became known as "of Binend". I have used the title "of Megginch" and it is right to identify him in that manner for there are, I am glad to say, still Drummonds of Megginch. I cannot sufficiently express my indebtedness to the wife of Captain Humphrey Drummond for assisting me with my enquiries. Suffice it to say that, just as Robert Eliot and Adam Drummond were "conjoined" in the professorship over 250 years ago, so should the lady be "conjoined" in the authorship of this paper.

Adam Drummond was chairman of the Surgeons from 1746–48, a recognition of the high regard in which he was held. He died at the close of 1758 and lies in Greyfriars Kirkyard within a hundred yards of his illustrious predecessor, James Borthwick —two surgeon-apothecaries of distinction who adorned their profession and left their mark for all time.

The second speaker at the meeting was Mr. Noel Kretzmar, F.R.C.S.Ed., who read a paper with the title:

AN INTRODUCTION TO THE HISTORY OF MEDICINE ON THE DIAMOND FIELDS OF KIMBERLEY, SOUTH AFRICA

Nearly two thousand years ago the Roman historian Pliny wrote, "Ex Africa semper aliquid novi"—Out of Africa there is always something new. If this was true then of the whole of Africa, how much more true is it of that small area in the heart of Southern Africa where the fantastic saga of the discovery and development of the diamonds took place just a hundred years ago.

It all began with the discovery of the O'Reilly Diamond on the banks of the Orange River near Hopetown in 1867. That spark was seen far and wide and attracted adventurous spirits from all over Africa and other parts of the world. They arrived on this barren area of veld with great hopes and met with varying degrees of success. The diggers followed up their finds northwards along the Orange River, until they discovered that both banks of the Vaal River, near where Barkly West now stands, were diamondiferous. All moved there so that, but 1870, there was a tent-town and digger population at Pniel, as it was then called, of about seven thousand people.

But the discovery of the "dry diggings" in 1871 set forces in motion round the world like the explosion of an atomic bomb. Twenty-five miles to the south-west of Pniel where Kimberley now stands, on an area covered by four farms, in a piece of desert, opened out the greatest Eldorado of diamonds ever seen before or since. Diamonds of good size and quality were found by scratching the surface, then larger quantities were found after removing a few feet of topsoil and exploring the yellow ground below. This yielded more and more diamonds as they went deeper and created a still further sensation. Overnight diggers abandoned their claims at the river and crowded to the new spot, so that in two months a piece of barren dry veld had to accommodate over twenty thousand souls. They lived in shacks, in tents, in the open air. At any moment the valuable ground on which they lived was liable to be excavated for diamonds and replaced by a large hole.

This territory had not been considered worth having by the neighbouring powers

and had been accepted as the homeland of the Griguas, mainly under the chief Nicholas Waterboer. But now that it had become so very valuable, the Orange Free State, the Transvaal and the Cape Colony showed a lively interest in it. The Orange Free State sent a Landrost over to Pniel, the Transvaal claimed the northern part of the field, and Sir H. Barkly, governor of Cape Colony, under the guise of protecting the rights of Waterboer, annexed the territory to the Cape Colony in 1871, and made it a separate colony under its own Lieutenant-Governor, Sir Richard Southey, in 1873. In 1880 it was again annexed to the Cape Colony.

How order was established out of the chaos; how the occasion threw up the men, how Cecil Rhodes arrived on the diggings a poor sickly young man, and in less than two decades established himself as a king, owner and master of the diamond fields; how he was helped by his friend Alfred Beit, opposed and then assisted by Barney Barnato; how he influenced everybody around him including Dr. Jameson, who eventually was his emissary to Mashonaland and was instrumental in gaining the concession from Lobengula for the chartered company—after generous doses, it is said, of morphine to relieve the old chief's gout; how all these developments took place is a fascinating and enthralling tale but strictly not relevant to our story today.

Here, then, this mass of humanity was concentrated on a small piece of bare desert veld, with no water, depositing their garbage and their excreta, thereby contaminating the little drinking water in the few wells they had dug. Small wonder that an epidemic of what, for want of a clearer diagnosis, was called "camp fever" broke out. It was a combination of malaria, typhus, typhoid, dysentery, tuberculosis, syphilis, gonorrhoea and others such as measles, chickenpox, smallpox, pneumonia and other common or garden infections. It spread like wildfire because there was no central authority with the knowledge of how to cope with it. The matriarch of the family with her stock of Dutch medicines coped well enough in the palmy days of scattered populations, but this was another matter. Help was urgently required and there was plenty of money to pay for it from the diamonds, but, until qualified medical men arrived, quacks reigned supreme while the natives had their witch-doctors and medicine men.

The first qualified doctor to arrive on the diamond field was Dr. B. W. Hall who came from Cape Town and settled on the Vaal River diggings in 1868. Like so many of the doctors who were to follow him to the diamond fields he was an adventurous, robust character to whom the open air, and wild life of the diggers appealed. He stayed for seven years and then went on to a further exciting career as a medical officer in the native wars, in the Basuto War, and finally settled on the goldfields. The next to arrive on the new diggings were Drs. Otto and Dyer and by the end of 1871 they were joined by Dr. J. W. Matthews.

Matthews was an interesting and dynamic character. Having finished his medical studies at Edinburgh he arrived in London to sit his final examinations. On his arrival in London he heard that there was a boat leaving for Africa the next evening and the ship's surgeon was ill. To be appointed a ship's surgeon the candidate had to have not only a medical diploma but to sit a special naval examination as well. But, by the next afternoon Matthews had both his certificates and boarded the boat. Arriving in Durban he waited for a return ship to Britain. There he heard of the diamond

fields and made straight for Kimberley. He spent twenty years in South Africa, first on the diamond fields doing very good work as a doctor and later, in Parliament in Cape Town, he helped the cause of medicine considerably. He subsequently went to America, came back for the gold rush to South Africa and finally settled in Johannesburg.

But doctors kept coming and going to the diamond fields, some such as Otto and Dyer remaining there for the rest of their lives, others using their profession merely as a sideline. One way or another there were soon about twenty-two qualified doctors on the diggings.

One who is worthy of mention is Dr. James Perrot Prince. A Canadian, he became an American citizen in order to take part in the American Civil War, becoming a regular army surgeon. He decided to come to South Africa for health reasons and settled in Kimberley. His claim to some fame is that his practice becoming too big for him, he appealed to the Dean of University College Hospital Medical School, London, to recommend a suitable young doctor as a partner. The Dean sent out to him none other than Dr. Leander Starr Jameson, who arrived in 1878. Jameson, with his personal charm, ready wit and ability as both physician and surgeon, soon became the most popular man and doctor on the diamond fields, and had an enormous practice which he carried on for nearly ten years. Like so many others he fell under the spell of Rhodes and gave up medicine to join Rhodes in his ventures. After a stormy political career, during which he saw the inside of a British gaol for his part in the Jameson Raid, he later became Prime Minister of Cape Colony. He returned to Britain in 1911 where he died the following year. His remains were subsequently re-interred in the Matopos near Bulawayo and he now lies buried there next to his friend and associate, Cecil John Rhodes. So much for some of the doctors.

The first hospital on the diamond fields was established at Pniel in 1868, first a wattle and daub building and then a stone building which functioned until 1870 when it was burned down. By this time the diggers had left for the dry diggings and there was therefore no point in replacing the hospital at the river. The first attempt to provide a hospital at the dry diggings was made by a Roman Catholic priest, Father Diddien, who erected a tent to serve as a hospital at Bultfontein in 1871. He tended the sick himself, with such casual help as he could raise. When his tent hospital was blown over, the diggers joined him in putting up a bigger tent. Conditions were primitive; the patients lay on the sandy floor, there being neither beds, covers, tables nor utensils. They lay side by side with their several diseases but without any skilled nursing, for there were as yet no nurses. Pressure by the diggers on the authorities persuaded them to erect a further tent at the local gaol as an official hospital, but conditions in this were even worse than in the other tented hospital.

The diggers then formed a central hospital committee and by the end of 1871 they had established a hospital of twenty beds on the racecourse with three qualified medical men, Drs. Matthews, Dyer and Grimmer, who attended patients gratis. By 1872 this primitive hospital was abandoned and a wood and iron, then a raw brick and iron building was erected and called the Diggers Central Hospital, with twenty-six beds, on the site of the Du Toitspan compound where the present Kimberley Hospital stands.

Meanwhile the government, again under pressure, established a brick and iron building on a site adjoining the Diggers Central Hospital in the same compound. This hospital was called the Provincial Hospital, later changed to the Carnarvon Hospital, and had fourteen beds. It was opened in 1874 because during the building process part had been destroyed by fire. By 1875 there were therefore two hospitals serving the dry diggings, the Diggers Central Hospital with twenty beds run by a committee of diggers, and the Carnarvon Hospital of fourteen beds administered by the government. The two hospitals stood side by side, each battling against odds with good doctors but with no nursing service. Then an event took place which was to have wide repercussions on the diamond fields, the Cape Colony and the rest of the world.

In 1876 a letter from the Anglican bishop of Bloemfontein to the Governor, Major Owen Lanyon, offered the services of ladies and nurses of the sisterhood of St. Michael and All Angels as nurses to the Kimberley Hospital under certain conditions. The nurses were to receive no pay, would not interfere with the religious beliefs of the patients, and would nurse all races. The first nurse to come to Kimberley was Sister Louise who did great and devoted work until 1879 when she was relieved by Sister Henrietta Stockdale. Then began a decade which established the Kimberley Hospital as the largest regular hospital in the Cape, bigger than the Somerset Hospital in Cape Town, and the foremost training school for nurses in the country.

Sister Stockdale was a handsome woman of outstanding ability, great strength of character and clearness of vision, very much in the form of Florence Nightingale. But whereas the latter came of a wealthy aristocratic family with contacts with the highest authorities in the land, Henrietta Stockdale was the daughter of an impoverished Anglican priest. She qualified as a nurse in London and subsequently became interested in mission work in Bloemfontein. Although she had to start from the very bottom on her arrival at Kimberley, by dint of her personality, wisdom and foresight, she established herself as the authority on nursing and was soon consulted by doctors, hospital boards, the inevitable Cecil Rhodes, the government and parliament in Cape Town. Surveying the chaos at Kimberley Hospital on her arrival there, she immediately set to work to organize some sort of order. She had to have properly trained nurses, and good nurses would not do their work satisfactorily unless they had good quarters, food and training facilities.

She therefore set to work to recruit suitable women not only to work in the hospital but to train as nurses. With the help of Dr. McKenzie, a house surgeon, she instituted courses of demonstrations and lectures for her trainees both during and after their work. She organized annual examinations; at the end of their third year successful student nurses were awarded certificates as qualified nurses. The standard of work in the hospital rapidly improved and the doctors were enabled to undertake more major operations and treatments. She further raised money in the town by public subscription, and in due course she had built, first, a better home for the nurses, and second, a chapel where she worshipped with her patients and nurses. The fame of this training school spread, and Kimberley nurses were soon in great demand as matrons for outlying hospitals throughout the Colony, the Orange Free State and the Transvaal. Wherever these nurses went they instituted the same system of training and so increased the efficiency of nursing all over the country.

But still Sister Henrietta was not satisfied. She felt that there should be a national register of nurses containing the name of every qualified nurse, so that the public and medical men should at once know who was a registered nurse and could be entrusted with responsibilities and rewarded accordingly. She continually advocated this to her medical colleagues at Kimberley, to the hospital board, to Rhodes and to members of parliament in Cape Town and by correspondence in Britain. Strangely, she encountered much opposition to the idea of a register from doctors and members of the public in South Africa and also, ironically, from Florence Nightingale. All seemed to be afraid that registration would lower the status of nurses. But Sister Henrietta persevered with her campaign and with the help of Dr. Matthews of Kimberley and Dr. Attherstone of Grahamstown, who were both members of parliament in Cape Town, the Medical and Pharmacy Act was passed in 1891 establishing a National Register of Nurses and Midwives. This was the first register of its kind in the world.

Slowly other countries followed suit. The torch thus lit by Sister Henrietta is today being carried forward in similar manner by Charlotte Searle of Kimberley who has raised the standard a step further by making nursing a university degree course, opening higher vistas for nurses to work as doctors' assistants. Now, as Professor Searle, she is an internationally known and respected nurse.

In 1895 the nurses of the Anglican Mission were withdrawn from the Kimberley Hospital to make way for government nurses. Sister Henrietta Stockdale, with Sister Mary Watkins whom she had trained as a midwife at the Kimberley Hospital, started the St. Michael's Maternity Home in Kimberley, which, in turn, became famous in South Africa as a training school for midwives. So that, by now, with a midwifery department at Kimberley Hospital and the St. Michael's Maternity Home, Kimberley became unique in South Africa in having two midwifery training schools. Sister Henrietta died in Kimberley in 1911, the South African Nursing Association accepting the responsibility of looking after her grave in perpetuity. Her chapel has been declared a national monument and in 1969, a statue, donated by Dr. J. Penn, was erected to her memory in the grounds of the Anglican Cathedral in Kimberley. In 1972, at a nurses' graduation ceremony at Kimberley, it was announced that a Nursing College to be known as the Sister Henrietta's Nursing College is to be erected there to her memory.

But, to return to the hospitals. The Diggers Central Hospital and the Carnarvon Hospital, which we left standing side by side in 1875, were soon the subject of possible amalgamation. This happened in 1882 when they became the Kimberley Hospital, administered by government through a board of which Rhodes and Dr. Jameson were members. After an ambitious plan of expansion, so that by 1883 there were 160 beds and a staff of fifty, the board was bankrupt, creditors demanded their money, and bailiffs collected the furniture. The board was sacked and a Mr. Judge was appointed by government to get the hospital out of its difficulties. To help the finances the Cape Provincial Government contributed funds and also reintroduced the "Hospitals Tax" of one shilling per head per month on every native working on the diamond fields. This tax the diggers had refused to pay in 1874 but now the mining companies undertook payment. Gradually with the help of the public and

the De Beers Company, extensions were made to the hospital and by 1888 an average daily number of 255 patients were being treated. A nurses' home, maternity ward and tuberculosis ward were by this time in operation, there were two house surgeons, four visiting surgeons and, for the first time in South African history, specialist appointments made for an ophthalmologist and pathologist. Until 1899, when the Boer War broke out, further improvements took place there.

At this stage let us catch up with outside events which influenced doctors and medicine in the diamond fields.

The first was what came to be known as the Smallpox War of 1882, an extraordinary episode involving medical men. An epidemic of smallpox had broken out in Cape Town, and the mining interests feared that it would spread to the diamond fields and cause workers to run away so that the shares of the diamond companies would decline. Rhodes, therefore, without any legal authority, established a quarantine station at Modderriver and put the rugged, aggressive and adventurous Dr. Hans Sauer in charge. Sauer promptly closed all other river crossings so that all travellers to Kimberley from the Cape were compelled to go through the Modderriver stop. If the secret intelligence showed that any travellers came from a district in Cape Town where there was smallpox, they were subjected to a primitive, though useless, disinfecting process of fumigation in a sulphur-vapour room for three minutes, before they were allowed to go on. Others had to show signs of successful vaccination, or be quarantined. In this way Sauer prevented fourteen cases of smallpox from going through to Kimberley. But in the process there were about 1,800 people held up at Modderriver from time to time and this lead to much argument.

Meanwhile, on the Transvaal side, a group of Portuguese native labourers on the way to the mines were discovered at Klerksdorp to be sick and dying. Doctors from Pretoria, Potchefstroom and Kroonstad, who were sent to examine them, declared the disease to be chickenpox and allowed them to go on. By the time they reached the outskirts of Kimberley many had collapsed and were halted at Felsted's farm, nine miles away. Controversy arose as to the nature of the disease. A committee of six doctors was appointed by the governor, headed by Drs. Matthews and Jameson who declared the disease to be chickenpox or pemphigus but certainly not smallpox. Consequently the patients were not isolated. Eventually Sauer declared that the disease was indeed smallpox, reported this to the government, and as a consequence the Public Health Act of 1883 was passed. This established a Board of Health at Kimberley responsible for public health, which enforced notification and vaccination. Medical men accepted these requirements and gradually the epidemic subsided, although not before 2,300 cases had occurred with 700 deaths. So ended the story of the "Pink Slip" doctors, so called because they had issued pink slips to the public intimating that the disease at Felsted's farm was not smallpox.

The next event was the Rhinderpest epidemic of 1895. The disease entered Africa through Somaliland in 1870 and spread down the continent. By 1895 it had reached the environs of Kimberley, killing the cattle, including those belonging to the De Beers Company. Rhodes, with the help of his friend, Matabele Thompson in the Cape parliament, persuaded the government to invite Robert Koch to come to Kimberley. When Koch arrived there with his assistant, Rhodes immediately put

premises and native boys at his disposal and by February 1897, Koch had made the discovery that, if a small quantity of bile from an animal recently dead from the disease was injected into a healthy animal, this provided about six months' immunity.

During the Boer War the Kimberley Hospital was used as a base hospital and more than a thousand soldiers were treated there, while emergency hospitals were also fitted up for the treatment of typhoid. At the end of the war the fortunes of the hospital fluctuated with the fortunes of the Cape Colony and the diamond market. During the First World War the hospital again became a base hospital, being used especially during the campaigns in German South West Africa and German East Africa. The pandemic of influenza which followed closely on that war hit Kimberley severely and during the first three days of the outbreak 294 people died in the hospital.

Further developments to the hospital took place during the period between the First and Second World Wars, including the erection of a new maternity block, the establishment of an X-ray department and the purchase of radium for therapy purposes. The hospital became yet again a military hospital during the Second World War, during which the West End Hospital was opened for non-white soldiers. This latter hospital in 1948 became a civilian hospital for the treatment of chest disorders in non-Europeans of the Northern Cape. Under the direction of Dr. Sleggs, cancer of the lung known as mesothelioma was described as due to the asbestos dust from the mines in the Northern Cape.

During the 1939–45 war, the Kimberley Medical Practitioners Pool was formed. This was as a consequence of the desire of so many of the local practitioners to join the armed forces. An arrangement was arrived at whereby a committee of the senior practitioners left behind ran the practices of all the doctors in the town on a pooled basis. All the income, military and civilian, went into the pool, all expenses were paid from the pool, and the balance was divided monthly equally between the firms, so that each doctor, whether on service or at home, received the same income as he would have had had there been no war.

In 1943 a branch of the South African Blood Transfusion Service of Johannesburg was started and operated from a cottage in the hospital grounds at Kimberley. This small beginning has developed until now the service has its own modern premises, with an annual turnover of 10,000 pints of blood.

In 1951, after lengthy negotiations with the Provincial Hospital authorities in Cape Town, a training school for coloured nurses was opened at Kimberley Hospital. This proved an unqualified success and the hospital for the coloured population in Kimberley now has an almost complete nursing staff of coloured nurses, including the matron. The training given is the full one as laid down by the South African Nursing Council.

Finally, a word about medical organization. The Kimberley Medical Association in 1880 was practically the first such association in the country and lasted until about 1883. In 1888 the Kimberley doctors, most of whom had qualified in Britain, formed the Griqualand West branch of the British Medical Association. In 1893 when the Kimberley Exhibition was held, the branch invited all the doctors in the country to what turned out to be the First South African Medical Congress. Thirty papers were read and the formation of a South African Medical Association with a journal of its

own was discussed, the leading figures in this first meeting being Drs. Hellier and Arthur Fuller. When the Association was formed, the Griqualand West branch continued its activities, having representatives on the Federal Council, of which I am proud to say I am one. In 1953, the late Dr. J. P. Collins of the Griqualand West branch was elected president of the Association and acted as host to the Federal Council meeting that year.

If we in Kimberley can continue in the same vein as in the pioneering days of eighty years ago and subsequently, then historians may be able to write: "Ex Kimberley semper aliquid novi."

THE SEVENTY-SECOND ORDINARY MEETING

The Seventy-Second Ordinary Meeting of the Society was held at the Royal College of Physicians and Surgeons of Glasgow on 2 March 1973. A paper was read by Mrs. Helen Brock, Senior Research Fellow in the Department of the History of Science at the University of Glasgow, entitled:

JAMES DOUGLAS OF THE POUCH

In 1886 Sir Norman Moore in his biography of James Douglas in the *Dictionary of National Biography* remarked that "when the first living authority on midwifery in London, the latest writer on the peritoneum and two of the best known teachers of anatomy were asked where Douglas's description of the peritoneum was to be found, none knew nor whether it was he or his brother the surgeon who they daily commemorated." Since then the situation should have been improved by Bryn Thomas's excellent little book, *James Douglas of the Pouch and his pupil William Hunter,* published in 1964. This was largely based on papers acquired by William Hunter and now in the Hunterian Library of Glasgow University.[1] Time has permitted more information to be extracted from these papers.

James Douglas was born in 1675 at Badds, West Calder, near Edinburgh. He was the third child in a family of twelve. His father was the largest landowner in the district and of some social standing. By tradition the sons of the family went into the army or into the church. They were almost certainly unsympathetic to the Stuart cause, for the oldest son, Walter, is said to have left his studies at Utrecht, a haven for many Covenanters and Anti-Jacobites, to join the army of William of Orange, in 1688. His brother-in-law fought for William in Ireland.

Beyond the date of his baptism, nothing is known of James Douglas's childhood. In 1694 a James Douglas obtained the M.A. degree at Edinburgh.[2] On 28 March of that year a James Douglas was granted permission to go to Harwich and embark within fourteen days for Holland,[3] but if this was our James Douglas he did not stay in Holland long, for by June he was back in Badds making jottings in a little notebook. Aphorisms, verses, imagined romantic situations, they show Douglas at nineteen years as a sophisticated, shrewd and witty youth. One example must suffice: "To know things and not to practice them is not to be a philosopher but a grammarian."