Pve Smith (Vindication of Citizens of Geneva from Statements, &c., 1825). Continuing his scientific investigations, Bakewell published his 'Salt' (Phil. Mag. lxiii. 86, reprinted in 'Silliman's American Journal,' x. 180); his 'Lava at Boulogne' (Phil. Mag. lxiv. 414); his 'Thermal Waters of the Alps' (ib. iii. 14, also reprinted in Silliman, xx. 219); his 'Mantell's Collection of Fossils' at Lewes (Mag. Nat. Hist. iii. 9); and a third edition of his 'Geology' in 1828, immediately reprinted in America. At that date Bakewell had settled at Hampstead, where his garden afforded him the opportunity of writing on the action of the 'Pollen of Plants' (Mag. Nat. Hist. ii. 1), and where he prepared the following scientific papers: 'Organic Life,' 1831 (Phil. Mag. ix. 33, appearing also in Froriep's 'Notizen,' xxx. col. 134); 'Gold Mines in United States,' 1832 (Mag. Nat. Hist. v. 434); and 'Fossil Elephants in Norfolk, 1835 (ib. ix. 37). A fourth edition of the 'Geology' was issued in 1833, which provoked a criticism from Professor Sedgwick (Geol. Trans. iii. 472, 1835); it reached a fifth edition in 1838, and still has its readers and supporters of its theories. Bakewell died at Downshire Hill, Hampstead, on 15 Aug. 1843, aged 76 (Annual Register, 1843).

A list of Bakewell's fugitive productions

A list of Bakewell's fugitive productions is in the 'Royal Society's Catalogue of Scientific Papers,' 1867, p. 165, but it is incorrect. Three of the articles enumerated, all three on 'Niagara,' are by one of the geologist's sons, also a Robert Bakewell. The error is curious, because the geologist himself introduces this son to the scientific world in 1830, in the preface to the first of the three papers in question (Mag. Nat. Hist. iii. 117). Robert Bakewell the younger became a resident at New Haven, America, whence he dated his second and third papers, 1847 and 1857. Another of the geologist's sons, Frederick C. Bakewell, wrote 'Philosophical Conversations,'1833, and 'Natural Evidences of a Future Life,' 1835, both of which passed through several editions.

[Poggendorff's Biographisch - litterarisches Handwörterbuch; Donaldson's Agricultural Dictionary; and the authorities cited in the article.]

J. H.

BALAM, RICHARD (A. 1653), mathematician, was the author of 'Algebra, or the Doctrine of composing, inferring, and resolving an Equation' (1653). There seems to be nothing original in this work but a multitude of terms which have perished with their inventor. The following sentence may be worth quoting: 'It seems probable to me that quantity is not the true genus of number;

but that measure and number, magnitude and multitude, quantity and quotity, are two distinct species of one common genus.'

[Algebra, preface, cf. p. 15.] F. Y. E.

BALATINE, ALAN (ft. 1560), is mentioned by Edward Hall in the list of the English writers from whose works he compiled his 'Chronicle.' Pits on this account classes him as an Englishman, but, according to Dempster, he was of Scotch origin, and, after studying privately, went to Germany, where he completed his education, and also taught in the gymnasiums. He wrote 'De Astrolabio, ' De Terræ Mensura,' and ' Chronicon Universale.' Dempster states that he flourished about 1560, but as Hall's 'Chronicle' was published in 1542, Balatine must have written his 'Chronicon Universale' at least twenty years before 1560. He died in Germany.

[Pits, De Angliæ Scriptoribus, p. 825; Dempster's Hist. Ecc. Gent. Scot. (1627), p. 100; Tanner's Bibl. Brit. p. 66.]

BALCANQUHALL, WALTER (1548–1616), presbyterian divine, derives his surname originally from lands in the parish of Strathmiglo, Fifeshire. It is nearly certain that Walter was of the 'ilk' of Balcanquhall, and that he was born there—according to his age at death—in 1548 (cf. Sibbald's 'List of the Heritors' (1710) in History of Fife, appendix No. 2).

Our earliest notice of him is that he was entered as 'minister of St. Giles, Edinburgh,' on Whit Sunday 1574, when we learn that 'he was desvrit by other towns and large stipend promist,' but 'yet he consented to stay and accept what they pleased.' At this time he is described in James Melville's 'Diary' (p. 41, Wodrow Society) as 'ane honest, upright hearted young man, latlie enterit to that menestrie of Edinbruche' [Edinburgh]. He was elected to the chaplaincy of the Altar called Jesus, 20 Nov. 1579. Having preached a memorable sermon, mainly directed against the influence of the French at court, 7 Dec. 1580, he was called before the privy council on the 9th, and 'discharged.' He attended the Earl of Morton while in prison under condemnation, 2 June 1581. When James VI of Scotland devised his scheme of re-establishing 'the bishops' in Scotland, he found Balcanguhall, along with James Lawson, Robert Pont, and Andrew Melville, and their like-minded brethren, in active opposition. On the calling together of the estates of the realm in 1584. the king sent an imperative message to the magistrates of Edinburgh 'to seize and imprison any of the ministers who should venture to speak against the proceedings of the parliament.' But Balcanquhall (along with James Lawson) preached fearlessly against the proposals; and along with Pont and others took his stand at the cross while the heralds proclaimed the acts passed by the subservient parliament, and publicly 'protested and took instruments' in the name of the 'kirk' of Scotland against them. The sermon was delivered on 24 May. A warrant was issued, and Balcanquhall and Lawson fled to Berwick-on-Tweed (Melville, Diary,

p. 119).

The storm blew over, though his house in Parliament Square was given to another in the interval. On his return to Edinburgh, a house formerly occupied by Durie was given to him (1585). On 2 Jan. 1586 he preached before the king 'in the great kirk of Edinburgh' [St. Giles] when the sovereign 'after sermon rebuikit Mr. Walter publiclie from his seat in the loaft [gallery] and said he [the king] would prove there sould be bishops and spirituall magistrats endued with authoritie over the minestrie; and that he [Balcanquhall] did not his dutie to condemn that which he had done in parliament' (Melville, Diary, p. 491). In this year (1586) he is found one of eight to whom was committed the discipline of Lothian by the general assembly. A larger house, which had been formerly occupied by his colleague Watson, was assigned to him 28 July 1587, and his stipend augmented. He was appointed to attend the coronation of Queen Anne, 17 May 1590. For some years he seems to have been wholly occupied with his pulpit and pastoral work. In 1596, however, his bold utterances again brought him into conflict with the sovereign; but a warrant having again been issued, again he escaped—this time to Yorkshire, after being 'put to the horn' as a fugitive. He appears to have been absent from December 1596 to April or May 1597. In May 1597 he resigned his 'great charge' of St. Giles in order to admit of new parochial divisions of the city. In July he was permitted to return, and was chosen 'minister' of Trinity College Church, to which he was admitted 18 April 1598. He was the friend and companion of the Rev. Robert Bruce, and bribes were tendered him in vain to get him to 'fall away' from Bruce. On 10 Sept. 1600 he was once more in difficulties, having been called before the privy council for doubting the truth of the Gowrie conspiracy. 'Transported' by the general assembly to some other parish, 16 May 1601, he was afterwards allowed to return to Trinity College (19 June), and he was in the

general assembly of 1602. In conjunction with Robert Pont, he again took his stand at the cross, and publicly protested in name of the 'kirk' against the verdict of assize finding the brethren who met in general assembly at Aberdeen guilty of treason. Later, for condemning the proceedings of the general assembly in 1610 he was summoned before the privy council and admonished. He ceased preaching on 16 July 1616 from a disease in his teeth, and died 14 Aug. following, in the sixty-eighth year of his age and forty-third of his ministry.

He married Margaret, a daughter of James Marjoribanks, merchant; in right of whom he had become 'burgess and good brother' of the city (15 Feb. 1591). They had three sons, Walter [see Balcanguhall, Walter, 1586?—1645], Robert, minister of Tranent, and Samuel, and a daughter Rachel.

[Reg. Assig. Presby.; Edinburgh Counc. Reg.; Hew Scott's Fasti Ecclesiæ Scoticanæ, i. pt. i. 5-6, 31; Bruce's Sermons; Balfour's Historical Works; Stevens's Mem. of Heriot; Boke of the Kirke; Crauford's Univ. of Edinburgh; Murray's Life of Rutherford.]

BALCANQUHALL, WALTER, D.D. (1586?-1645), royalist, son of the Rev. Walter Balcanquhall [q. v.], who steadfastly opposed episcopacy, was born in Edinburgh 'about 1586'—the year of his father's 'rebuke' by King James. Convinced, it has been alleged, by the arguments in favour of bishops maintained by the sovereign, he proceeded to the university of Edinburgh with a purpose ultimately to take orders in the church of England. In 1609 he graduated M.A. He afterwards removed to Oxford. entering at Pembroke College. He passed B.D., and was admitted a fellow on 8 Sept. 1611. He was appointed one of the king's chaplains, and in 1617 he received the mastership of the Savoy, London. In 1618 James sent him to the synod of Dort. His letters from that famous synod, which were addressed to Sir Dudley Carleton, are preserved in John Hales's 'Golden Remains.' Before proceeding to Dort the university of Oxford conferred upon him the degree of D.D. In March 1624 he obtained the deanery of Rochester, and in 1639 he was made dean of Durham. The 'Calendars of State Papers' from 1625 onward reveal him as a pushing suppliant for offices and dignities. On the death of the celebrated George Heriot on 12 Feb. 1624, it was found that Balcanquhall was one of the three executors of his will and was assigned the most responsible part in founding the hospital which was to bear the royal jeweller's name. Balcanguhall

drew up the statutes in 1627, and, it is universally conceded, discharged the weighty trust imposed on him with integrity and

bility.

In 1638 he revisited his native country, as chaplain to the Marquis of Hamilton, the royal commissioner. Balcanquhall was accused of shiftiness and treachery in his conduct towards 'the people' who were contending earnestly for their religious rights. He was the undoubted author of an apologetical narrative of the court proceedings under the title of 'His Majestie's Large Declaration concerning the Late Tumults in Scotland' (1639). On 29 July 1641 he and others of kin with him were denounced by the Scottish parliament as 'incendiaries.' He was afterwards 'hardly entreated' by the dominant puritan party, and was one of the 'sufferers' celebrated by Walker in his 'Sufferings.' He retreated to Oxford and shared the waning fortunes of the king. He died at Chirk Castle, Denbighshire, on Christmas day 1645, whilst the echoes of Naseby were in the air. Sir Thomas Middleton erected a 'splendid monument' to him in the parish church of Chirk.

[Dr. Stevens's History of George Heriot's Hospital; Wood's Athenæ (Bliss), iii. 180, 839; Walker's Sufferings, pt. ii. 19; Anderson's Scottish Nation; The two Sermons' of 1634 on Psalm cxxvi. 5, and S. Matt. xxi. 13.]

BALCARRES, Countess of. [See Campbell, Anna.]

BALCARRES, EARLS OF. [See LIND-SAY.]

BALCHEN, SIR JOHN (1670-1744), admiral, was born, according to local tradition and an anonymous inscription on his picture, 'of very obscure parentage, 4 Feb. 1669-70, at Godalming, in Surrey;' but he himself, in a memorial to the admiralty, dated 12 June 1699, related all that is really certain of his early history. 'I have served in the navy,' he said, 'for fourteen years past in several stations, and was lieutenant of the Dragon and Cambridge almost five years, then had the honour of a commission from Admiral Neville in the West Indies to command the Virgin's prize, which bears date from 25 July 1697, and was confirmed by my lords of the admiralty on our arrival in England. I continued in command of the Virgin till September 1698, then being paid off, and never at any time have committed any misdemeanour which might occasion my being called to a court martial, to be turned out or suspended.' He was asking for the command of one of the small ships employed

on the coast of Ireland; but it was fully eighteen months before he was appointed to the Firebrand for the Irish station. In December 1701 he was turned over to the Vulcan fireship, was attached to the main fleet under Sir George Rooke on the coast of Spain, and was with it at the capture or burning of the French and Spanish ships at Vigo, 12 Oct. 1702. It is uncertain whether the Vulcan Balchen brought home the Modéré prize of 56 guns. A few months later, February 1702-3, he was appointed to the Adventure, 44 guns, and continued in her for the next two years, cruising in the North Sea and in the Channel, and for the most part between Yarmouth and Portsmouth. On 19 March 1704-5 he was transferred to the Chester, and towards the end of the year was sent out to the Guinea coast. He returned home the following summer, and continued cruising in the Channel and on the Soundings, where, on 10 Oct. 1707, he was one of a small squadron which was captured or destroyed by a very superior French force under Forbin and Duguay-Trouin. The Chester was taken, and a year later, 27 Sept. 1708, when Balchen had returned to England on parole, he was tried by court-martial and fully acquitted; the decision of the court being that the Chester was in her station, and was engaged by three of the enemy, who laid her on board, entered many men, and so forcibly got possession of the ship. He was, however, not exchanged till the next year, when, in August 1709, he was appointed to the Gloucester, a new ship of 60 guns then fitting at Deptford. On 8 Oct. he had got her round to Spithead, and wrote that he would sail in a few days; but he had scarcely cleared the land before he again fell in with Duguay-Trouin (26 Oct., in lat. 50° 10′ N.), and was again captured. He was therefore again tried by court-martial for the loss of his ship (14 Dec. 1709), when it appeared from the evidence that the Gloucester was engaged for above two hours with Duguay's own ship, the Lis, 74 guns, another firing at her at the same time, and three other ships very near and ready to board her. She had her foreyard shot in two, so that her head-sails were rendered unserviceable, and had also received much damage in her other yards, masts, sails, and rigging. The court was therefore of opinion that Captain Balchen and the other officers and men had discharged their duties very well, and fully acquitted them. It may be added that the French sold the Gloucester to the Spaniards, and that for many years she was on the strength of the Spanish navy under the name of Conquistador.