James Joyce was born in Dublin, Ireland, 100 years ago. His celebrated novel, *Ulysses*, was published by Shakespeare and Company, the bookstore established by Sylvia Beach in the rue Dupuytren, a name redolent of history, but sited in the rue de l'Odeon when the book appeared in 1922. Writing to a friend, Joyce described it as an « encyclopaedia », and before delving into the well-stocked bran-tub his fragmentary connection with medical education should be recalled.

In *A Portrait of the Artist as a Young Man*, James Joyce describes his father as having been « a medical student, an oarsman, a tenor... » and gives an account of their visit together to Queen's College, Cork, where in the anatomy room he reads the word « foetus » cut into a desk. « The sudden legend startled his blood... » This book refers, too, to opportunities open to newly-qualified doctors « the chances of getting places on ocean liners, of poor and rich practices ».

Joyce enrolled at the Catholic University Medical School, Cecilia Street, Dublin and at l'Ecole de Médecine in Paris but his sojourns in both were brief. He couldn't pay the fees and he didn't understand chemistry. A more lasting influence stems from his friendship with a group of medical students in whose company he spent his leisure time during his arts course at University College. He acquired a smattering of medical knowledge from them and in his omniverous way he amplified it for his novel from textbooks.

His ill-health and his daughter's necessitated consultations with many doctors. Albert Vogt, the Swiss ophthalmic surgeon who operated on him in Zurich refused any fee other than a signed copy of *Ulysses* but was rewarded too, by being mentioned in *Finnegans Wake* where he is worked into « Ann van Vogt » a modification of Ireland's legendary Shan Van Vocht. He regarded Jung and Freud with a good deal of scepticism — the former was consulted on his daughter's behalf — and refers to them in *Finnegans Wake* in the phrase « when they were young and easily freudened ».

*Ulysses* is a multi-coloured word-tapestry woven on cloth of gold, its main design obscuring sub-themes and allegories. It is a prose cathedral whose gargoyles and angels are lost in the massive masonry of the total structure. Joyce describes the events of a single day in Dublin, 16 June 1904, and the meanderings of two men, Leopold Bloom and Stephen Dedalus, which lead eventually to Ithaca. He presents, too, like an obsessed tailor finishing off an expensive suit, hand-stitching that lies unseen — but turn the lapel and it is there.

The sub-themes I propose to disclose are those of medical history and nosology though not formally conceived as such by Joyce. The threads of history or, since I have mixed my metaphors, the gargoyles, are in two groups : familiar
historical celebrities of antiquity and later; and contemporary figures who have since entered the Pantheon. The nosological handsewing delineates clinical commonplaces of 1904 which would be unfamiliar to today's medical students. The doubtful standing of Dublin's students, incidentally, is summed up in the exclamation of a bawd in Nighttown: «Trinity medicals. Fallopian tube. All prick and nos pence» (427) (1).

Dublin's Lock Hospital no longer exists. It was for females with syphilis and a prostitute in the novel refers to «Mary Shortall that was in the lock with the pox she got from Jimmy Pidgeon in the blue cap, had a child of him that couldn't swallow and was smothered with convulsions in the mattress and we all subscribed for the funeral» (482).

There are many direct references to syphilis and «clap», diseases which were an occupational risk for soldiers causing Joyce to repeat a nationalist politician's protest concerning «an army rotten with venereal disease» (74). Mercury is the major remedy and Leopold Bloom wonders «how a wretched creature like that from the Lock Hospital reeking with disease, can be barefaced enough to solicit...». «In this country», Stephen Dedalus replies, «people sell much more than she ever had...» (553).

Scrofula, a form of tuberculosis to which Joyce alludes, has disappeared from Dublin but the agonies of childbirth are eternal and the lying-in hospital in Holles Street that Joyce knew has been replaced by the purpose-built National Maternity Hospital. It was a ramshackle affair in 1904, directed by Dr (later Sir) Andrew Horne whom Joyce instinctively seized upon as a phallic symbol: «Of that house A. Horne is lord» (382).

_Ulysses_ is divided into eighteen episodes each with its particular colour, art, organ and location. The art of the «Oxen of the Sun» episode is medicine, its colour white, its organ the womb and its location the maternity hospital where a Mrs. Purefoy is in labour. Her unusual name is borrowed — Joyce's little joke for local readers — from an ex-Master of the Rotunda Hospital, a rival institution, Dr. Richard Dancer Purefoy.

Joyce makes in clearest statement on medical history in «Oxen» and refers to the mediaeval families who were hereditary leeches to Irish chieftains:

«It is not why therefore we shall wonder if, as the best historians relate, among the Celts, who nothing that was not in its nature admirable, admired the art of medicine shall have been highly honoured. Not to speak of hostels, leperyards, sweating chambers, plaguegraves, their greatest doctors, the O'Shiels, the O'Hickeys, the O'Lees, have sedulously set down the divers methods by which the sick and the relapsed found again health whether the malady had been the trembling withering or loose boyconnell flux» (381).

The novel grew by accretion. Joyce compiled long lists of words and phrases, the so-called «note-sheets» now in the British Library and scarcely legible but Philip Herring has painstakingly identified the names of Hippocrates, Galen, Harvey, John Hunter and others, some of whom were fitted into the mosaic of _Ulysses_.

The note-sheets contain embryological data which Joyce used in the «Oxen» episode into which he contrived to introduce a nine-part sequence of styles to symbolise gestation:

«Must we accept the view of Empedocles of Trinacria that the right ovary (the post menstrual period, assert others) is responsible for the birth of males or are the too long neglected spermatozoa or nemasperms the differentiating factors or is it, as most embryologists incline to opine, such as Culpepper, Spallanzani, Blumenbach, Lusk, Hertwig, Leopold and Valenti, a mixture of both?» (415).

Earlier in the book, algebra, the gift of Islam, causes Stephen to think of
Averroes and Moses Maimonides, « dark men in mien and movement, flashing in their mocking mirrors the obscure soul of the world, a darkness shining in brightness which brightness could not comprehend » (34). Maimonides reappears later with the biblical Moses an Moses Mendelssohn as hero of the affirmation « from Moses to Moses there arose none like Moses » (608).

Leopold Bloom canvases advertisements for a living but is something of a scientist manqué with a lively interior monologue. « Sandy shrivelled smell he seems to have [Bloom is watching a pharmacist turn over the pages of a prescription book]. Shrunken skull. An old. Quest for the philosopher's stone. The alchemists... »

It is in Stephen Dedalus's ruminations that we encounter Gerard the herbalist and Lopez, leech to Queen Elizabeth but his real interest is Dowland, a 16th century lutenist, not Elizabethan medicine. John Gerard, Dowland's neighbour in London's Fetter Lane, was the author of The Herball or General Historie of Plantes (1597). Dr. Roderigo Lopez, a Portuguese jew, was hanged, drawn and quartered for allegedly plotting to poison the Queen. The consequent jew-baiting inspired Shakespeare's Merchant of Venice.

Lipoti Virag, Bloom's grandfather, appears in the phantasmagoric Nighttown episode and possesses the arcane information that Rualdus Colombus, Vesalius's successor in Padua, recognised the clitoris as an anatomical entity which makes sense of his advice, « Tumble her. Columble her » (476). He has a cure, too, for warts : « Wheatenmeal with honey and nutmeg » (477).

Elsewhere there are references to folk remedies, Widow Welch's female pills (346), Dr. Franks' cure for the clap (153) and the strong man, Sandow's exercises, « Doctor Diet and Doctor Quiet » (42) echoes the regimen sanitatis of Salerno in the « Oxen » episode. Paracelsus (295), Pasteur (244) and Koch (39) are mentioned. Joyce was unlikely to have noticed that the latter's discovery of the tubercle bacillus occurred in his own natal year. « Foot and mouth disease. Known as Koch's preparation. Serum and virus » (39).

Sir Philip Crampton's memorial fountain bust puzzles Bloom (93). « Who was he ? » The question is not answered and this 19th century notability, surgeon to the Meath Hospital and contemporary of Graves and Stokes, remains unidentified though Bloom has further thoughts about the lack of hygiene. « After you with our incorporated drinking cup. Like Sir Philip Crampton's fountain. Rub off the microbes with your handkerchief. Next chap rubs on a new batch with his » (170).

Public memorials are less common in Dublin than in Paris where Pinel, Laennec, Bichat and others are deservedly honoured but Sir John Gray's statue, which stands in a major thoroughfare, is featured as a landmark in Ulysses (95). Likewise, Wilde's corner, i.e. the corner of Merrion Square where formerly Sir William Wilde occupied a fine Georgian house (249). His celebrity as an innovative aural surgeon, his accomplishments as archaeologist, author and inspector of the censuses in Ireland have been overshadowed by the meteoric rise and tragic fall of his son, Oscar.

From the contemporary group three men have passed into the annals of our art : Roentgen (559) whose x-rays fascinate Bloom ; Sir Arthur Conan Doyle (629), the creator of Sherlock Holmes — Bloom has borrowed The Stark Munro Letters from the public library ; Metchnikoff who succeeded in providing an experimental animal for the study of syphilis. « And to such delights », Lynch, a medical student muses, « has Metchnikoff inoculated anthropoid apes » (482).

Most of the other contemporary doctors mentioned are of Irish rather than general interest and few have historical relevance. Sir Charles Cameron (519), President of the Royal College of Surgeons in Ireland in 18 was author of its first
official history. Dr. Robert Kenny (207) the Joyce's family doctor, was a supporter of Parnell, the nationalist leader whose tactics caused chaos in the House of Commons. Johnny McArdle (165) is an example of a surgical type no longer in existence, a man larger than life whose operative prowess astonishes his community. Within a few weeks of Bloomsday, Connolly Norman (12), a leading Dublin psychiatrist, objected to a proposal to erect Sir Thomas Browne's statue in Norwich, on the grounds of Browne's inhumanity. The author of Religio Medici, according to Norman, gave vital support to the prosecution in a witchcraft trial. Sir Thornley Stocker (448) a prominent Dublin surgeon and art connoisseur is nowadays remembered as a brother of Bram Stoker, the author of Dracula.

I should mention, in conclusion, a historical link fashioned by Joyce's claim the episodes of Ulysses represent organs, the heart (Hades), the lungs (Aeolus), the ear (Sirens) and so on. His inspiration, which he believed he excelled, was Phineas Fletcher's Purple Island, published in 1633, an allegory which described the detailed anatomy of the island of man as the reverend author had seen it revealed at public dissections in Gonville and Caius College, Cambridge.

Space does not permit consideration of Joyce's personal ailments, which I have discussed elsewhere arguing that he suffered from Reiter's syndrome (2).

REFERENCES
1. The figures in brackets are page numbers in the Penguin Books edition of Ulysses.