MEDICAL MISCELLANY.

ILLUSTRIOUS PHYSICIANS AND SURGEONS IN IRELAND.

No. I.

SIR PATRICK DUN, KNT., M. D., M. P.

State Physician in 1700, Founder of the School of Physic in Ireland.

With a Portrait.

LORD BACON, in his "Advancement of Learning," after remarking on the variability of the human frame as a cause for the conjectural character of Medicine in his time, writes as follows:—

"And therefore I cannot much blame physicians that they use commonly to intend some other art or practice, which they fancy more than their profession; for you shall have of them antiquaries, poets, humanists, statesmen, merchants, divines, and in any of these better seen than in their profession."

And he gives as a reason, that "they find that mediocrity and excellency in their art maketh no difference, in profit or reputation, towards their fortune." Let us admit the fact, but suggest a different interpretation.

We believe it is true (and we appeal to history to justify our conclusions), that if in the profession of medicine are to be found many distinguished in other branches of science, it is not because they have turned to these pursuits as a relief from the practice of a conjectural, inconsequential art, but that the same high tone of mind, the same spirit of inquiry, and love of truth, which disposes men to these pursuits, fits them alike for a profession which calls on every great quality of the mind for its exercise. Men possessing such qualifications cannot be mere physicians or surgeons, for their minds are too comprehensive, and they turn to these things from the very fruitfulness of their own nature.

"Qui sapit, innumeris moribus aptus erit."

It is true that physicians have ever been distinguished for eminence in other pursuits; and the best proof of the value of their more immediate studies is, that they do not act in destroying their tastes for other pursuits, or lessening their powers for other investigations.

No man was ever truly great in his department who was ignorant of all else but what was sufficient for its exercise. But there are lasting, tangible evidences that the belief in the inconsequence of his art formed no part of the physician's creed. We may pass by the long lives of labour and painful investigation of the great masters of medicine, and the works they have left us, and appeal to the fact of their endowment of splendid institutions for the exercise of that art to which they were devoted. We need not travel out of our own city in evidence of this; witness the Lying-in Hospital, Steevens' Hospital, and the bequest of Sir Patrick Dun,

from which sprung the School of Physic of Ireland, and the institution which bears his honoured name.

The Irish College of Physicians owes its origin, in a great measure, to Dr. John Stearne, a Fellow of Trinity College, who, about the year 1654, purchased a house then called Trinity Hall, now occupying the site of the present Trinity-place, Dame-street, for the Fraternity of Physicians in Dublin, of which he was the first President; (for an account of which we refer our readers to a learned article on the origin and early history of the College of Physicians, by Dr. Aquilla Smith, in the nineteenth volume of our former series). The first record of the establishment of any medical corporation in this country is contained in a letter of Charles I. in 1626, to Lord Falkland, Deputy General in Ireland. In 1654 we find Dr. John Stearne President of Trinity Hall. In 1662 he was elected public Professor of Medicine in Trinity College; and in 1667 the first charter of the physicians of Dublin was received from Charles II. Up to this period, however, there was no regular school of physic in Ireland; and for its establishment the country is indebted to the distinguished individual who forms the subject of this memoir.

Sir Patrick Dun was a native of Scotland, but as Ireland was the country of his adoption, we place him in the ranks of those who deserve our regard, as having advanced the interests of Irish medicine; and we here wish to state, that in the lives and memoirs of eminent physicians and surgeons in Ireland, with which we hope to present our readers, we do not intend to limit ourselves to the notice of those who have been natives of the country, but to include all who have laboured to promote the interests of medical science in this kingdom, and have thus identified themselves with Ireland.

We have alluded to the benefits conferred on humanity by the philanthropy of medical men in Ireland, and have specified three of the most important institutions of the country in support of our assertion. We had hoped that circumstances of such value in medical history would not have been omitted or overlooked by any European historian; we therefore expected to have found in the list of medical worthies enumerated by Mr. Pettigrew, in his "Medical Portrait Gallery," the names of some of those Irish physicians and surgeons who have earned for themselves an undying reputation, in bequeathing to their country monuments like those which are our boast. There is, however, no notice of any native of Ireland who practised in this country, in that book. Were there no Molyneuxes? Was Sir Hans Sloane (we believe the first medical baronet) unworthy of notice? And were not the names of Colles and of Crampton as worthy of note as many whom Mr. Pettigrew has recorded, though not honoured? Let us hope that our next medical biographer will investigate before he writes, and not omit names which he should have inserted, while he devotes forty-eight pages of his book to his own biography, even though "in accordance with a wish very generally expressed," by his friends(*a*).

(*a*) The only Irishman, acknowledged as such, introduced into Mr. Pettigrew's

Sir Patrick Dun, descended from the ancient Scottish family of Dun, of Dun, near Montrose, was born in Aberdeen in 1662, of which city his father was a distinguished merchant and burgess. His uncle, Patrick Dun, was the principal of Marischal College, and founder of the Grammar School of Aberdeen. We have no record of the time at which Sir Patrick Dun settled in Dublin, but we find him, in 1681, President of the College of Physicians, an office which he again filled in 1690 and 1693; and he is named in the charter of 1693, along with Howard, Molyneaux, and Steevens. In procuring of the charter from William and Mary, by which the College took the name of the King and Queen's College of Physicians, he took a very active part. He was one of the founders of the Dublin Philosophical Society of 1683; in which body he read a paper on the Analysis of Mineral Waters. And it is an interesting fact, to which we have before alluded, that the first record of a public dissection in this city is that made by Mr. Patterson in 1684, of the body of a malefactor procured for that purpose by Sir Patrick Dun. He filled the office of State Physician for many years, and was knighted on the 29th of January, 1696, by the Earls of Montrath and of Drogheda, then Lords Justices of Ireland. In 1699 he married Miss Jephson, a native of the county of Cork, but had no issue.

Sir Patrick Dun served in the Irish parliament as member for Killyleagh, in the county of Down; and that he must have enjoyed considerable popularity as well as rank is instanced by the fact, that he was also returned for Mullingar, at the same election, but chose that which we have just specified. He resided at one time in Skinner's-row, but subsequently on the Inns'-quay. He died in 1714, and was, in accordance with his will, privately interred in St. Michan's Church in this city.

His will has been published by Professor Osborne, who, in his interesting "Annals of Sir Patrick Dun's Hospital," observes that "It is worthy of being recorded, although containing some irrelevent matter, inasmuch as it is the instrument from which the School of Physic originally derives its present support. It is to be observed, that the lands in the county of Waterford, which he held by lease from the Duke of Ormond, produced at the time of his framing the deed (to which the will refers), only a profit rent of £52 per annum; but that he contemplated it would rise, on the expiration of the leases then in existence, to £200, and he proposes it as a query *whether this sum could not support two Professors?*"

The last item in this interesting document we insert at length:—"*Item.*—I devise all the remains of my real and personal estate, not above disposed of, viz. my fee-farms and real estate, after the determination of the devise to my wife, during her widowhood, and all my personal estate, after discharging and fulfilling the lega-

work, is the late Dr. James Johnson, the editor of the Medico-Chirurgical Review; but he practised in London. Dr. Cheyne is introduced, it is true, but he was not an Irishman; while Mr. Abernethy, a native of the county of Antrim, is stated by Mr. Pettigrew to have been born in Finsbury-square, London.

cies and devises herein before mentioned, unto the said Patrick Dun of Tardy, Esq., and unto the said Doctor Patrick Mitchell, their heirs, executors, and administrators, respectively, to the use of, and in trust for themselves, their heirs, executors, and administrators respectively, until there shall be a Professor of Physic established in the College of Physicians in Dublin, to continue for ever by succession, according to the rules and directions, and under the regulations by me laid down, or to be laid down and expressed in a certain instrument in writing, under my hand and seal, entitled 'The scheme which I intend to have observed for the establishing a Professor of Physic in the College of Physicians in Dublin;' and from and after such time as such Professor shall be accordingly established, then in trust, that the said Patrick Dun of Tardy, and Patrick Mitchell, and the survivors of them, and their heirs and assigns, shall, by such conveyances and methods as shall be reasonably desired by the Council of the said College of Physicians, convey and assure or secure the said residue of my said real and personal estate, so to them devised, to answer and fulfil my intentions expressed in the said paper, entitled—The scheme which I intend to have observed for the establishing a Professor of Physic in the College of Physicians in Dublin, be it by Act of Parliament, or otherwise, howsoever."

A copy of the instrument here referred to, is in the archives of the College; its provisions are recited in an Act of Parliament, passed in the twenty-first year of George II., entitled, "An Act for vacating the Office of King's Professor of Physic in Dublin, upon the Death, or Surrender, of the present King's Professor, and for erecting three Professorships in the said City, instead thereof." The preamble to this Act, after reciting the general purposes of Sir Patrick Dun's will, states, that the property is to be vested in trustees, until there should be a Professor of Physic established in the College of Physicians in Dublin, to continue for ever by succession, according to the rules expressed and laid down in a certain instrument in writing under his hand and seal, intituled, "The scheme which I intend to have observed for the establishment of a Professor of Physic in the College of Physicians in Dublin:" and the same document goes on to state, "that the deed or instrument was signed by Sir Patrick Dun on the 8th June, 1704, when he declared, amongst other things, that it was his desire and intention to make provisions for one or two Professors of Physic, and for reading public lectures, and making public anatomical dissections of the several parts of human bodies, or bodies of other animals, to read lectures on osteology, bandaging, and operations of Chirurgery, to read botanical lectures, demonstrate plants publicly, and to read public lectures on Materia Medica."

Our friend, Dr. Jonathan Labatt, Registrar of the College, to whose kindness we owe the opportunity of perusing these documents, informs us that this act was never printed. It contains a clause, (the only one of the original scheme now remaining in force),

which provides that, in case of equal claims on the score of merit, the preference is to be given, on the election to professorships, to the descendants of Patrick Dun of Tardy.

In 1743 an Act was obtained by which three professors, styled the King's Professors of Physic, of Surgery and Midwifery, and Pharmacy and Materia Medica, were established; and in 1763, the estates having increased in value, the College, finding that additional professorships were required, and that maintenance should be provided for patients, so as to establish a system of clinical institution, obtained an Act of Parliament by which chairs of Anatomy and Surgery, Chemistry, and Botany, were attached to the University; and creating others of the Institutes of Medicine, Practice of Medicine, Materia Medica and Pharmacy, Natural History, and, contingently, that of Midwifery, together with provision for clinical lectures, and for the support of the library. At this time the practice of lecturing in the Latin language was abolished. Other enactments, in the year 1800, enabled the College to erect the present Hospital, bearing the name of Sir Patrick Dun.

"Subsequent Parliamentary grants enabled the Commissioners to complete the building conformably to the original plan. They provided for the accommodation of the professors and students, by devoting a considerable part of the central building to a theatre for lectures, and private rooms for Professors. This central building likewise contains three spacious apartments—one fitted up for the library of Sir Patrick Dun, the other used by the College of Physicians as their place of meeting, and the third a board-room, together with ample accommodation for the apothecary and matron. The two wings appropriated to the reception of male and female patients respectively, are thus completely separated, each of them being provided with a separate staircase, extending to the underground offices."

The School of Physic of Ireland is an institution which has worked well for science and the country. It has produced a long succession of eminent physicians; and, by its incorporation with the University and the College of Physicians, has in its constitution the means of advancement. It is well circumstanced to become a great national institution. Placed in a metropolis in which are a greater number and variety of hospitals than, we believe, can be found in any other city of the same size; and with the advantage of a Surgical school and a Lying-in Hospital, inferior to none in the world—having attached to itself a noble medical institution, an excellent library, and a pathological and obstetrical museum—in close connexion with the University—with independent funds and a careful government, it seems capable of a great extension of its utility, an object which every man who has the interests of the country at heart, and who wishes to see the objects of Sir Patrick Dun fully carried out, must desire. The University, we have reason to know, is ready to do its part in advancing the interests of the medical schools of Ireland; and we doubt not that ere long we shall see such changes and improve-

ments as the time demands. We cannot, in an article like the present, enter into the question of medical education *in extenso;* but, referring to the School of Physic, and its interests, we may point out a few alterations which are desirable.

The first would be, that medical education, so far at least as the fees to professors and for attendance on the hospital are concerned, should be made free to all students who have attained a certain standing in their University undergraduate course, or who have taken the degree of A. B.; so that a bonus should be given to induce young men preparing for the profession to give themselves a proper preliminary education.

In the second place, we desire to see new chairs created; and we would specify Surgery, Clinical Medicine, Morbid Anatomy, and Medical Jurisprudence. To the existing system of clinical instruction we have great objections: for it cannot be expected, in the present state of science and opinion, that the professors of botany, anatomy, and chemistry, can give effective instruction in clinical medicine, which requires that it should be taught by a practical and practising physician.

Thirdly—the school should be concentrated, so as to enable the student to attend the various courses of lectures under the one roof.

Fourthly—we desire to see public rewards for merit established. The Board of Trinity College have lately taken the first step in this direction, by the foundation of anatomical and botanical prizes. But the system should be extended, until we have medical exhibitions, scholarships, and prizes, established on a liberal scale.

Fifthly and lastly—we believe that a much more extended reciprocity with respect to testimonials of education should be established.

These are some of the leading points to which we would respectfully direct the attention of the patrons of the School of Physic. We believe them at least worthy of consideration, as means by which the reputation of the institution founded by the philanthropist whose memory we wish to honour, may be promoted; so that when they look back with pride to the names of Stearne, Petty, Molyneaux, Mullen, Rutty, O'Connell, Percival, and Cheyne, they may feel that their example and their influence have not been left in vain.

The original portrait from which we present our readers with the accompanying engraving, was painted by Sir Godfrey Kneller. It remained for many years in the possession of Lady Dun, and was obtained by Peter Walsh, Esq., of Billine, from Mrs. Jephson, the widow of a grand-nephew of Lady Dun's; and was presented by Mr. Walsh to the College of Physicians in 1817, who placed it in their hall.

Memoir of the Life and Writings of the late JOHN HOUSTON, M.D., M.R.I.A., *Fellow and Curator of the Museum of the Royal College of Surgeons, one of the Surgeons of the City of Dublin Hospital, &c. &c.*(*a*)

DR. JOHN HOUSTON, eldest son of a Presbyterian clergyman in the north of Ireland, was born in the year 1802, and when a boy was adopted by his maternal uncle, Dr. Joseph Taylor, who was then Physician to the Forces, and by whom he was destined for the medical department of the army. In 1819 he was bound to the late Mr. Shekleton, one of the first anatomists that Dublin has produced, and at that time a demonstrator to the school of the College, as well as the founder of the magnificent museum belonging to that body.

We cannot, even in this notice of another, pass onward in the narrative without stopping to pay a tribute to the memory of a man to whom the Dublin School of Medicine is so much indebted. From the period when Shekleton was bound apprentice to Mr. Colles in 1810, to the date of his decease in 1824, his zeal, energy, and talent in the acquisition of professional, and more particularly anatomical knowledge, was unparalleled; and before his apprenticeship was concluded, he had added considerably to the scanty supply of preparations which the professors of the College school then possessed for the purpose of exhibiting at lecture. In 1817 he was appointed demonstrator of anatomy to the College School, and so ardent was his love of that science, in which he excelled all his compeers, that he devoted his entire time and income in laying the foundation of that collection, the numerous specimens of which must remain, *if properly taken care of*, memorials of his unwearied industry, his eminent anatomical talent, and his acknowledged taste. In June, 1820, the College, becoming sensible of the great utility of Mr. Shekleton's services, allocated an apartment in their hall (the present library) as a museum, and appointed him their curator, an office which he continued to fill with unabated ardour, till unfortunately he died from the effects of a dissecting wound in May, 1824, in the 29th year of his age(*b*). The crowded state of the museum at the time of his death, led to the erection of the present building in which the collection is placed.

About the third year of his apprenticeship, Dr. Houston's uncle died; but the liberality and kindness of Mr. Shekleton prevented in a great measure that loss from being felt, and elicited the warmest gratitude of his pupil, who in a short time became enamoured

(*a*) For the materials of this memoir (which we are of necessity obliged to abridge considerably), we are indebted to R. G. Butcher, F.R.C.S.I., Demonstrator of Anatomy in the Dublin School of Medicine.

(*b*) See the history of his case by the late Professor Colles in the fourth volume of the Dublin Hospital Reports, page 240. Mr. Shekleton himself wrote a valuable paper on "Dissections of Aneurism," in the third volume of the same work.

of those pursuits in which his master so much excelled, and moreover attached himself to many by his assiduity, his gentle disposition, and his varied talents. Dr. Houston's apprenticeship terminated in 1824, and he had prepared for his examination as a Licentiate with great industry; but on the morning of the day for which that ordeal was fixed, he followed the remains of his attached friend and master to the grave. Notwithstanding this, he passed his examination with great eclat.

Upon the death of Mr. Shekleton, the College of Surgeons resolved to throw the office of the curatorship of its museum open to public competition, the tests of qualification being the number and superiority of preparations made by the candidate within three months from the date of advertisement. Dr. Houston, young as he was, was induced to became a candidate, and found himself, on the day of election, without a competitor. The preparations which he then exhibited, some of which still remain, are admirable specimens, exhibiting great elegance of design, and mechanical skill, added to profound anatomical knowledge. He retained his office as curator till the year 1841, when he resigned it, owing to more pressing engagements(*a*). The fruits of his labours during these seventeen years, are to be found in the noble collection at present in the College. In connexion with this museum, Dr. Houston published two descriptive catalogues, the first in 1834, containing an account of those preparations which illustrate the form and structure of animals in their normal state; the second in 1840, giving a description of these structures when altered by disease: works exhibiting an immensity of research, intense labour and application, a most extensive knowledge of both human and comparative anatomy, and a practical acquaintance with the products of disease. They have greatly enriched the pathological department of the museum of the College of Surgeons, every specimen in which has thus its value enhanced by the graphic descriptions of the talented author. As we have already reviewed both these publications at length, in the sixth and twenty-third volumes of our former series, it is not necessary here to enter into their merits.

Shortly after his election to the curatorship, he was appointed one of the demonstrators of anatomy in the College school, in which capacity he was a great favourite, especially with the students, to whom, by his punctuality, his great attention, and his clear and comprehensive mode of demonstrating, he had particularly recommended himself. As a lecturer, his manner was very attractive; clothed his ideas in intelligible and appropriate language; and he possessed that rare faculty in an anatomical teacher, of interesting his audience in the object of his discourse.

In 1826 Dr. Houston graduated in medicine in the Edinburgh University, and in 1829 he was elected a member of the Royal Irish Academy. On the establishment of the City of Dublin Hospital in 1832, Dr. Houston became one of the surgeons of that institution, and

(*a*) The office of curator of the museum of the college remained vacant till the present year, when Mr. Carte was appointed.

here an opportunity occurred for displaying his capabilities for the practical part of his art, which the public and his professional brethren were not slow in appreciating. He was not only an acute observer of disease, but an admirable operator, and an excellent clinical surgeon in every respect. In 1837 he became a lecturer on surgery in the Park-street School of Medicine, in connexion with Mr. Cusack, which place he continued to fill till the period of his last illness. In the Park-street School he commanded a numerous and respectable class, as his lectures were not only particularly attractive from the practical knowledge comprised in them, but from their containing every new and important improvement in that science which they were intended to teach. Among the many splendid collections of normal and pathological anatomy which this city affords, there is none more worthy of attention than that connected with the Park-street School, enriched as it has been in its normal department by Jacob, Hart, Alcock, Carlisle, and Hill; and in the pathological department by Crampton, Marsh, Graves, Cusack, Stokes, Porter, Wilmot, Beatty, and others; but the treasures of this collection remained known to but a few till the year 1843, when Dr. Houston published his descriptive catalogue of this museum.

Dr. Houston was medical officer to several of the institutions in Dublin; he was also honoured with the corresponding membership of the Institute of Washington, the Society of Naturalists of Heidelberg, and other learned bodies of a like character.

In April, 1845, Dr. Houston, while delivering his clinical lecture at the Hospital, was attacked with violent head symptoms, the result of an overworked brain; and although the immediate symptoms were arrested, and he lingered on for two months longer, his disease terminated fatally on the 30th of July, 1845.

We now proceed to enumerate his various writings, and to give a brief analysis of the most remarkable of them, for it would not be possible, even were it necessary in a memoir such as the present, to describe each in detail. The first paper which Dr. Houston published, was in the second volume of the Dublin Hospital Reports, which appeared in 1827, being "An account of an unusual Variety in the Femoral Artery." Although a brief communication, this is one of considerable importance in a practical point of view, as the variety here described is one which would have led, where it existed, to great embarassment in any operation upon this large vessel, particularly as the bifurcation occurred at the place at which the femoral artery is usually tied for popliteal aneurism. The preparation exhibiting this abnormal condition is preserved in the museum of the College of Surgeons; and what adds particular interest to the case, is the fact, that while Dr. Houston's paper was passing through the press, a similar description of arterial malformation occurred in a Negro who became the subject of an operation in the Middlesex Hospital, for popliteal aneurism, and in whose case all the difficulties suggested by Dr. Houston did really occur. An account of this case has been published by Mr. C. Bell, in Anderson's Quarterly Journal for October, 1826.

The scientific labour on which Dr. Houston's character as a naturalist and a profound anatomical investigator rests, is his elaborate essay, published in the Transactions of the Royal Irish Academy in 1808, "On the Structure and Mechanism of the Tongue of the Chameleon," the engravings in which, from the beautiful drawings by Dr. Houston, prove him to have added to his many other accomplishments that of a very accurate and tasteful artist.

Our readers are no doubt aware of the phenomena which attend the prehensile powers of this very interesting little animal, by which it is enabled to project from its half-opened mouth, a tongue nearly as long as its body, with which it strikes with unerring aim, the fly or insect on which it feeds, and fixing it by means of a glutinous exudation on the cup-like cavity at the extremity of this organ, carries it back into its mouth with the same rapidity with which it was projected. The mechanism, however, by which this remarkable erection and projection of the tongue is produced, was long a subject of interesting inquiry, and after a fierce dispute between anatomists and physiologists, Perraut endeavoured to explain this curious action, by asserting that it was an effort of forced expiration; and many of our readers are, no doubt, aware, that Sir Philip Crampton, a few years ago, revived this theory in part, and in a most ingenious explanation which he gave at a zoological lecture, where he exhibited several recent dissections of the parts, and also some models and diagrams illustrative of the theory, endeavoured to establish the fact, that the chameleon possesses the voluntary power of forcing air into the tubular cavity of its tongue, by which means the organ becomes erect, and is suddenly protruded. And certainly, the circumstance of the large sac or pouch connected with the larynx of the chameleon and its tubular tongue, demands still further investigation. De La Hire ascribed its erection to its elasticity, like that shewn in a spiral spring; and Cuvier considered it entirely owing to muscular action. This latter explanation, however, was not considered fully adequate to the production of the several effects observed, and Dr. Houston shewed that another agent was called into operation, and that this agent consisted of a highly organized vascular or erectile tissue, an organic element which about that period had been particularly noticed by Dupuytren and Rullier. Dr. Houston observed, that the moveable part of the tongue consists of two portions;—the anterior or true prehensile part, undergoes no change during the projection or elongation of the whole body, but has several powerful muscles attached to it, running between it and the long stile of the hyoid bone. The second, or posterior portion, Dr. Houston discovered to be erectile, and placed between the anterior or prehensile portion and the os hyoides; and it is this part which exhibits the remarkable changes in bulk under the circumstances of the animal's excitement and projection of the tongue. Having minutely described the anatomy of the organ, which he dissected with great care, he described the vessels of the part, which are visible even to the naked

eye, but, when examined under a good lens, are seen like a beautiful trellice work, their branches closely intersecting and inosculating with each other, to incalculable minuteness; and by a series of intricate anatomical mechanisms, this portion of the tongue becomes suddenly injected and erect, in the same manner as the penis and other portions of the animal body endowed with a like property. The blood of the animal, from the diminutive size of its globules, is particularly favourable to such a minute injection of its ultimate vessels, and the whole structure of the vascular and circulating apparatus lends exceeding probability to the theory advocated in this paper. The heart consists of but one ventricle and two auricles, with each of which cavity there is connected a large sinus, which Dr. Houston was the first to describe, and which very probably is intimately connected with the power which the animal exercises over the erectile portion of the tongue, and even upon the condition of the skin, the two parts which have gained such notoriety for this singular animal. Several beautiful preparations, exhibiting the parts just described, have been placed by Dr. Houston in the museum of the College. From this paper, therefore, it would appear, that although the tongue of the chameleon is partly set in motion by the ordinary muscular action which influences that organ in other animals, and in particular by the protrusion of the os hyoides, that the chief cause of projectile power which the animal appears to possess, is either the injection of the erectile vessels from the lingual arteries, or the retardation of the egress of the blood from the latter into the veins(*a*).

In 1830, Dr. Houston published several valuable anatomical and pathological observations, in the fifth volume of the Dublin Hospital Reports, consisting of "Observations on the Mucous Membrane of the Rectum;" "Pathological Observations," containing "Notices of a congenital Malformation of the Pharynx, which ended, not in the Œsophagus, but in a large *cul de sac*;" "Cases of Malformation of the Heart;" and other observations of an equally interesting nature; and in his third communication, that of "An Account of two newly-discovered Muscles for compressing the dorsal Vein of the Penis in Man and other Animals, and also of a similar Provision for compressing the Vein of the Chameleon's Tongue." Each of these papers is accompanied by valuable engravings and lithographs, from drawings made by Dr. Houston himself; but as it would not come within the scope of a memoir of this description to enter at any length into the history of these discoveries, we must refer our readers to the articles themselves.

The accuracy of Dr. Houston's views of the anatomy of the

(*a*) We know not whether the following fact is generally known to anatomists. The chameleon possesses the power not only of striking with unerring certainty a stationary object, but also of hitting its prey when on the wing. To effect this the animal is possessed of great quickness and perfection of vision. On dissection, it has been found that the entire retina is of a yellow colour, similar to the hue of the limbus lutea, or yellow spot of Sœmmering, in other animals. Is it this yellow colour which endows the creature with its exceedingly quick and accurate sight?

rectum having been called in question, and severely animadverted on, by Dr. O'Beirne, Dr. Houston published some further "Observations on the Form of the Rectum," which were published in our third volume, in 1833.

In 1830 the use of the stethoscope was not only in its infancy in this country, but was by many, even of a high rank in the profession, decried; and about this period a very interesting case occurred, in which its value was tested, of which Dr. Houston has given an account in the fifth volume of our former series (1834), viz.: "A Case in which a large molar Tooth entered and passed through the Larynx during the Operation of Extraction." It caused so very little immediate distress, that many could not bring themselves to acknowledge that a large, double-fanged tooth could find a ready entrance through the rima glottidis, and remain in the trachea, or bronchial tube, without causing symptoms of a more urgent nature than were complained of by the patient. On the other hand, it was urged by the stethoscopists, that the feeble and indistinct respiratory murmur, taken in connexion with the rattle in the lower part of the trachea, while at the same time percussion on the right side elicited a sound equally clear with the left, "indicated the existence of an obstructing body in the right bronchus." Some time after the accident, the subject of it died in hospital, having gone through the various stages of inflammation of the lungs and their investing membranes; and, on dissection, the tooth was found "lying in the right bronchus, about one inch beyond its commencement."

In the Scientific Intelligence in the same volume we find an extract of a communication which the subject of this biography made to our Zoological Society, of which he was a most valued member, "On the Diseases of the Animals which died in their Collection."

In the Edinburgh Medical and Surgical Journal for 1832, Dr. Houston published an article entitled, "Observations on Natural Phymosis, with a new Operation adapted to its Removal," which, we believe, had formed the subject of his thesis, on graduating, some months before; and in September, 1835, he wrote one of his most valuable Physiological Essays in the twenty-second Number of our former Series, being the substance of a paper read at the British Association, at the time of its meeting here in that year, a period ever memorable in the scientific annals of this city, and one which, we are vain enough to hope, the members of that body will not soon forget. And here we cannot but allude to the warm interest taken in the advancement of the Association during its meeting at Dublin in 1835, by several now no more, among whom we may mention the late Provost Lloyd, Mr. Maclean, Dean of the University, and Dr. Houston. The paper to which we allude, was "On the Peculiarities of the Circulating Organs in diving Animals;" in which, by a series of anatomical investigations, illustrated by many beautiful dissections, he shewed that the property of remaining under water

for a great length of time, in aquatic birds at least, is the result of a peculiar arrangement in the vena cava, and venæ cavæ hepaticæ, which are dilated into large receptacles capable of containing a great quantity of venous blood, enabling these animals to remain under water without the lungs becoming gorged by the venous blood which is retarded in those great reservoirs.

This paper is not only of great interest in a physiological and a zoological point of view, but is of considerable pathological importance, by explaining the phenomena which take place in many of the diseases of the circulating and respiratory organs. At the same meeting of the Association, Dr. Houston made a communication upon the subject of "Hydatids found in the Omentum of an Axis Deer, with Illustrations of their pathological Changes," in which the facts are not only graphically related, but an interesting physiological disquisition on their generation and mode of growth, &c.. is included. This paper likewise appeared in our Journal for November, 1835.

One of the most practical surgical papers with which Dr. Houston favoured us, will be found in our eighth volume, the Number for September, 1835, in which we have "A Report of a Case of Fracture of the Pelvis, attended with Sloughing of the Urethra, and singularly extensive urinary Fistulæ, cured by Operation after the lapse of one year and a half," the details of which are exceedingly well worth perusal.

The following catalogue includes all the other scientific communications of any note, and they are neither few nor short, which Dr. Houston published in the periodicals of these kingdoms.

"Observations on Fractures, being the substance of Lectures delivered in the City of Dublin Hospital."—*Dublin Journal of Medical and Chemical Science*, vol. viii. p. 459.

The object of this communication (which is accompanied with an engraving) is to institute a parallel between the flexed and extended positions in the treatment of fractures of the lower extremities; and the author advocates the latter, to effect which he recommends a modification of Desault's splint. This mode of treatment was, however, not confined to Dr. Houston's practice in particular; the extended position is that used in several hospitals in Dublin, and in Steevens' Hospital it was that generally employed from 1832 to 1837. Dr. Houston, who was an exceedingly neat surgeon in all matters of bandaging and the application of mechanical means, deserves, however, great credit, not only for the very valuable original observations, both of a physiological and practical nature, in his paper, but also for bringing forward a mode of practice of great utility, and not much known out of this city.

We would here remark, that as there are many points of practice, both in medicine and surgery, but particularly the latter, and various modes of treatment peculiar to the Dublin School, and as several of these are even peculiar to some of our hospitals, and, con-

sequently, known but to a very limited circle, we should like to see a good practical paper, or series of papers, on the comparison between the practice of the London and Dublin hospitals. It opens a very interesting field for some of our young men intending to pass a season in the great metropolis.

"An Account of a human Fœtus without Brain, Heart, or Lungs; with Observations on the Nature and Course of the Circulation in such monsters."—*Dublin Jour. of Med. Science*, vol. x. p. 204. (Originally read before the medical section of the British Association at Bristol.) The subject of this curious malformation was a twin; the other child was perfectly natural, and what adds exceeding interest to this communication is, that the placentæ were united, while the circulation in each infant took a diametrically opposite course. To the monster, the blood was conveyed by the umbilical vein, through which it passed to the vena cava abdominalis, and was distributed by the, in this instance, valveless branches of that vessel throughout the body. It was then taken up by the capillaries constituting the roots of the aorta, and conducted thence, by the umbilical arteries, out of the body again. The correctness of these views and conclusions having been questioned by Dr. Marshall Hall, in a Paper in the Edinburgh Monthly Journal, Dr. Houston replied (in 1844) in an article:—

"On the Circulation of the Blood in acardiac fœtuses."—*Dublin Journal of Medical Science*, vol. xxiv. p. 337.

In March, 1843, he published—

"An Essay on the Use of Nitric Acid as an Escarotic, in certain Forms of Hæmorrhoidal Affections, illustrated by Cases."—*Dublin Jour. of Med. Science*, vol. xxiii. p. 94; and "Further Observations on the Use of the Nitric Acid as an Escarotic, in vascular Tumours of the Rectum," in vol. xxiv. p. 204.

Both these communications are of great practical importance in the treatment of diseases of the rectum and anus; but it is only justice to Mr. Cusack to say, that he was the first person to employ this remedy in Dublin. Several years before Dr. Houston published his paper, we assisted Mr. Cusack to apply strong nitric acid to piles and other hæmorrhoidal excrescences: and a case-book now lying before us contains the history of a man treated by him after this fashion in Steevens' Hospital, in 1833, with which case we shall furnish our readers in the Medical Miscellany of our November Number. We mention these circumstances, not as an accusation against Dr. Houston, who most fairly and honestly acknowledged in his first communication not only the claims of Mr. Cusack, but also explicitly stated that the mode of treatment had originated with that gentleman; but because we know that many award to Dr. Houston the entire merit of the introduction of this operation. Mr. Cusack should have made his professional brethren acquainted with the results of his experience in this matter; and not having done so, we are much indebted to Dr. Houston for bringing the subject forward as he has done.

"Observations on the Treatment of Hare-lip, illustrated by Engravings of two successful Cases."—*Dublin Jour. of Med. Science*, vol. xxi. p. 165. 1842.

A further communication on the subject was made to the Surgical Society, and published in the *Dublin Medical Press* for April, 1843.

In 1840 Dr. Houston tied successfully the external iliac artery, and published a history of his operation as "A Case of Femoral Aneurism cured by Ligature of the external Iliac Artery (with a Plate)."—*Dublin Jour. of Med. Science*, vol. xxii. p. 209. 1843.

"A Case illustrative of the Means adopted by Nature for the spontaneous Suppression of Hæmorrhage from Laceration of the large Arteries." (Communicated to the British Association at Cork).—*Dublin Jour. of Med. Science*, vol. xxiv. p. 204. 1843.

Besides these matured essays, Dr. Houston made many interesting communications to the Surgical Society of Ireland, from 1840 to the date of his death, which have been recorded in the proceedings of that body in the *Dublin Medical Press.*

As an instance of Dr. Houston's energy and quickness of observation, we may here allude to the zealous manner in which he applied himself to the study of the microscope a few years ago; so much so that in a very short time he became one of the most astute microscopists in this city. In 1844 he wrote a very original and interesting paper on the "Microscopic Pathology of Cancer."—*Dublin Medical Press.* And in the same year, "A Lecture on the modern Improvements of Surgery."—*The Lancet.*

Description of "A new Fracture of the Humerus;" and a "New mode of stopping Leech Bites."—*Dublin Hospital Gazette*, 1845.

Dr. Houston likewise made some communications to our Pathological Society—a body in which nearly every physician and surgeon of eminence in this city has distinguished himself. These consisted of cases of dry gangrene, and fracture of the pubis, with inflammation of the bladder and urinary fistulæ.

We should also mention that in the Dublin Philosophical Journal, of which we gave an account in the Preface to our present series in February last, Dr. Houston published a paper on the "Eye of the Chameleon."

A glance at this long list of communications shews at once the industry of the subject of this memoir, and also the originality and the practical nature of his investigations. Dr. Houston was not only a ready, but a very clear and graphic writer.