

The difference between the common seal and the other species mentioned, as regards the condition of the young at birth and the shedding of the coat, is curious, and is perhaps to be accounted for in some measure by the different nature of their haunts at the time the young are born. The Greenland and grey seals bring forth their young upon rocky out-of-the-way islands, where they stand little chance of being molested, and consequently there is no need to get the young hurriedly to sea. The common seal, though breeding also on wild coasts, very often deposits the young on a sand-bank at no great distance from a fishing village, and subject sometimes to be submerged at high tides. On such banks the stay of the parent seals must be comparatively brief, for were the young not speedily able to take care of themselves, many would perish soon after birth. Thus it would seem that the greater activity of the young common seal is correlated with its conditions of life.

We have an analogous case in the difference to be found at birth in the rabbit and hare. The young rabbit born underground, where it is more or less removed from danger, is helpless and blind at birth; the young hare, deposited in a "form" on the surface, where it is more exposed to enemies, is born clothed with fur and with the eyes open. The rabbit stands in no need of early or rapid development; the young hare, on the contrary, must quickly leave the nursery and learn to shift for itself. So it may be with the seals.

J. E. HARTING.

SIR RICHARD QUAIN.

SIR RICHARD QUAIN, Bart., M.D., F.R.C.P., F.R.S., President of the General Medical Council, died on March 13, at the advanced age of eighty-one years. He had been ill for more than twelve months, and during the last half-year of his life was entirely confined to bed. His last appearance in public was when his paper on the "Cause of the First Sound of the Heart" was read before the Royal Society in June, on which occasion the President made a touching reference to the extraordinary courage which Quain displayed. His life had been one of ceaseless activity, good health, and overflowing spirits; and when overtaken by disease he appeared not to regard or understand rest, physician though he was. The paper just referred to was written in bed, and he left his bed to present and defend it. But no one was surprised at this who knew the story of the man's life.

Richard Quain was an Irishman, born at Mallow, Co. Cork, on October 30, 1816. As a child he was precocious. He was thoroughly grounded in English and the classics; distinguished himself at the public examinations, and at fifteen entered on an apprenticeship of five years as an apothecary. Even at this age he resolutely fought the cholera when it swept over Limerick. No doubt experience of this kind, and thus early, gave Quain courage and readiness in dealing with disease as a practitioner; but influences of more scientific bearing were to shape his career. The year 1837 finds him in London at University College, with a galaxy of teaching talent around him: Sharpey, Graham, Grant, Elliotson, Jones Quain the anatomist, and Richard Quain the surgeon and author of "The Arteries"—his cousins, from the same district—and as an instructor in practical surgery the great

Liston, with whom Quain came to be on terms of intimate friendship. The clever young Irish lad, enjoying such advantages, immediately made his way to the front at College and University; and at the end of his curriculum as a student, obtained the coveted post of Resident Medical Officer at the Hospital.

It was shortly after this that Quain produced the brilliant research on the nature of fatty degeneration with which his name is associated for all time, and established his reputation as an original observer and thinker. Simple as the doctrine appears to us at the present day, fifty years ago it was a startling pronouncement by a young man fresh from his medical studies that fat may be, and often is, a product of the decomposition of muscular tissue, and that this change goes on in the living body. The ideas of life, nutrition, and death were greatly influenced by the doctrine. This, let us remember, was many years before Bauer and Voit, working with phosphorus in starving animals, furnished the proof experimentally and quantitatively; and Quain's claim was freely admitted by Virchow and Paget.

Although he was one of the founders of the Patho-

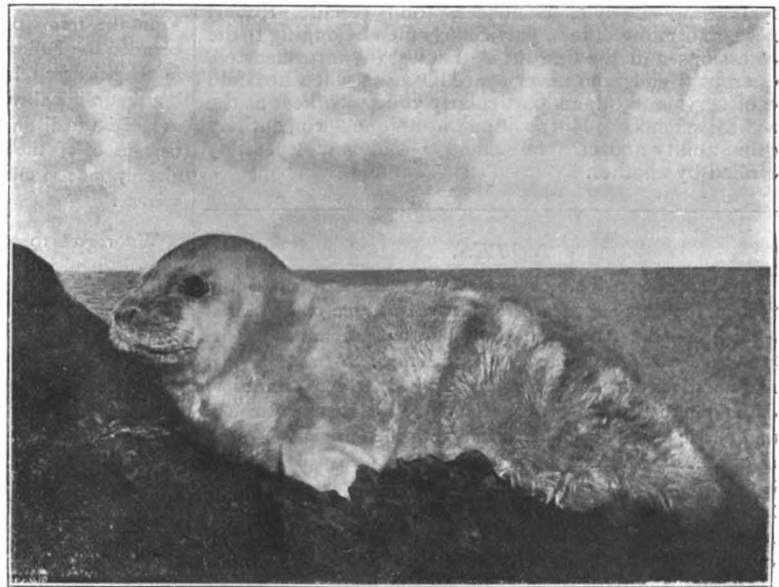


FIG. 2.—An older pup, still retaining woolly coat.

logical Society, an early Secretary of it, and a frequent exhibitor at its meetings, Quain produced no other original work in this direction. His activities were being diverted into other channels. He quickly became popular as a practitioner; and having secured the valuable appointment of physician to the Brompton Hospital for Consumption, he was presently recognised as an authority on tuberculosis and diseases of the heart. Quain's personal qualities—the interest he displayed in his patients, his kindness, cheeriness, and cleverness in diagnosis and treatment—enabled him to turn to advantage his opportunities in practice; and whilst he was still comparatively young, he rose to the front rank of London consultants.

His heart was, for all this, even more closely set on the public work associated with Medicine. Medical education, medical research, medical relief at hospitals—these were the subjects at which he mainly worked, and with an energy and avidity which appeared to grow rather than wane as time passed and he attained in his old age the highest positions in the profession. A senator

of the University of London; chairman of the Brown Institution, with Burdon-Sanderson, Klein, Greenfield, Horsley, and their equally distinguished successors working as professors there; one of the most prominent Fellows of the College of Physicians, which was passing through a critical period of its history; and finally President of the General Council of Medical Education and Registration, of which he had been for thirty years a member—Quain had his hands full. Yet he never appeared to grudge his time to a friend in want of advice; and he was always keen and ready for the latest information in science. He had little time for ordinary literature. His nights were spent in writing—but in writing letters. It is true that he projected and edited the great Dictionary of Medicine with which his name is associated, and he wrote a few of the articles in it; but he produced—one might say “of course”—no book of his own. He had no patience for work of such a kind. Neither was he, nor could he have been, a teacher. He was much too quick in the workings of his mind to undertake instruction in laborious fashion.

Sir Richard Quain enjoyed the priceless privilege of the close personal friendship of many of the leading men of his time—Carlyle, Landseer, John Delane, Robert Lowe, and many others, particularly men belonging to the professions and the fine arts. He was a warm-hearted, generous friend, who never spared himself when he could be of service to others, particularly young workers at the medical sciences. His position was unique—won entirely by his ability and ceaseless energy—and cannot possibly be filled by another.

NOTES.

THE International Meteorological Conference which met in Paris in 1896 appointed a permanent Committee on terrestrial magnetism and atmospheric electricity, and submitted to the Committee a number of questions for report. In order that these questions may be well discussed, it has been decided to hold an international conference on terrestrial magnetism and atmospheric electricity in connection with the forthcoming meeting of the British Association at Bristol, which will begin on September 7. Letters of invitation are being sent out by the Committee; and all foreigners who propose to attend the conference may obtain tickets of membership of the British Association, free of charge, on application to the Assistant General Secretary of the Association. Among the subjects to be discussed are: the calculation of monthly means with and without taking disturbed days into account; the publication of the monthly means of the components X, Y, Z, and the differences ΔX , ΔY , ΔZ , of the monthly means from the preceding means; the establishment of temporary observatories, especially in tropical countries; and the relative advantages of long and short magnets. The decisions of the conference upon these questions will be reported direct to the International Meteorological Conference. But though the first business of the conference will be to report upon the questions submitted to them, papers and communications on other subjects connected with terrestrial magnetism and atmospheric electricity are also invited. It is desired that such papers be sent to the Committee some time before the opening of the British Association meeting.

A NUMBER of Fellows of the Royal Society have expressed a wish that a portrait of Lord Kelvin, who served as President from 1890 to 1895, should be placed in the apartments of the Royal Society, and a Committee is now being formed to carry out this object.

A BILL to amend the law with respect to vaccination was introduced in the House of Commons on Tuesday, and was read

for the first time. The Bill provides that glycerinated calf lymph, the valuable properties of which were described in NATURE a few weeks ago (p. 391), shall be placed within the reach of all, and that no parents shall be required to submit their children for vaccination by means of anything but calf lymph. Vaccination will continue, as at present, to be obligatory; but vaccination by anything but calf lymph will cease to be compulsory. At present children must be vaccinated within three months after birth, but it is proposed to extend this period to twelve months.

IN the summer of 1897 a recommendation was made to the Government of India in support of the establishment of a physical laboratory in that country for advanced scientific teaching and research. The Government of India has now reported that the initial outlay on a physical laboratory of the kind described would be 60,000 tens of rupees, and that they are unable, in the present state of the finances, to entertain the scheme.

MAGDALEN COLLEGE, Oxford, announces that a Fellowship in Medical Science will be given by the College next October. From the terms of the announcement it appears that on this occasion the Fellowship will be bestowed merely for proficiency in the sciences related to medicine, as tested by examination; but that original work in these sciences will be fully recognised as a claim to distinction. The offering of this Fellowship affords new proof of the interest which Magdalen College—that has already done so much—still takes in the advancement of natural science.

WE regret to announce that Sir Henry Bessemer, F.R.S., the distinguished metallurgist and engineer, died on Tuesday evening.

THE eighth general meeting of the German Meteorological Society will be held at Frankfort-on-Main on April 14–16.

TOWARDS the end of the year 1896, at the request of a large number of distinguished men of science, philosophy and literature, Mr. Herbert Spencer agreed to have his portrait painted by Prof. Herkomer, for presentation to one of our national collections. The portrait is now finished, and will be sent to the next exhibition of the Royal Academy. In time it is intended to offer the picture to the Trustees of the National Portrait Gallery for hanging upon their walls.

WE learn from *Science* that the New York Zoological Society has secured the 100,000 dollars needed to enable it to take possession of the site provided by the city for a Zoological Garden. The total amount subscribed is 103,550 dollars, which included thirteen subscriptions of 5000 dollars each. According to the terms of the agreement between the Society and the city, as effected last year with the Commissioners of the Sinking Fund, the Society is under obligation to raise 250,000 dollars for buildings and collections, of which sum 100,000 dollars must be in the Society's treasury on or before the 24th of this month, and it was agreed that the Society could not take possession of the site until that amount had been provided.

AN Executive Committee of the Royal Zoological Society, Dublin, has made an appeal for subscriptions towards the erection of a “Haughton Memorial Building” in the gardens of the Society, in recognition of the important services rendered to the Society by the late Rev. Dr. Haughton, F.R.S., who for twenty-one years acted as its honorary secretary, and discharged the duties of president for five years. The form which the building will take has not yet been decided, but the Council of the Society propose that it should be one with a useful purpose. Sub-