As a consequence, a planet of the earth's mean density and the above assumed tensile strength is held together as much by cohesion as by gravitation if its radius is $\frac{1}{\sqrt{25,410}}$ th of that of the earth, or about 25 miles. If of steel's tenacity it would have a radius of about 409 miles.

Monday, 4th January 1875.

SIR WILLIAM THOMSON, President, in the Chair.

The President exhibited and described his Tide Calculating Machine, also his Improved Tide-Gauge; he also described certain Capillary Phenomena, with Experiments.

The following Gentlemen were elected Fellows of the Society:---

C. H. MILLAR, ESq. JOHN MILROY, ESq. Professor Daniel Wilson, Toronto. Anderson Kirkwood, LL.D. Dr Ludwik Bernstein. Daniel G. Elliot, Esq., New York. Robert Gray, Esq. William Craig, M.D., F.R C.S.E.

Monday, 18th January 1875.

The HON. LORD NEAVES, Vice-President, in the Chair.

The following Obituary Notices of Deceased Fellows of the Society were read:—

1. Biographical Notice of Lord Colonsay. By the Hon. Lord Neaves.

By the death of Lord COLONSAY, this Society has lost a member of great distinction, and well worthy of being held in respectful remembrance. He was a man of great vigour of mind, and with powers and qualities which would have earned for him a high place in science or in literature if they had been turned in either of these directions; but it was his lot and his choice to follow a professional career, in which, as will afterwards be seen, he came to attain all the varied honours which the practice of the law is able to confer.

Duncan M'Neill was the second son of John M'Neill, proprietor of the islands of Colonsay and Oronsay, and of the estate of Ardlussa in Jura, and was born in Oronsay on the 20th of August 1793. He was not educated at any school, but received private tuition at home along with his brothers, until he repaired to the University of St Andrews, along with his immediately younger brother, now Sir John M'Neill.

He used in after life to tell of an incident that occurred to the party when his father and the two boys passed a night in Glasgow on their way from the Highlands to St Andrews, and it was certainly one well calculated to make a permanent impression on a vigorous and appreciative mind. While he was walking in the morning, near the post-office, a mail-coach arrived, from the roof of which the guard announced to an assembled multitude the news of the victory of Trafalgar, which occurred on 21st October 1805. The intelligence, of course, was received with tumultuous cheering, after which, one of the crowd proposed three cheers for Nelson, but when the guard in a loud and sad whisper said " that Nelson was killed," they all instantly dispersed in solemn silence, and left the streets empty.

Duncan M'Neill was twelve years old when he went to St Andrews, which was not at that time an unusual age for college intrants. He and his brother were boarded with Dr James Hunter, professor of Logic, for whom and for his family M'Neill always entertained a strong feeling of attachment and regard. He became a diligent student and a good classical scholar, but was still more distinguished in mathematics, for which he had a remarkable aptitude.

After three years spent at St Andrews he came to Edinburgh, and attended college here for some sessions. As usual with young men of intellectual power, he applied himself diligently to Logic and Metaphysics, for the latter of which, undoubtedly, Dr Thomas Brown, whom he attended, was calculated to inspire a strong taste, though Brown himself was not a profound or perhaps even a sound metaphysician. His lectures, however, were pleasing and attractive, and had often the effect of leading his hearers to larger and deeper views than their teacher entertained.

It has been stated in a very able and kindly notice of Lord Colonsay, ascribed to Mr Campbell Smith, that about this period, or shortly afterwards, M'Neill formed the intention of publishing the philosophical works of David Hume, of which at that time no good collective edition existed. I am not able to confirm this statement by my own testimony, but I know well that he was always a great admirer of our greatest Scottish philosopher. He was not likely to be led away into those sceptical speculations which Hume propounded from his attempting to introduce metaphysics into a region which lies above their reach, nor was he likely to follow Hume in the perverse preference which he seemed to feel for-French literature over English, and which may be traced partly to the influence of prejudice, and partly to a feeling that he was less appreciated in England than on the other side of the channel. But in other respects the mind and style of Hume were well calculated to please and influence M'Neill in matters of reasoning and of The simplicity and brevity with which he wrote, the philosophy. caution and moderation with which he stated his opinions, and the calmness with which he dealt with his adversaries, were all congenial to the tastes and feelings with which M'Neill was wont to approach questions of evidence and reasoning. It is not to be supposed that he was destitute of feelings and energies to which Hume was a stranger. His Highland or Island blood was more fervid than any that circulated in Hume's veins, and his early life and athletic frame were a strong contrast to the indolent and somewhat obese form of the philosopher of the Merse.

With a view to a professional life, M'Neill entered on an apprenticeship in the chambers of Mr Michael Linning, W.S., and discharged with regularity and diligence the duties that there devolved upon him.

I am not sure whether it was originally intended by his friends that M'Neill should come to the bar, or whether the remarkable talents which he soon displayed led to his adopting that profession instead of that of a writer to the Signet, to which his initiation at Mr Linning's would naturally have led. But it cannot be doubted that the time passed and the instruction received by him

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in a writer's chambers, as well as the friendships which he there formed, were eminently useful to him at the bar.

Lord Colonsay passed advocate in 1816, and amidst a great number of eminent contemporaries and rivals he soon became distinguished in his profession. He devoted himself with special diligence to the study of criminal law, which he thoroughly mastered, and made himself so formidable as an opponent in defending prisoners that the Crown authorities saw the advantage of securing his services on their side, and in 1820 he was made an Advocatedepute by Lord Meadowbank, then Lord Advocate.

In 1822 he was appointed Sheriff of Perth, in room of Lord Medwyn, promoted to the Bench. He continued in that office with great efficiency and usefulness down to 1834, when he became Solicitor-General under Sir Robert Peel's administration. That ministry retained office for only a few months; but when they returned to power in 1841, he was again made Solicitor-General. In October 1842 Sir William Rae, then Lord-Advocate, died, and M'Neill succeeded him in that office. In 1843 he was elected Dean of the Faculty of Advocates, and became Member of Parliament for Argyllshire, holding that position from 1843 to 1851, when he was promoted to the Bench by the Whig Ministry at the same time with Lord Rutherfurd. In 1852 he was made Lord Justice-General and President of the Court of Session. After serving in that high position for fifteen years he was created Baron Colonsay in 1867, when he retired from the bench.

Thus it is that Lord Colonsay passed through all the grades and honours of his profession, from that of a simple advocate to the Presidency of the Court. We do not know if this is unprecedented, but it'certainly has rarely happened that a member of the bar has become successively, as Lord Colonsay did, a Depute-Advocate, a Sheriff, Solicitor-General, Lord Advocate, Dean of Faculty, an ordinary Judge, and finally Lord Justice-General and Lord President. The varied functions and wide experience which these successive positions involved, could not fail to qualify him in the highest degree for the discharge of all his duties, and above all, of those which ultimately devolved upon him when placed at the head of legal administration of Scotland. Every professional man knows that the inferior grades of legal preferment are eminently conducive to furnish the necessary knowledge and practice required for higher positions. It cannot be doubted that great experience as an advocate at the bar is of the highest use in discharging the functions of the bench. Under some national systems, Judges have been chosen who had not practised as advocates, but they would certainly not possess in that way the intelligence and penetration which an experienced barrister acquires, and which must enable him when on the bench to weigh the evidence, to detect the truth, and to see quickly through the fallacies and disguises to which litigants are apt to resort. In another way the exercise of the inferior jurisdiction of Sheriff brings the holder of office into closer contact with country matters, and with local and customary considerations, which will serve him in good stead when as a Judge he comes to sit in review upon County-Court procedure.

Lord Colonsay was every way qualified for the profession which he adopted, and for the offices which he held. His talents, which were great, were eminently of a forensic and still more of a judicial His logical acumen was severe and unerring. character. He possessed also, though he never exercised it unnecessarily, a power of vivid and impressive eloquence, in which he was equalled by few and surpassed by none. He was a most able criminal advocate, and indisputably the greatest criminal lawyer of his day. His natural powers were aided and improved by patient and laborious study as a young man, and by the most conscientious and careful discharge of duty in all matters that came before him, whether at the bar or on the bench. Those who had the advantage of meeting him in consultation as an advocate, will bear testimony to the thorough mastery which he always attained of his client's case, and to the sagacious and skilful perception which he also acquired of the probable case of his opponent. In consultation he was entirely free from the petty selfishness that has sometimes been laid to the charge of seniors in bottling up their best views for their own use. Whatever point he thought advantageous to the case was always fully communicated and explained to his juniors.

In the practice of his profession as an advocate Lord Colonsay had some advantages not equally enjoyed by some of his brethren. The subjects with which an advocate has to deal are so various,

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and often so special and technical, that it is impossible for any man to have a thorough and independent knowledge of all. The advocate has what may be called a nisi prius faculty of learning, on short notice, what he knew nothing of before, and then forgetting it when the occasion is over, in order to make room for new acquisitions equally temporary and transient. His great art consists in knowing where information is to be found, and making the appropriate use of it for his immediate purpose. In an extensive practice an advocate is thus brought in contact with questions of the most dissimilar kind-commerce, agriculture, engineering, chemistry, and many others, arising out of multifarious patents or contracts that become the subject of litigation. I once was able to illustrate this somewhat oddly to a man who knew many subjects and wrote many books. The late Mr MacCulloch, the political economist, once asked me in company whether his "Commercial Dictionary," which is a very useful book, was ever founded on or quoted in our courts of law? I answered rather abruptly, "Never; the name of it is never heard." He appeared disappointed at this, and I then added, "But very often a case comes in to us at night to prepare for next day, on a subject we know nothing about-general or particular average, foreign exchanges, or the like-upon which we go to our shelves and take down a Commercial dictionary, which enables us to appear at the bar when wanted next day with an amount of information that astonishes even our own clients. But we never mention the book from which the information is got." This statement seemed completely to re-establish the self-complacency of the sensitive author.

I would say here that Lord Colonsay, from his scientific tastes and tendencies, was more fully and accurately grounded in many of these questions than the most of his brethren. And this could not fail both to lighten his labours and to give confidence to his views.

As a judge, his judgments were models of clearness and brevity, and were always remarkable for an anxiety to maintain the great landmarks of legal principle. If he had a fault, it was one which, I think, in judicial business, "leans to virtue's side." When he felt that he could not be bold he was apt to be very cautious, and certainly was ever anxious not to decide any case but the one that was immediately before the Court, leaving other cases to be determined at their own time, and after fully hearing the arguments that were specially directed to discuss them; and I am much inclined to think that it is better always to decide nothing but the actual question raised, or necessary to be decided, as no collateral point can in general receive the mature treatment and consideration that it deserves. His perfect command of temper, his great patience in listening, and his uniform courtesy on the bench earned for him the respect and gratitude of the whole bar, and added greatly to the weight and authority of his judgments.

We should not fully do justice to Lord Colonsay's merits if we did not notice and acknowledge the important benefits which the country has derived from his legislative exertions. At an early period, I believe, we may say that the great improvements made on criminal procedure in Scotland, by an Act in the ninth year of George IV., emanated from Lord Colonsay, though Sir William Rae was at that time Lord Advocate. The older forms of criminal process in Scotland, whatever may have been said to the contrary, were highly, and perhaps unduly, favourable to accused personsin this respect, at least, that many formal objections to the designation and citation of witnesses and otherwise could be kept back till after a jury was empanelled, and could then be brought forward so as to frustrate the proceedings, while at the same time the accused could not be tried again in consequence of having "tholed an This state of things, of which no one could make a assize." better use than Lord Colonsay when defending prisoners, was abolished; so that all formal objections must now be brought forward at once before empanelling a jury, and thus, even if they prove fatal, the accused can be tried again on a new indictment.

When in Parliament as Lord Advocate, Lord Colonsay passed, or assisted in passing, many useful measures; but perhaps the most conspicuous of these is the Poor Law Amendment Act—a wise and beneficent measure, which has gone far to solve the great social difficulty of relieving pauperism without paralysing industry or oppressing ratepayers, many of whom must always be nearly as poor as the objects who obtain relief.

In all matters of legal reform, Lord Colonsay's services have always been at the command of his country, and though unosten452

tatiously performed, have been thoroughly appreciated by those who had the means of knowing and the power of judging.

Of the debt which we owed to Lord Colonsay after he took his seat in the House of Lords, it is unnecessary to speak.

I may here advert to a part of Lord Colonsay's life which possesses much interest, and is calculated to throw a strong light upon his character. Some time after the death of his father he became by a family arrangement the proprietor of Colonsay and Oronsay, which he retained till a comparatively recent period. In consequence of the advanced age of his father, these estates had not latterly been administered with as much energy and enterprise as the times demanded. They were all in the hands of the proprietor, except some small possessions held by a number of crofters and cotters. When Lord Colonsay acquired the property, he applied himself vigorously to putting it into perfect order. Besides visiting it during the vacations of the Court, he personally directed the whole improvements which were made upon it, and for that purpose transmitted, in the midst of the labours of his profession, minute directions weekly to his managers on the spot, and received their detailed reports of everything that was doing. In a few years he had the islands put into a most satisfactory state for being let out in separate farms of suitable size. The stock on the farms was every way improved. He encouraged and liberally aided emigration, and did so with singular delicacy, so as to spare the feelings and not impair the means of the emigrants. Excellent farm houses and offices were built, roads formed, and harbours improved at a very great expense, and at last he succeeded in lightening his own labours and establishing in the islands respectable tenants whose occupations gradually increased in value. He also succeeded in getting Colonsay detached from Jura and made a separate parish; and having improved the church that had been there in use, and built a comfortable manse and good school, he settled a.liberal endowment on the minister, and thus gave the people on the island the advantages of a regular and efficient ministry, and two good parish schools. It may gladden our friend Professor Blackie's heart to hear that he retained his Gaelic in perfection to the last, and was thus enabled to exercise an influence that might otherwise have been lost.

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I shall add only a few more words as to his personal life. He was never married, but his younger brother Archibald, with his wife and family, were for many years domesticated with him, and when his brother died, the widow and surviving children remained with him as before, and ultimately shared in a large portion of his means. He was a most affectionate relative, and a very firm friend. He never forgot a kindness received, and had particular pleasure in repaying, when it came to be in his power, any proofs of friendship which he had received in the earlier period of his career, when encouragement and assistance were calculated to be of such value. He was a man of great goodness of temper, and of inflexible justice in all his dealings. His estate of Colonsay he had disposed of before his death to his brother Sir John M'Neill, under a family arrangement.

For a considerable part of his life Lord Colonsay laboured under some weakness in the chest and breathing tubes, and latterly a tendency to bronchitis was perceptible. We believe it was to this malady that he fell a victim. He was only ill for a short time, and at the age of eighty it was not wonderful that he was unable to resist the influence of a disease so dangerous in general to those advanced in life.

2. Biographical Notice of Cosmo Innes. By the Hon. Lord Neaves.

We have lost another eminent member of our Society in Mr COSMO INNES, of whom I shall venture to give a short account. I do not think it necessary to make it long, and this for various reasons. Mr Innes's labours were more nearly akin to the studies of another Society which meets under the same roof with ourselves, and within that body, I believe, tributes have been paid to his memory far more intelligent and more worthy of his reputation than any I could venture to offer. The general features of his career, also, are so well and widely known, and have been recalled to our recollection of late in such various ways, that any detailed narrative would be superfluous. My endeavour now, therefore, will mainly be not to pay homage to his antiquarian attainments, which are