extraordinarily successful way in which the scourge of sleeping sickness, which burst like some devouring flood upon us a few years ago, has been all but abolished, or at any rate so lessened as to have lost its menace, and this entirely through the wise administrative measures suggested by the principal medical officer of this protectorate and his colleagues, so many of whom we rejoice to see with us to-day.

Considering its small size, Uganda has bulked largely in the eyes of the medical public. I need not remind you that the cause of sleeping sickness was discovered here, and Colonel Sir David Bruce added fresh laurels to his name by the discovery at Entebbe of its association with *Glossina palpalis*. We have had commission after com-

mission sent out by the Royal Society and the Colonial Office to elucidate the nature of this, and to grapple with the problems of how to check the ravages of syphilis. Dr. Wiggins, the Acting Principal Medical Officer, and Captain Keane, R.A.M.C., have drafted, and succeeded in getting passed into law, a set of rules for notification and control of this fell disease; we wish Captain Keane and his colleagues every success during the coming year in their venereal hospital at Mulago. Again, we remember how the cause of African tick fever was independently discovered in Uganda; and so I might go on. We have had so much recently, however, on diseases involving microscopical research, bacteriology, and chemotropism, that I have selected a simple clinical subject for my paper—namely, obstetrical practice in Uganda. It deals with problems with which every one of us may be confronted suddenly and in which proper treatment is of incalculable importance.

The Church Missionary Society, under whose auspices this hospital is run, early perceived the importance of medical work as an integral part of its mission, and an Edinburgh graduate, Dr. John Smith, sailed as a member of the first party in 1876. He, alas! perished of dysentery at the south end of the lake on the very threshold of his work. The next doctor was another Scotsman, Dr. Felkin, who joined the society for a year in 1879. The party to which he belonged was assisted in its passage to this then little known country by General Gordon, who was in charge at Khartoum. He is joint author of a most illuminating book on Uganda, though it has long been out of print. Dr. Gaskoin Wright came in 1891, till invalidated home from blackwater fever in 1893. Dr. Rattray came for a brief visit in 1895, but it was not till the following year that arrangements could be made for definite hospital work to be started. In that year my wife and myself arrived, and the advent of my brother in 1899 ensured the continuity of the work. From the commencement we have kept careful notes and statistics of all cases, and it is from these that the following paper has been compiled.

The first hospital was opened in May, 1897, and, though we soon gained the confidence of the people, largely, no doubt, owing to the labours of our predecessors, yet it was long before they brought their midwifery cases to us. This was due partly to the act of confinement being so mixed up with their religious customs that it was looked upon as more requiring a witch doctor than a medical practitioner. For this reason we had to attend all our early cases at their own homes, either in flea-ridden rooms or—a very much preferable place—in the banana plantations beneath the stars. The early cases were therefore few and far between, and usually of such a nature that surgery could not be expected to do much for them—for example, cases of labour obstructed for several days, etc. My first case was one in which there had been a stillborn child two days before; the woman was walking about with retained placenta, and the vagina plugged with a huge piece of banana stem. The third was a case of contracted pelvis; the woman had been two days in labour, and had previously borne twelve children, not one of whom had survived birth. Forceps delivered a living child, but it only survived a short time; three years later the woman became pregnant again, and, taking her into the hospital, we succeeded in delivering a living child. The numbers for the first eight years show how gradual was the process of allaying their fears and removing their ignorance. In these years we saw respectively 6, 8, 37, 44, 94, 107, 117. It was not till 1906 that we topped the 200 line, and we have not yet reached 300 in one year.

Women confined at home were usually delivered in a kneeling position, the child being received in a bark-cloth. The cord was cut with a sharp strip of reed, and no ligature was placed round it. The long distances women in labour would travel in later years to reach the hospital to be delivered there is almost incredible. One such case residing twenty miles away when labour pains set in started off cheerfully for the hospital, reaching it in triumph five minutes before delivery. Very often, owing to the stimulus produced by walking, the confinement takes place *en route*, and the woman steps aside into the nearest banana plantation, and after all is over wends her way on to the hospital, either carrying her newborn infant herself or getting some compassionate friend to do so.

Our first lying-in ward was a very primitive structure, and at the time of the Nubian rebellion, when the wards

were overrun with wounded people, the same chamber had to do duty as an operating room, an obstetric ward, and a *post-mortem* room. When I add that the walls were of reed and the windows shutterless, you will understand that the cases did almost invariably well. At that time the railway to Uganda had made only slight progress, all goods had to be carried up on men's heads, and the journey from the coast was a three months' march, instead of a three days' pleasure trip as it is now by rail and steamer. Cement floors and corrugated iron roofs were not to be thought of, nor iron bedsteads. It was not until the rails reached the east side of the lake in 1901, and steamers were placed upon it, that such luxuries could be obtained.

This paper is based upon the statistics of 2,232 cases, of which only 80 were European. The first point that emerged was unexpected. *A priori* it was imagined that the average native confinement would turn out to be easy. The head of a Bantu infant was known to be small, the women are well formed, and many of them graceful in carriage. Experience soon showed that often labour was very far from easy, and careful pelvic measurements showed that this was due to contracted pelves. Rickets is practically unknown in the country, so that we are driven to look farther afield for the cause. I believe myself it is due to the almost universal custom of making even little children carry heavy pitchers of water or bundles of plantains on their heads. That component of the weight transmitted through the vertebral column, which acts parallel to the pelvic brim, would tend to force in the sacrum between the two iliac bones, and thus to diminish the antero-posterior diameter of the pelvis. Perhaps correlated with this is an unusual number of unreduced occipito-posterior presentations. I may note in passing that the proportion of pelvic contractions found in the Baganda is entirely borne out by negro statistics in America. Thus Whitridge Williams, in his book on obstetrics, says (p. 16):

My own experience in Baltimore has shown that contracted pelves occur several times more frequently among black than white women (21 per cent. to 7 per cent.).

And again (p. 583):

One reason for the marked frequency of contracted pelves in Baltimore is probably due to the fact that more than half our patients are coloured, 941 in the entire series being white and 1182, black women. In the former we found 6.9 and in the latter 18.82 per cent. of contracted pelves.

In presenting the following statistics I am only giving the essence of thousands of observations, for except to an enthusiast figures are apt to be tedious. Against each percentage I have put, as far as possible, the corresponding English figures.

Presentations.

Variety.	No. of Cases Noted.	Percentage of Total Cases.	English Figures.
L.O.A. ...	676	44 of V.	60.9 % of V.
R.O.A. ...	671	44 of V.	22.3 % of V.
R.O.P. ...	110	7.1 of V.	14.2 % of V.
L.O.P. ...	42	2.7 of V.	2.6 % of V.
Unclassified V.	43	—	—
		Percentage of Total Presentations.	Percentage of Total Presentations.
Total Vertex ...	1542	93.2	96.9
Breech ...	81	4.3	3.33
Brow ...	3	0.4	0.06
Face ...	6	0.8	0.4
Shoulder ...	22	1.3	0.23

The chief point to notice here is that the L.O.A. and R.O.A. positions are approximately equal, and that in a large number of cases the percentage of V. to total presentations, and of L.O.P. positions is remarkably close to the English figures. The few unclassified V. cases are those attended by the native nurses in training before one of us could get to the case. It is, I think, a matter of pardonable pride in the training of the very raw native material that comes to us for training that this item has largely been

eliminated in the last few years. Some native girls show a remarkable aptitude for midwifery work. Footlings and arm are included under breech and shoulder respectively. The larger percentage of these is no doubt connected with the increased proportion of contracted pelves.

Twins have occurred once in every forty pregnancies, and this is interesting, as multiple pregnancy appears to be commonest among the most fertile races. According to Galabin, in Ireland the proportion is about 1 in 60; in England only about 1 in 110. The highest rate was met with in Dublin, 1 in 57; the lowest in Naples, 1 in 158. We have only had one case of triplets, and one monster of the anencephalic variety.

Miscarriages and abortions form only a small proportion of our in-patients, but that is only because they come to us either with retained placenta, or when a woman is very anxious to have a child and symptoms of miscarriage have already set in. Owing to the almost universal infection of syphilis miscarriages among out-patients are appallingly frequent.

Sex of Infant.—Male, 51.5 per cent.; female, 48.5 per cent. This, according to the *Encyclopaedia Britannica* (article, Population), is exactly what occurs in all Western nations, the proportion being rectified in later years, when, owing to the higher mortality in boys than girls, the female sex comes to predominate.

With regard to *parity* the returns are not so numerous as one could wish, for it has not always been noted, but the proportions are as follows: Primipara 33 per cent., 2-para 20.6 per cent., 3-para 15.5 per cent., 4-para 10.3 per cent., 5-para 7.6 per cent., 6-para 5.5 per cent., 7-para 2.8 per cent., 8-para 1.8 per cent., 9-para 0.9 per cent. We have noted eight 10-para, seven 11-para, three 12-para, two 13-para, one 16-para, and one 17-para. These figures do not represent anything like the true fertility of the Baganda, for the obvious reason that the more children a woman bears safely the less likely she would be to come to the hospital for treatment.

Obstetric Operations.

Forceps ...	329 times (14.5 %)
Perineorrhaphy ...	205 (9 %)
Digital removal of retained placenta... (A significant fact when one remembers the prevalence of syphilis.)	88 (4 %)
Curettage ...	19 cases
Internal version ...	26 "
Craniotomy ...	11 "
Cephalotripsy ...	5 "
Decapitation... ..	4 "
Caesarean section and Porro... ..	6 "
Embryotomy ...	1 case

Measurements of Fetal Skull and of Maternal Pelvis.

(The average of a large number of observations are given; as before, the English measurements follow for comparison.)

Fetal skull:	English.
Suboccipito-bregmatic ...	3.55 in. ... 3.8
Occipito-frontal ...	4.5 " ... 4.6
Maximum vertico-mental ...	5.3 " ... 5.0
Biparietal ...	3.5 " ... 3.7
Bitemporal ...	2.8 " ... 3.4
Pelvic measurements:	
Anterior interspinous ...	8.66 in. ... 10.0
Maximum intercrystal ...	9.7 " ... 10.75
External conjugate ...	7.0 " ... 7.5
Internal conjugate ...	3.56 " ... 4.25
Diagonal conjugate ...	4.4 " ... 4.9

The definition of contracted pelvis is a somewhat disputed point, but most authorities accept Litzmann's classification, who considered as contracted all pelves having a conjugata vera of 10 cm. (4 in.) or 9.5 cm., or less, according as they were generally contracted or flat respectively. The matter is not quite so simple as this, however, for the varying size of the head in different races must be considered. A glance at the average measurements of the fetal skull given in the table will show that there is ample room in the Muganda pelvis for a head to pass in a well-flexed position, whereas it would suggest that in an unreduced occipito-posterior position there might be grave difficulty, and this is what experience has actually shown.

The external pelvic measurements are small, and here it is again interesting to quote Williams:

In coloured women, had we estimated the frequency of contracted pelves from external measurements alone, our would have shown a frequency of about 75 per cent., whereas

internal pelvimetry showed that in reality it was only 18.8 per cent.

But after all, from a practical point of view, we do not need academic discussions on minutiae of measurements, and looking at our figures we find that forceps had to be used in 14.5 per cent. of all cases. This does not take into account, of course, the smaller degrees of contraction the natural forces were able to overcome.

Average length of child ...	18½ in. (English 20.5 in.)
Average weight of child...	6.8 lb. (English 7 lb.)

Complications Affecting Pregnancy.

The one maternal disease the influence of which dwarfs all others in this respect is syphilis. Turning to our outpatient register, we find that no less than 43 per cent. admit the existence of this disease in one or both parents, and these figures may be a little under the truth. Owing to the almost universal prevalence of the disease in Uganda, many of these are cases of syphilis insontium. The result is an enormous number of miscarriages, a still more appalling morbidity both of the mother and the newborn infant, and a very serious check to the natural increase of the population. I will quote from my brother's report of the hospital for last year. He says:

It has been calculated that 70 per cent. of the children in Uganda either die from premature birth or are stillborn, or die in the first week after birth. In England the corresponding infant mortality is 14 per cent.—that is, in Uganda nearly 3 children die to 1 that survives; in England 6 children survive to that dies. Out of 30,000 successive cases attending Mengo Dispensary and 10,000 attending in Toro, the percentage of sufferers from venereal diseases, was the same in each country, namely, 22 per cent.

No facts could more clearly show the far-reaching influence for good of the recent legislation initiated by the medical advisers of the Government.

Ankylostomiasis is a most serious complication when the sufferer only presents herself after labour has set in. Nearly all the cases die, whereas if they come during pregnancy there is a fair chance of saving them.

Tick fever generally produces miscarriage owing to the high temperature obtaining during the attacks, but we have had several deaths from this complication when it happened to occur during delivery. Another serious danger is the administration of native drugs. My brother, Dr. J. H. Cook, has taken great interest in these. To quote again from his report, he says:

Another great evil in the country is the administration of potent native drugs to parturient women. Not unnaturally the women of the country, in their hour of need, seek their own native remedies, drugs which accelerate labour. But they do not realize that such drugs are very dangerous. They contain potent alkaloids, and the natives take them in unmeasured doses, and take them at the wrong time. Their friends administer them, and they often clamour for them themselves. Many a case of easy labour has been rendered difficult by these drugs, and not a few, alas! have terminated fatally for the child, or for the mother, or both, simply owing to the taking of these special native drugs. In the space of two or three months in Mengo Hospital last year five mothers lost their lives in this way. Again and again has an autopsy revealed the same sad fact—killed by their own drugs, administered by their relatives often in enormous doses. . . . The difficulty is that these drugs are not given as poisons with felonious intent, but are often demanded by the patient, or administered by her nearest or dearest relatives as the correct and orthodox thing to do. . . . The matter was reported to the Government, and most courteously and promptly taken up by the Principal Medical Officer. Specimens of these native drugs, collected from native chiefs by Dr. J. H. Cook, have been forwarded to Entebbe and sent by the Government to the Imperial Institute for analysis, and proved to contain potent alkaloids, though further physiological tests are still in progress. Lectures have been delivered before the native parliaments in Mengo and Toro, illustrated by black-board diagrams, books, microscopic specimens, and illustrative cases, to try and awaken the native chiefs, at all events, to the seriousness of the evil.

Ruptured uterus from obstructed labour outside the hospital is met with from time to time, but unless this grave complication has only just been sustained, the prognosis is very gloomy.

English Confinements.

During the early years of our stay here, Uganda was no place for a prospective English mother. The country was too unsettled, the comforts obtainable too few. The first English confinement was in 1901, and turned out to be a breech with extended legs. The infant had to be extracted

with a blunt hook, but is now a cheerful young schoolboy. We have attended only some eighty cases, but they have included all the ordinary complications. The only peculiarity that we have noticed as compared with labour in a temperate climate is that the commencement of the labour by premature rupture of the membranes is very common here. Much has been said upon the supposed danger of giving quinine during pregnancy. Our favourite dose of this drug in pregnancy where malaria is rife is 5 grains daily. When fever is actually present as a complication, 5 grains of quinine hydrobromate twice a day by the mouth, or in more serious cases hypodermically, are quite safe if guarded by the simultaneous administration of suitable doses of potassium bromide and opium. Time will unfortunately not permit me to deal with individual cases, or I could tell of the interest excited in the native mind by our first Caesarean section, fortunately a successful one, both mother and child surviving. I could speak, too, of the interest of incubating premature infants in the Hearson's incubator intended only for bacteria; we have reared them when only weighing 2 lb., and one child, at any rate, who was apparently only six months. The result to the country of so many women passing through the maternity wards yearly has been excellent from an educational point of view, as they all receive simple instruction as to how to manage their children just at a time when so many hapless children succumb for want of a little simple knowledge.

I will conclude with a very warm expression of gratitude to our energetic secretary, Dr. Strathairn. It has long been a commonplace in Kampala that if anything needs to be done well it must be entrusted to him, and I tremble to think what his engagements are in this festive week, yet he has cheerfully undertaken all that is making this first meeting of ours as a corporate body a success. As a profession "united we stand, divided we fall," and the numbers attending this meeting augur well for future ones.

A PLEA FOR SURGICAL WORK IN THE COTTAGE BY THE COUNTRY PRACTITIONER.

By J. EUSTACE WEBB, M.B., C.M.ABERD.,
LOOE, CORNWALL.

TWENTY years' experience in general practice, in a country seaside town and agricultural district, very much isolated from a big centre, has, with an ever-increasing force, impressed me with the need of encouraging the man who takes up general practice in the country to do his own surgical work on the spot, no matter how lowly the dwelling from which the appeal comes. If the custom of the country practitioner is otherwise, the sensitive and conscientious worker must experience the bitterest disappointment when he recollects some lost opportunity to relieve human suffering and to prolong human life. To-day this appeal seems to be the more necessary, for the experience of the working of the National Insurance Act has shown that no pecuniary incentive is given to a man to do the higher class work connected with our healing art. We want to infuse into men the spirit of unshrinking self-denying work, and I ask what higher destiny can be allotted to any of us than the destiny which imposes on us the necessity of well-balanced intellectual and physical work as found in the life of a good general practitioner?

To act continuously on the dictates of reason with a strong unbending will is true heroism, and impediments are made opportunities by the man of resolute will; not only are the intellectual faculties rendered brighter and more keen by every struggle, but every obstacle overcome signalizes the fresh acquirement of power. The class of surgery I am pleading for, as the right to be commanded by the working classes, brooks no delay. Never for one moment of the workaday life must the practitioner lose sight of the intrinsic value of each human being—man, woman, or child—who applies for his assistance. Success in life as a country practitioner depends upon patient, uniform, and unflinching effort to serve those entrusted to his care, and medicine and surgery has never been really advanced by any other means. His aim is to prolong life and avert the tendency to premature death, and the