I.

SKETCHES OF LATER SCOTTISH ALCHEMISTS:—JOHN NAPIER OF MERCHISTON—ROBERT NAPIER—SIR DAVID LINDSAY, FIRST EARL OF BALCARRES—PATRICK RUTHVEN—ALEXANDER SETON—AND PATRICK SCOT. By JOHN SMALL, M.A., F.S.A. Scot.

John Napier of Merchiston.

Among the cultivators of the hermetic art in Scotland is to be included no less a person than the celebrated John Napier, the inventor of logarithms, who was born at Merchiston, near Edinburgh, in the year 1550. It is at first a little surprising that a man so distinguished in the exact sciences should have given himself to such a pursuit, but the attractions which an art like alchemy would have for an active and excursive mind like his must be kept in view. It is also now admitted that the great Sir Isaac Newton was a believer in alchemy, and devoted much time to the study and practice of its processes. Napier had, in addition, what might be called a hereditary predisposition to such a study, as he belonged to a family which had long been famous for their connection with the gold mines of Scotland, and had become imbued with all the enthusiastic fancies then current upon the subject of discovering the occult relations and properties of the precious metals.

The father of John Napier was Sir Archibald Napier of Edinbellie, who was master of the mint to King James the Sixth. What is very remarkable in their history is that both father and son were so nearly of an age that the difference could scarcely represent a generation. Sir Archibald was only about 16 when he was married, and he and his son, born in 1550, dwelt and studied together like brothers through life, and all their practical researches were in common.

Sir Archibald was in 1562 appointed to the office of Justice Depute of Scotland, and was made a knight in 1565. In 1582 he was made "General of his Majesty's Cunzie House," or master of the mint. In this office, which he enjoyed for the rest of his life, he had the control of all the mines for the precious metals in Scotland, some of which were on his own estates. "He was practically versed in the craft of metals, could work with his own hands, and became the most expert man in Scotland at

detecting gold amid the grosser elements of creation—refining it for human purposes, besides regulating as a statesman the whole preparations and conditions of its legal circulation in the realm. His younger son, Francis, was assay master under him."[1]

While master of the mint, Sir Archibald was violently assailed in his administration of his office by John Lindsay, Parson of Menmuir, father of the first Earl of Balcarres, of whom a short sketch is subsequently given. In 1592 an Act of Parliament was passed, creating a new and superfluous office in the department of the mint, in favour of the "Parson," who was to be styled "Master of the metals." The same act also bears that "forsameikle as Thomas Foullis, goldsmith, has found out the ingyne and moyene to melt and fyne the ores of metals within this country, and has brought in strangers," etc., therefore ratifies to him the gift of "the said melting and refining of all and whatsomever ores of metals are won and wrought within this country." This step was strongly opposed by Sir Archibald, who drew up a formal protest against it in his own name and that of his younger son Francis, which he laid before the Lords of Council. In this document, which is preserved in the Advocates' Library, he does not flinch from affirming that Lindsay's appointment was simply "ane substantius ground to mak himself ane hauie purse." He also impugns the "effyning" qualifications of Foulis and his staff of strangers, whom he regards as charlatans, and urges that "the said effyning ought to be made in presence of the wardens and essayer of the cunzie house only; for if some controlement thereof be not used by the most expert of the cunzie house the said effyners may make more than £40,000 of profit to themselves, and never kennel ane fyre for effyning thereof."

Sir Archibald retained his office for many years after his opponent, the Parson of Menmuir, died, and he was in great repute in his management of his important duties. In one instance he was so successful in conducting with skill a case relative to the Scottish coinage before the English commissioners, that it is recorded by Birrell in his diary: "The 10th of September 1604, the Generall maister of the Cunzie House tuik shipping to Lundone, and the wit and knowledge of the General wes wunderit at by the Englischmen." Sir Archibald died shortly after this in 1608.

John Napier, thus early brought into contact with matters pertaining

[1] Lectures on Logarithms, by Mark Napier, ii. p. 31.

to the mysteries of gold mining, was a believer in the power of discovering hidden treasure by divination or the exercise of magic. In 1594 the famous contract was entered into between Robert Logan of Restalrig, and Napier, for the discovery of buried treasure in Logan's fortress of Fastcastle. This, one of the most impregnable places in the kingdom, was situated on a cliff overhanging the German ocean, connected with the land by a very narrow path; and it was supposed to contain many valuables which, from the lawless and unsettled state of the country, had been secreted by those who never returned to recover them. The contract was to the effect that "as ther is dywerss ald reportis, motyffis, and appirancis that thair suld be within the said Robertis dwellinge place of Fastcastell a soume of monie and poiss, heid and hurdit up secritlie, quilk as yit is onfund be ony man. The said Jhone sall do his utter and exact diligens to serch and sik out, and be al craft and ingyn that he dow to tempt, trye, and find out the sam, and be the grace of God ather sall find the sam, or than mak it suir that na sik thing hes bein thair, sa far as his utter trawel, diligens, and ingyne may reach." As a recompense, Napier was to have the third part of the discovered treasure as his share, and a safe conduct to Edinburgh lest he should be "spulzeit of his said third pairt, or utherways hairmit in his body or geir."[1]

With the subject of alchemy Napier was equally conversant, and the following account of his conferences with a German adept, Daniel Müller, Dr of Medicine, still exists among his MSS. A copy is also to be found in the MS. common-place book of Patrick Ruthven, brother of the first Earl of Gowrie, now preserved in the Library of the University of Edinburgh. The meetings seem to have been held in the sick chamber of this German savant, who was the more communicative upon these occasions, as he thought himself at the point of death while suffering from an attack of gout.

"Heer folowetha discours that passed betwixt D. Muller and Markestone, when the sayde Doctor was lyen sicke of the goute in Edinbroughe and thought to have died, as the same was set downe by the sayd Markestone, and founde after his death amongst his papers.

"Vpon Saterday the 7 of Nouember 1607 years, I Jhon Napeir, fier of

[1] Life of Napier, by M. Napier, p. 221.

Markeston came to confer with Mr Daniel Muller, Doctor of Medicine, and student in Alchymie anent our phylosophicall matters, not knowinge that he was sicke, and findinge that he was diseased of the goute his ordinarie diseas, I thought not to haue troubled him with much conference, and meaned to haue left him for that tyme, but he crauinge conference of me shew me that he was to haue sent for me if I had not of accident come, and that he had a matter to communicat with me if I mighte then remaine or shortly returne. So I remoued my compagnie, and sate done befor his beddside. Then he burst foorth in thire wordes: S^{r}, you ar occupied in alchymie, I haue been thir manie years ane verie earnest student therinto, and haue attained to the knawledge therof. I haue pressed to haue diuerted you from your wronge opinione, so farr as I durst be plaine, but now, Sir, I will be plaine, knowinge that you ar a man who fears God and will be secret, and that you will be good to my wyfe and bearins in case thir diseases shall take me awaye. S^{r}, I sent ane credible freinde to Histria to bringe me hither of crude Mercurie out of thes mines a longe tyme since, and as yeat I haue harde no worde from him. I thinke he is dead. I once receiued a letle peece of the earth of thes mines aboute the quantitie of ane hazell nute, which as I brake ther appeared scales of quicksiluer within the same, and the crude Mercurie flowed foorth without fyre; with this I perfited the phylosophicall worke as you may doe with the lyke, for this mercury beinge taken with fine siluer which neuer did finde fyre and enclosed in ane matrix will become blacke within the space of 40 dayes, and therafter will become white, and then is the pointe and terme to loose it, or then you must ioyne it with his ferment, to wite with fyne gould that neuer did finde the fyre, fynlie fimelled in limell, and instantly that whit stoofe of mercury and luna will deuore vp the gould; and at this coniunctione or fermentatione endeth the first worke called *opus Lunae*, and beginneth immediately the second called *opus Solis*. In this *opere solis* your worke becomes blacker then in *opere Lunae*, and then white, and at last reede. Both thir workes ar performed in ane year, to wite twoo monthes and ane halfe in *opere Lunae*, and nyne months and ane halfe in *opere Solis*, and for *pondera*, I take nyne of crud mercury to one of crud siluer *in primo opere*, and this I conioyne with one of sol in *secundo opere*, and so Luna is his *medium coniungendi* betwixt crud mercury and Sol, and heerof cometh three Mercuries, to wite, the first

which is *Mercurius crudus*, and is called *Mercurius frigidus, acetum, Mercurius Mineralis*, the seconde which is *Luna* dissolved in crud mercury *ad albedinem*, and this is called *Mercurius tepidus, acetum acerrimum, Mercurius vegetabilis, quia Luna est planta*. The third, which is Sol dissolued in the seconde, is called *Mercurius calidus, Mercurius animalis*. Farder, sayed he, the letle sipher table intituled 'Medulla philosophiae Hermeticae,' it is myne, for I made it. Also, he added manie discourses, citinge texts out of 'Clangor Buccinae,' Marsilius Ficinus, Riplie, and Arnold, to proue the premises, and especially *de terrâ nigrâ oculosâ, terra Hispanica;* and in Comes Treuirensis, nostrum opus fit ex vna radice (scilicet mercurio crudo) et duabus substantiis Mercurialibus crudis, e minerâ sumptis (Luna et Sole). Farder, he sayed, that the variante hewed glass that I did see was so *ad intima* litted with the stuffe which he made in that same glass. Farder, he spake *de triplici vsu lapidis* after Paracelsus: first, in transmutations of metals; secondly, in curinge diseases; thirdly, it is *Lapis Divinus* for magicall vses. Now when I hard thir thinges and had sayed vnto him, My Lord, that matter is marvailous, if you be sure of the treuthe therof by practice. He answered with earnestness, in treuthe I have practised it to the ende and made proiectione, and found it true. Againe when I demanded him how it fortuned that he did not multiplie his stuffe and keeped the same; he answeared, I laiked crud mercury without which it can not be multiplied againe. Vpon the 9 of Nouember I conferred with him againe, anainte some doubtes, *quod fons trahit Regem et non Rex fontem*, and so doeth aqua Regis, but vulgar Mercurie contrarily, *non trahit Solem, sed Sol eum*. He answeared that whatsoeuer vulgar mercury or crud mercury doe, yeat this mercury philosophicall of crud mercury and silver will instantly drink vp gould, and drawe it in, *initio secundi operis*. Then I demanded, when should the second worke begine, and what was the signe befor *punctus periculosus*, he answeared that after perfite whitnes in *opere primo*, ther walde appear in ane instant *parvus circulus capillaris circa materiam ad latera vasis subcitrinus*, then instantly ferment with limell of goulde, and it will presently eate vp all the gould, and that circle will evanishe, but if you staye longer in fermentinge, the worke will become all citrine, and mor drye then that it can dissolue the goulde, for the gould must be sowen *in terram albam foliatum*. Then I demanded what *terra alba foliata*

was, he answeared that *in prima albedine*, the matter of mercurie and luna became lyke the smal skales of ane fishe; when I remembered that my father shew me that he made ane worke which became *terra alba foliata*, most lyke the leaves of ane booke set on edge, of *Sol*, *Luna*, *aqua regis* and *aqua fortis*. Vpon the 13 daye of Nouember, he being convalesced, he shew me that he had feared himself, and vpon affection reuealed thir thinges to me, which vpon his saluatione he affirmed to be true, and desired me to confer the sentences of the philosophers togither, and I should finde them all agree with thir premisses, which I finde appearantly verie true in ther theoricall sentences, but contrarie in ther practicall precepts. They induce many thinges repugnant to themselfes to illude the vulgar and prophane people, to diuerte them from the treuthe of ther former sentences, as vnworthie therof. Heerafter, about the 15 daye of Marche 1608, the Doctor shew me that he had receiued glade tydinges of the safe returne of Lionel Struthers his sayd freind from Histria to England, and shew me ane certaine anticke figure with certaine verses of congratulatione which he made and was sendinge to him in ioye of his safe returne. So within 10 dayes he came to Edinbroughe to the Doctor, and brought with him great store of minerall mercurie which neuer had fealte fyre, and some vnfyned easie to be wrunge out from his owre. The Doctor gaue me secretly ane smal portione bothe of the one and of the other, as also ane verie smal parte of Luna minerall vnfyned, but I purchased mor bothe of Scotes and Germane Luna. As for Sol minerall, wee haue enoughe in Scotland. Rests tyme and opportunitie to enterpris the worke with the blissinge of God to performe the samen to his glorie and comforte of his servants, which the Almightie grante to ws whos holy name be praysed and magnified for ever and ever. Amen. Mr Struthers sayes that the Spainards takes all the sayde crude mercurie, for it gathers most of mine gould."

"This graphic glimpse," says Napier's accomplished biographer, Mr Mark Napier, "of the inventor of logarithms, in his walks about Edinburgh, at the commencement of the 17th century, is as vivid as a photograph. His 'dismissing his company,' in order to take his place at that private *séance* at the bedside of his sick friend, affords a trait of individuality suggesting an idea of the sages of Greece and Rome, attended by their clients or scholars as they moved about. It

would seem, at least, that the sage of Merchiston was not without a "company," whom he dismissed at will, in his progress about the metropolis."[1]

Such, in a few words, is an episode in the life of John Napier; and we are constrained to believe that the desire to discover a short and certain road to vast wealth by a secret mode of transmuting baser metals into pure gold had not been without its influence on one of the greatest mathematicians Scotland ever produced.

ROBERT NAPIER.

The second son of John Napier of Merchiston, by his second marriage, was Robert Napier of Culcroich, Drumquhannie, and Bowhopple, who was born about the year 1590. It was to him that his distinguished father left the care of his younger children, and the editorial charge of his unpublished works. He accordingly, in conjunction with Oxford's greatest mathematician, Henry Briggs, published his father's "Logarithmorum Canonis Constructio," and wrote the preface in Latin, a language of which he was thoroughly master. He also wrote a treatise on Alchemy, which is still preserved in manuscript in the charter-chest of the present Lord Napier, and which has been fully described by Mr Mark Napier in his excellent life of his great ancestor.

[1] Lectures on Logarithms, ii. p. 29.

The title of this singular work is "The Revelation of the Mystery of the Golden Fleece, or Philosophical Analysis whereby the marrow of the true Hermetic Intention is made manifest to such of my posterity as fear God.—ROBERT NAPIER, Author."

Its motto is—

> "Orbis quicquid opum vel habet medicina salutis,
> Omne Leo Geminis suppeditare potest."

The Golden Fleece was a favourite title with the alchemists, and was given to several of their treatises. As they were always ready to attribute some secret meaning to the names they employed, they conceived that the Golden Fleece, which it was the object of Jason and the Argonauts to carry off with Medea from Colchis, was a treatise on gold-making, written on hides. That a work containing secrets so highly prized by its author was never printed is explained by the following solemn instruction given by Napier to his son:—"This booke to remain in my charter-chist, and not to be made known to any, except to some neir friend, being a scholler, studious of this science, who feares God, and is endewed with great secrecie not to reveal and mak commone such misteries as God has apointed to be keipit secrit among a few in all ages whoes harts are upright towards God, and not given to worldly ambitione or covetousness, but secretly to do gud and help the poor and indigent in this world, as they wold eschew the curse of God if they do otherways."

After this peremptory injunction there follows a solemn caveat in Latin, to this effect:—"Beware that you do not disclose this little book to the impious, the imprudent, or the garrulous—Beware!"

In the preface the author states that he had collected all that was scattered through the works of the Hermetic writers bearing upon the art of alchemy, which he considered a great gift of God. He also states that his object in writing it was for the sake of the good men who worship God with sincere and pure hearts.

That the author was convinced of the difficulties which might follow from the too great success of the alchemistical processes, and of the necessity for their being kept profoundly secret, is evident from the following passage in the preface:—

"Whoever divulges these sacred mysteries shall be held guilty of

betraying this secret, and responsible for all the ills that may emanate therefrom. A madman must not be armed with a sword. Divulge this secret, and the hind would become greedy of gold to his own destruction. The earth would be deluged with iniquities. Agriculture and the other arts of civilization would no longer exist. Mighty in their gold, nations would rush to causeless war. The worthless would wax proud, and scorn their rulers. The reins of civil power and legitimate government thus relaxed, a fearful convulsion would follow. Oh! I say, reveal this secret to the vulgar, and the darkness of chaos must again brood on the face of the waters." [1]

This singular manuscript contains many extracts from the cabalistic works of the most noted adepts, with annotations by the compiler, "whereby," as the title intimates," the marrow of the true hermetic intention is made manifest to such of my posterity as fear God." Among the philosophers quoted are "Flamelli Hieroglyphica," or "Flamel's Explication of Hieroglyphic Figures;" Nortonus Anglicus, author of the "Ordinal of Alchemy;" and Basilius Valentinus, author of the "Mystery of the Mycrocosm." There is, however, in it no reference to the illustrious father of its author, who does not seem to have bequeathed the grand secret now communicated under such fearful restrictions. It contains a quotation from D. D. Mollierus, who may be the Doctor Daniel Müller whose intimacy with John Napier has already been referred to. The following may be taken as a specimen of the enigmatical poetry so much in favour with the alchemists of the period, and its translation is by Napier himself:—

D. D. Mollierus.

Clavicula triplici proprio de stemmate facta
Ingenue reseror; quarum jacet *una*, sepulta
Monte sub Istriaco; Mariano monte, *secunda;*
Tertia soliferis Scotiæ reperitur in undis:
His tribus unitis—cedo non viribus ullis—
Longævus, sanus, locuples, reserator abibis.

"A threefold key soon opens me, made of my proper kind;
The *first* lies still in Istria hill, there buried in that mine;

[1] Lect. on Log. by Mark Napier, ii. p. 50.

The *next* is wont in Marian Mount to lie among the mould;
The *third* is found in Scottish ground, in waters yielding gold:
Thir units three does open me—I fear non other force—
Depart with wealth, long life, and health, thou opener of my corse."

An interesting volume, published in London in 1623, has the following title:—"A Revelation of the Secret Spirit, declaring the most concealed secrets of Alchemie, written first in Latin by an unknown Author, but explained in Italian by John Baptista Lambye, Venetian. Lately translated into English by R. N. E., Gentleman." As the translator was, from the dedication, evidently a native of Scotland, in which he states that the work was published specially for the whole Scottish nation's sake, the initials R. N. E., Dr Laing thinks, with much probability, might stand for Robert Napier, Esquire, or of Edinburgh.

Sir David Lindsay, First Earl of Balcarres.

Among the Scottish nobility, the art of alchemy has a representative in Sir David Lindsay, afterward created Earl of Balcarres. Sir David was the second son of John Lindsay, better known by his judicial title of Lord Menmuir, who again was the second son of Sir David Lindsay of Edzell and Glenesk, ninth Earl of Crawford. Lord Menmuir was born in 1552, and in his early life was provided for by being appointed to the Rectories of Menmuir, Lethnot, and Lochlee in Angus, which were in the gift of the Edzell family, and from the first of these he was well known by the title of Parson of Menmuir. The law, however, was his pursuit, to which he applied himself with such success that before he was thirty years of age he was appointed one of the Lords of Session. He was afterwards created Lord Privy Seal, Secretary of State, and one of the Octavians, or eight Commissioners of Exchequer, who for a time ruled Scotland. He discharged the important duties confided to his care so well that scarcely any commission connected with the Government—the improvement of the finances, the regulation of the taxation, &c.—was considered complete without his name being included in it. The attention of Lord Menmuir was early directed to the subject of mining, with a view to the improvement of the public revenue, and he entered eagerly into the project of working the lead mines and other minerals on his

brother's estates. Workmen, says Lord Lindsay, were procured from Germany, smelting furnaces built, and large sums expended on the lead-mines in Glenesk, which were supposed to be of great value.

In 1592 Lord Menmuir was created by the king "Master of the metals and minerals within the kingdom"—"knowing the qualification," says His Majesty, "of his weill beloved councillor, and his travels in seeking out and discovering divers metals of great valour within this realm and in sending to England, Germany, and Denmark to get the perfit assay and knowledge thereof"—an appointment supported by extensive powers, and the object of which was the increase of revenue to the Crown by the exploration of the mineral wealth of Scotland, more especially the gold mines of Crawford Muir, on the lands granted by the Lindsays above 350 years before to the monks of Newbattle. But this resource was found unproductive, or at least the necessary preliminary outlay was too expensive.

The jealousy of Sir Archibald Napier, "General of the Cunzie House," at this appointment has been before referred to. While Sir Archibald was not slow to call attention to his own qualifications, and to animadvert upon the "Parson's" mining schemes, the latter attacked Sir Archibald's qualifications in these bitter words—"He may be better versed in bellices and fornaces nor I, and to have more knowledge; but virtue is in action and not in contemplation; and I believe that I shall shew better effects of my office in ane year nor he has done in nine." Several Memorials addressed to the Scottish Privy Council are still extant relative to this dispute.

Lord Menmuir died in 1598, and was succeeded by his youthful son John Lindsay, who only survived till 1601. His second son, David, succeeded his brother at the age of 14. His estates of Balcarres, Balneill, Pitcorthy, &c., were united into the free barony of Balcarres in 1603. When King Charles I. visited Scotland, Sir David Lindsay was advanced to the peerage by the title of Lord Lindsay of Balcarres, and his patent was dated at Holyrood House in 1633, "in regard of the good services done to His Majesty and his late Royal Father, of blessed memory, by him and his predecessors." He married a daughter of the first Earl of Dumfermline, Lord High Chancellor of Scotland.

Shortly after he attained his majority, he travelled on the Continent,

where he had ample opportunities for study, and on his return to Scotland he devoted himself to the pursuits of science. He added to his father's library till it became one of the best then to be met with in Scotland. "He thought a day misspent," says his daughter-in-law, "on which he knew not a new thing. Natural philosophy, particularly chemistry, and the then fashionable quest of the *elixir vitæ*, and the philosopher's stone, occupied much of his attention; but it was the spirit of science and philanthropy, not of lucre, that animated his researches. . . . . Ten volumes of transcripts and translations from the works of the Rosicrucians and others, models of correct calligraphy, "which I remember seeing, says one of his descendants," in our library, covered over with the venerable dust (not gold dust) of antiquity, survived their author, but have now dwindled to four, which still hold their place in the library of his representative along with his father's well-read Plato—the favourite author, I have little doubt, of the son likewise." This love for mysticism and occult science may probably have been imbibed during his early travels on the Continent. "It is not impossible indeed that he may have become," says Lord Lindsay, "a brother of the 'Rosy Cross,' if indeed that celebrated society ever existed—its labours having been professedly devoted to the glory of the God, and the good of mankind."[1]

This amiable nobleman died in 1641.

Patrick Ruthven.

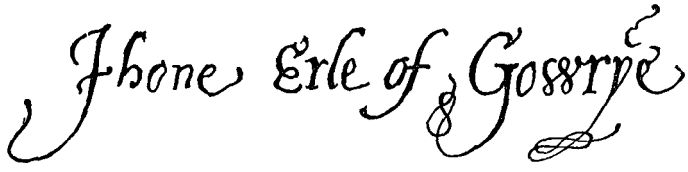
The ancient family of Ruthven, so well known in Scottish history, was of Saxon or perhaps Danish origin, and is said to have been settled in Scotland before the middle of the twelfth century. Sir William de Ruthven was created a baron by James III. in 1488. His grandson William, the second baron, was one of the first who embraced the Reformation. Patrick, the third Lord Ruthven, who, as heir of his mother had been also created Lord Dirleton, was the chief actor in the assassination of David Rizzio in 1566. The first Earl of Gowrie was William, the son of Patrick Lord Ruthven, and is well known from the enterprise called "the Raid of Ruthven," in which he carried off James the Sixth, and detained him in his castle for ten months. For this treason against the king he was executed at Edinburgh in 1584. The first earl left a family

[1] Lord Lindsay's Lives of the Lindsays, vol. ii. p. 4.

of thirteen children, five of whom were boys:—1. *James*, the second earl, who died in 1588; 2. *John*, the third earl, born about 1578; 3. *Alexander*, born in January 1580–81 (these latter were the two brothers who were killed at Perth on the occasion of the Gowrie conspiracy in 1600); 4. William; and, 5. Patrick. At the time of the execution of the earl, William and Patrick were of very tender age, the former being probably about three years old, the latter about as many weeks.

It is a remarkable circumstance that the members of this family, so much mixed up with the turbulent and violent proceedings of the period when they flourished, were at the same time distinguished for their great mental attainments and for the study of the natural sciences. "Patrick, the third Lord Ruthven," says Dr Craik, "who is commonly thought to have been little better than a barbarian, received a learned education at the University of St Andrews, and was an expert clerk and man of literary tastes and accomplishments, as ready when occasion demanded with his pen as he was with his dagger." He wrote an account of the death of Rizzio, and in it he relates an anecdote which implies not only that he had the reputation of dealing in the supernatural, but that he would himself upon occasion encourage and take advantage of the belief in his forbidden knowledge. He had once, it seems, presented Mary Stuart with a diamond ring, which he told her had the virtue of preserving her from poison; and the Earl of Murray, either feeling or affecting a horror of such a recognition of the powers of darkness and employment of their services, would have had Her Majesty bring him into question on that account. His son, the first Earl of Gowrie, inherited the same tastes, and he was, according to Spottiswoode, "a man wise, but said to have been too curious, and to have consulted with wizards touching the state of things in future times." The third earl and his brother Alexander Ruthven, the chief actors in the Gowrie conspiracy, were two of the earliest graduates of the University of Edinburgh,—the earl having taking his degree of M.A. in 1593 and Alexander the same degree in 1598. The earl seems to have retained his fondness for scientific study to the last; and it was stated that when his pockets were searched after he was killed on the occasion of the conspiracy, there was found in them "a little close parchment bag, full of magical characters and words of enchantment, wherein it seemed that he had put his confidence, thinking

himself never safe without them, and therefore ever carried them about with him." It is interesting, as showing the popular feeling of the period in Scotland with regard to scientific research, that the mysterious hieroglyphics in which the earl indulged were the cause of great uneasiness to his tutor, William Rhynd. "The tutor would sometimes get hold of the



[1]

paper," says Dr Craik, "and anxiously ask the earl for what purpose he kept it about him; the only answer he got was, 'Can you not let it be? It will do you no harm.' Rhynd was so troubled in his mind about the matter that he several times intended to have burned the characters, and was only deterred by the apprehension of his pupil's wrath and anger; for if at any time he took them out of the earl's pocket, my Lord, he says, would be in such a rage with him, that for a certain space he would not speak with him, nor could the unhappy tutor by any means regain his good countenance. In Rhynd's opinion, my Lord was never at ease if he had not the characters about him to the hour of his death. And he was constrained to believe that he kept them for no good. The talismanic words or letters it seems were partly Latin, partly Hebrew, and were all in the earl's own handwriting. Indeed, he told Rhynd that he had copied them himself."[2]

The younger brothers of the conspirators, William and Patrick Ruthven, several years afterwards were distinguished for the same researches. Of William, Bishop Burnet remarks, "It was given out that he had the philosopher's stone;" and of Patrick the alchemical commonplace book still exists, which testifies to his skill in the hermetic science.

At the time of the death of the Earl of Gowrie and his brother Alex-

[1] Facsimile of signature of the third Earl of Gowrie, in Laureation Book of the University of Edinburgh, *anno* 1593.

[2] Craik's "Romance of the Peerage," vol. ii. p. 153.

ander, on the occasion of their conspiracy, their brothers William and Patrick were "at the schools" in Edinburgh, and were resident "in the dwelling-house of Alexander Adamson in umquhile Mr Thomas M'Calyean's Close." On receiving the news of the calamitous end of their brothers, the two youths with their tutor immediately took to flight, and proceeded to the house of their mother at Dirleton, about twenty-five miles from Edinburgh. This was on the morning of the day after the explosion of the conspiracy. The same evening a band of horsemen, headed by the Master of Orkney and Sir James Sandilands, arrived at Dirleton to effect their apprehension. Their mother the countess, however, had the opportunity of receiving intelligence of the party sent by the king, and the youths with their tutor escaped to Berwick, where they gave themselves up to the English governor, Sir John Carey. From Berwick they went south, and are said to have, with the consent of Queen Elizabeth, resided at Cambridge with their tutor for two years. In 1602 they ventured to return to Scotland, but this had the effect of raising suspicions in the mind of the king that they had come to carry out some dangerous plot against him. They therefore returned to England, and were in that country when the death of Elizabeth placed King James on the throne of England. One of the first acts of the king when he entered upon his new dominions, was to issue a proclamation for the arrest of these young men. William made his escape to the Continent, whence he never returned; but Patrick was seized and imprisoned in the Tower. There he languished for a period of nineteen years, without trial or even an accusation formally brought against him.

In 1622 Patrick Ruthven was liberated by His Majesty's command, on condition that he should confine himself to the University of Cambridge or six miles from the same; and a pension of L.500 was settled upon him, payable out of the Exchequer. He was, however, in the following year permitted to reside in Somersetshire. After regaining his liberty he married Elizabeth Woodford, widow of Thomas first Lord Gerrard; and his daughter, Mary Ruthven, became the wife of the celebrated painter, Sir Anthony Vandyke.

In consequence of the troubles which subsequently agitated the country, the pension of Patrick Ruthven was stopped, and he was reduced to difficulties. In this emergency he is said to have procured a degree of

Doctor of Medicine, and practised that profession in London. In the diary of Sir Henry Slingsby, under the year 1639, it is stated that Sir Henry's wife, who was suffering apparently from some nervous disorder, after consulting many other medical advisers, made "some trials of Mr Ruthven, a Scottish gentleman of the family of Lord Gowers, who had made it his study in the art of physic to administer help to others, but not for any gain to himself."

After suffering much from poverty and neglect, Patrick Ruthven died in the King's Bench, at the age of sixty-eight; and was buried at St George's in Southwark, as "Lord Ruthven," on 24th May 1652.

The commonplace-book of Patrick, the last of the Ruthvens, now preserved in the University Library, Edinburgh, contains the Smaragdine Table of Hermes Trismegistus, together with a carefully digested series of extracts from alchemical and other works relating to the philosopher's stone, such as—"De vero et solo artis nostræ acquirendæ modo;" "Ex quibus opus nostrum;" "Cum quot et quibus perficitur;" "Quot vasa operi sunt necessaria;" "De coloribus apparentibus in opere nostro;" "Descriptio mercurii philosophici cum quo solo vera et naturalis auri fit solutio;" "Of coniunction, sublimation, fermentation, of projection."

A long letter to the Earl of Argyle from D. M., who is no doubt the Dr Müller referred to in the sketch of John Napier, written prior to 1629, is also included in this interesting volume, and begins as follows:—"The coppie of D. M. letter writen to the Earle of Arg. contayning the wholl worke aenigmaticallie as he conceiued it, firste out of the former wheels and sypher of Trithemius, and then made it with his owne hands; copied by me from the originall letter under D. M. owne hande; copied, I saye, an. 1629 Octob. 2. per me PATRICIUM RUTHUENUM."

This letter, as the above description purports, gives long directions for making a red powder, which it states when projected on "10 parts of mercurie thou shalt see thy meadson will turne this letle starr into a bright and perfect shininge sonne." The letter thus concludes:—

"I say with this thou mayest instantly heal all manner of diseases of all living creatures, restore the sicke to their health, preserve the holl from sickness, and continue them both in ane assured estate of health vntill

that howre apoynted by God to call them hense for their originall sinne. Thou mayest also helpe all the infirmities of vegetables, and of chrystall make rubies and all kind of pretious stones. Judge then whither this be not the rarest gyfte that God hath geven to man next after his soule and the saluatione of the same. Vse therefor this sacred gyfte as a means whereby to acknowledge the goodness of so gratious a God, and take head thou abuse not him and his gyftes; and think that in this thou art but Godes stewart, and must give to him a full account whow thou hast vsed this thy talent, for to whom he leandeth much of him shall much be requyred.

"Liue clean in soule, to God doe no offence;
Exalt the not, but rather keep the lowe;
Els will thy God in the no wisdom sowe.

"D. M."

Alexander Seton, or the Cosmopolite.

Of the early life of Alexander Seton very little is known. According to Dempster,[1] who seems to have been acquainted with him, he was a native of Edinburgh, and he states that Seton was also known under the name of *Cobrethus*. It was, however, under the name of "the Cosmopolite" that he travelled over Europe, and the origin of this designation is still a subject of controversy with the historians of the hermetic science. From the almost universal custom of Latinising proper names at the period when he flourished, his name occurs in a great variety of forms, such as—*Sethon*, *Seidon*, *Sithonius Scotus*, *Setonius*, *Sidonius*, *Suthoneus*, *Suethonius*, and *Sechtonius*. The designation *Scotus*, however, with which nearly all references to him are accompanied, sufficiently indicates that it is attachable to the same person; and his recent biographer, M. Figuier,[2] infers that he belonged to the noble family of Seton, whose chief residence was Seton House, in the county of Haddington.

The account of the first successes of Alexander Seton in the hermetic art is to be found in Morhof's "Epistola de metallorum transmutatione, ad Joelem Lengelottum," in which the following incident is related :—

[1] Hist. Eccl. Gent. Scot. ii. p. 603.
[2] L'Alchimie et les Alchimistes, p. 254.

During the summer of the year 1601, a Dutch pilot, called James Haussen, being with his crew caught in a storm in the North Sea, was thrown upon the coast of Scotland. The shipwrecked mariners received shelter in the house of a gentleman, who, possessing a mansion and grounds on that coast, attended with much kindness to the sailors while with him, and procured them the means of returning to Holland. This instance of the humanity of the Scotsman was gratefully felt by the pilot, while the pleasure which both his host and he felt in each other's society, during the few days they passed together, made them promise on parting to meet again at some future time.

In the beginning of the year 1602, continues Professor Morhof, Seton began his peregrinations by a voyage to Holland. He went to visit his guest and friend Haussen, who then lived in the small town of Enkhuysen. The sailor received him with joy, and he spent several weeks in his house. During his sojourn there, a fraternal intimacy arose. The Scotsman did not wish to quit his guest without confiding to him what he knew of the art of transmuting metals, and to prove it, he made a projection in his presence. The 13th of March 1602, at four o'clock in the afternoon, Seton changed a piece of lead into a piece of gold of the same weight, which he left as a souvenir to his friend James Haussen.

Struck by the prodigy which he had witnessed, Haussen did not hesitate to talk of it to one of his friends, a medical man of Enkhuysen, and to him he also made a present of a piece of his gold. This friend was Van der Linden, grandfather of John Van der Linden, author of several medical works; and who, having inherited this gold, showed it to the celebrated physician, George Morhof, author of the well-known letter above referred to, and out of which this part of the history of "the Cosmopolite" is taken.

After quitting Enkhuysen, Seton repaired to Amsterdam, and afterwards to Rotterdam, and then embarked for Italy. Dempster, in his "History of Scottish Writers,"[1] states that he gave notable proofs of his skill at Naples, and that in the Portico at Florence, at the Museum of the Grand Duke, his skill was attested by two plates of gold which he made of molten lead, but while the goldsmith in whose workshop he performed the projection was inspecting and much admiring his work, he withdrew

[1] Vol. ii. p. 603.

from the place, and was not to be found afterwards in the city or its neighbourhood.

In the same year he seems to have arrived in Germany, through Switzerland, in company with a professor of Friburg, Wolfgang Dienheim, who, declared adversary as he was to the hermetical philosophy, was constrained to render his testimony to the success of a projection which Seton executed at Basle, before him and several important persons of that city.

"In 1602," writes Dr Dienheim, "about the middle of summer, when returning by Rome to Germany, I found myself at the side of a man singularly spiritual, small in size, but sufficiently stout, of a ruddy complexion, of a sanguine temperament, having a brown beard cropped in the style of France. He was dressed in a habit of black satin, and had for his suite a single attendant, who could be distinguished among all by his red hair and beard of the same colour. This man called himself Alexander Seton. At Zurich, where the clergyman Tighlin gave him a letter to Dr Zwinger, we hired a boat and returned by water to Basle. On our arrival in that town, my companion said to me—'You will remember that throughout the voyage, and in the boat, you abused alchemy and alchemists. You will also recollect that I promised to answer you, not by verbal demonstrations, but by a philosophical experiment. I expect, besides, another person, whom I wish at the same time to convince with you, so that the adversaries of alchemy may cease to doubt upon the subject of this art.' I then went to seek the person in question, whom I only knew by sight, and who did not live far from our hotel. I was afterwards informed that he was Dr Jacob Zwinger, whose family numbered so many eminent naturalists. We now repaired, all three, to the house of a goldsmith with several plates of lead, which Zwinger had fetched from his house, a crucible which we received from a goldsmith, and some ordinary sulphur which we bought on the way. Seton touched nothing. He caused a fire to be made, ordered the lead and sulphur to be placed in the crucible, the lid to be put on, and the mass stirred with rods. After a quarter of an hour had elapsed, he said to us, 'Throw this small paper on the middle of the melted lead, and take care that nothing falls into the fire.' In this paper was a powder, rather heavy, of a colour which appeared to be citron yellow; for the rest it required good eyes to

distinguish any other peculiarities. Although as incredulous as St Thomas himself, we did all we were commanded. After the mass had been again heated for a quarter of an hour, and continually agitated with rods of iron, the goldsmith received an order to quench the crucible by pouring water on it, when there was not the least vestige of lead but a quantity of pure gold, which, in the opinion of the goldsmith, surpassed in quality the best gold of Hungary or Arabia. It weighed as much as the lead of which it had taken the place. We were stupefied with astonishment. It was as if we could hardly dare to believe our eyes. But Seton, mocking us, 'Now,' said he, 'where are you with your pedantries? You see the truth of the fact, and that is more powerful than all your sophisms.' He afterwards cut off a portion of the gold, and gave it as a souvenir to Zwinger. I also preserved a portion, which weighed about four ducats, and which I carefully kept in memory of this journey. As to you incredulous, you will perhaps mock at what I write. But yet I saw it, and I am a witness always ready to testify to what I have seen. But Zwinger also saw it; he will not conceal anything, but render his testimony to what I affirm. Seton and his domestic are still alive, the latter in England, the former in Germany, as is well known. I might also specify the precise place where he dwells, were it not an indiscretion to make researches into the affairs of this great man, this saint, this demi-god."[1]

Jacob Zwinger, cited by Dr Dienheim, was a physician and professor at Basle, and left a name respected in the history of German medicine. He died of the plague in 1610, but in the year 1606 he confirmed in the minutest details the account of Dr Dienheim in a Latin letter, which Emmanuel König, one of the professors at Basle, has printed in his Ephemerides.[2] This letter further states, that before quitting Basle Seton made a second projection in the house of a goldsmith called Andrew Bletz, where he changed into gold many ounces of lead. As to the piece of gold which had been given to Dr Zwinger, it is stated in the *Bibliotheca Chemica* of Manget, that the family of that physician preserved it, and showed it for a long time to strangers and the curious.

[1] J. W. Dienheim de Minerali Medicina. Argent. 1610.

[2] Epistola ad Doctorem Schobinger.

After entering Germany, Seton seems to have commenced a career of adventures. He returned to Strasbourg after leaving Basle. He is also to be regarded as the unknown alchemist, who was mixed up with an event of which the results were very sad to a German goldsmith named Philippe Jacob Gustenhover. This Gustenhover was a citizen of Strasbourg, where he exercised his calling. In the middle of summer, in the year 1603, a stranger presented himself at his house, under the name of Hirschborgen, who was no other than Seton, asking leave to assist him in his labours, which request was granted. On leaving, the stranger, to recompense his host, gave him a red powder, of which he showed him the use.

After the departure of his guest, the goldsmith had the vanity to speak of his treasure, and more unfortunately to use it before several persons, among whom he wished to pass himself off as an adept. All was in truth done between neighbours and friends, but, as has been well remarked by Schmieder, who furnishes this episode, each friend had a neighbour and each neighbour a friend. The news spread from mouth to mouth and from house to house, and shortly in the town of Strasbourg every one cried, "Gustenhover has found the secret of the alchemists! Gustenhover makes gold!"

The fame of this event was rapidly carried to Prague, and it is easy to believe that the person who brought the news would be well received by the Emperor Rodolph II., who was himself a great alchemist. At the first rumour of it the council of Strasbourg deputed three of their number to inquire into the fact. The names of these delegates have been given, who made the goldsmith work before their eyes, and who, after seeing his experiments, operated themselves one after the other with equal success. One of these three delegates, called Glaser, councillor of Strasbourg, who came to Paris in 1647, showed a morsel of the gold thus made by Gustenhover to Dr Jacob Heilman, on whose authority these details, and those which follow, are given.[1]

The Emperor Rodolph did not lose time in sending commissioners to the adept. He ordered the goldsmith to be brought into his presence. When questioned by the German Hermes, Gustenhover was forced to admit that he had not himself prepared this marvellous powder,

[1] Bib. Chem. Mangeti.

and that he was absolutely ignorant of the manner of fabricating it. But this avowal had only the effect of irritating the greedy sovereign against him. The poor goldsmith reiterated his protestations without being any more listened to. He was ordained to continue to make gold, although all his stock of the powder was exhausted. This powder, a present from his guest, and which without doubt must have been a compound of gold, had furnished to him the means of satisfying for some time the imperial desire; but after he had expended it all he found himself unable to do more. To escape the wrath of the emperor, the unfortunate goldsmith took to flight as a last resource. But, pursued and brought back, he was shut up in a tower, in which the emperor, always believing that the alchemist was obstinately refusing to reveal his secret, retained him a prisoner for life.

Many anecdotes are related in the works of Hogheland and Morhof, before quoted, and in Guldenfalk's *Anecdotes Alchimiques*, of projections of a similar kind made by Seton in various towns of Germany. At last, in 1603, the Prince of Saxony, having heard of the ability of the Cosmopolite, desired to have a proof of his skill. Seton, however, did not think fit to appear, but sent his servant Hamilton to operate before his Highness. The projection made in presence of the whole Court was fully successful, the gold of the adept having stood all the tests. The prince then persuaded Seton to come to Court, and at first affected to be favourable to him. A small quantity of the philosopher's stone, of which Seton made him a present, did not however suffice to content the prince, and he demanded to be informed of the secret of the operator, which Seton obstinately refused to reveal. He was in consequence made to endure all the torments that cruelty, stimulated by the thirst for gold, could devise. He was pierced with sharp irons and burned with molten lead, and was then shut up in a dark dungeon.

A Moravian gentleman, skilled in chemistry, however, called Michael Sendivogius, who was at the time a favourite with the prince, got leave to visit Seton in prison, and proposed to rescue him. He raised a sum of money, bribed the guards, and succeeded in conveying Seton out of the territories of the prince. He then demanded Seton's secret, but the latter excused himself, saying he could not commit so great a sin, and counselled his rescuer to ask it from God.

Seton died in 1604, from the effects of the tortures inflicted on him. Sendivogius then married his widow, from whom he obtained a small quantity of the red powder of projection, and an alchemical manuscript, entitled "The Book of twelve chapters," which he published at Cracow, with the motto *Angelus doce mihi jus.* This being the anagram of his own name, caused the book to be attributed to him.

Sendivogius successfully used small quantities of the powder he received from Seton at various places, and obtained great notoriety. All the Courts in Germany were impatient to have visits from him; and he was so successful in his transmutations made at Prague before the emperor Rodolph II., that to commemorate the circumstance the emperor placed a marble tablet on the wall of the room where the experiments were performed, with the inscription :—

Faciat hoc quispiam
Quod fecit Sendivogius Polonus.

This tablet was often visited by the curious, and so recently as 1740 was to be found in the imperial castle at Prague.[1]

Patrick Scot.

Among the Scottish writers on alchemy, though opposed to its pretences, may be included Patrick Scot, whose varied fortunes form a fitting accompaniment to those of Alexander Seton. Of his birth and parentage nothing has been recorded, but he is stated to have belonged to Falkland, in Fifeshire, where he was possessed of landed property. From his published works he appears to have been a man of good education. The first of these was his "Table-book for Princes, containing short remembrances for the Government of themselves and their Empire."

[1] In the notice of Seton given in Dempster's "Historia Eccles. Gentis Scot.," already quoted, it would appear that his fame as an alchemist was very great, and that an epigram, *Alter Jason eris, qualis Sidonius estque Ramsaeus,* had been praised by Raphael Eglinus Icovius. Dempster states that he had met Seton at Toulouse, where he showed him several things, but immediately repented having done so. "This," Dempster adds, "I at all events learned from him, that he considered liberty more precious than gold, and that he neither wished for the attention of princes nor the friendship of the great. He lived a wandering kind of life, and though practising a lucrative profession, he was poor. I have heard that he was killed in France by two men, in the hope of getting at his secret, who were for this offence afterwards executed."

This curious volume was printed in 1621, and is dedicated "To the High and Mightie Prince Charles, the hopeful Prince of Great Brittain, France, and Ireland."

The views contained in this work in all probability recommended its author to the notice of king James VI., by whom he was patronised, and engaged on a mission by which he obtained great notoriety.

As is well known, king James was extremely anxious to assimilate the Church of Scotland to that of England. He introduced Episcopacy, and endeavoured, as far as possible, to enlarge the authority and jurisdiction of the bishops. Among the Scottish clergy who were opposed to those schemes, none was more resolute than David Calderwood, the historian of the Church of Scotland, who, with one or two others, drew up a remonstrance to be sent to the king. They were in consequence subjected to severe pains and penalties. Calderwood was imprisoned at St Andrews; but, on giving security to depart from the kingdom before the ensuing Michaelmas, and not to return without the royal license, he was released from confinement.

After residing for some time at Carlisle, Calderwood lingered about the north of England, and began the publication of anonymous works in support of Presbyterianism, and condemnatory of the famous Assembly convoked by James at Perth to settle the peace of the Church. One of these works,—entitled, "The Perth Assembly: containing (1.) The Proceedings thereof; (2.) The Proofe of the Nullitie thereof," &c.,—was published in 1619. This treatise gave the greatest offence to the king. The publisher of it, James Cathkin, when on a visit to London, was apprehended and examined in presence of His Majesty, who on the occasion was so indignant that he is said to have exclaimed with reference to the people of Edinburgh, whom he had not found sufficiently submissive, "The devill ryve their soules and bodies all in collops and cast them in hell!" Calderwood, who was at this time concealed at Cranstoun, at last sailed for Holland, where he visited Leyden, Rotterdam, Dordrecht, and Campvere. During his absence, and while rumours of his death were general, a most extraordinary attempt was made by Scot to impose upon his countrymen by publishing in the name of Calderwood a recantation of his Presbyterian views. This singular work bears the following title, —"Calderwood's Recantation: or, A Tripartite Discourse directed to

such of the Ministerie and others in Scotland that refuse conformitie to the Ordinances of the Church; wherein the causes and bad effects of such separation, the legall proceedings against the refractorie, and nullitie of their cause are softly launced, and they louingly invited to the uniformitie of the Church."[1] In this work Calderwood was made to abandon his Presbyterian predilections, to condemn the writings of Knox, Beza, and other Reformers, to demonstrate the divine origin of Episcopacy, and to laud the wisdom, goodness, and clemency of King James.

What renders this extraordinary step of Scot still more remarkable, is the statement of Calderwood, that it was generally believed that King James himself supplied the materials to Scot for this unscrupulous pamphlet. Calderwood was not idle, and soon showed his enemies that he was alive and as active as ever. He printed in Holland several controversial tracts, and his best known work,—"The Altar of Damascus,"—published in 1623, was one of the most formidable attacks on the polity of the Church of England, of which it has been remarked that "the patrons of Episcopacy have never yet answered it, how much soever their cause requires it."

The publication of this able work, and other pamphlets on the same subject, seem to have caused so much annoyance to the king, that Scot was selected for the important task of proceeding to Holland and silencing Calderwood, either by getting him put in prison or even by taking his life. That this singular mission was sanctioned by the king is abundantly evident from a letter of Sir Dudley Carleton, afterwards Viscount Dorchester, the English Ambassador at The Hague, addressed to James himself; while Scot has left an account of the manner in which he discharged the matters committed to his care in a document still extant,—"The accompt of my diligens in the seruice committed to mee, with a motion commended to His Majestie from his embassadoure at the Hague." In this paper Scot states that he searched for Calderwood at the Hague, Delft, and Amsterdam successively, and endeavoured to find his residence by pretending that he brought for him a large sum of money contributed by his friends in Scotland. But he never was able to cross the path of his intended victim.

As a writer on alchemy, Scot is known by a little work (of which a

[1] 4to, London, 1622.

copy exists in the library of Dr Laing) called, "The Tillage of Light, or the true discoverie of the Philosophical Elixir, commonly called the Philosopher's Stone.[1]" In this work he has shown considerable shrewdness. "If," he says, "the knowledge of this Elixar did by tradition come to Miriam the sister of Aaron (who, as some say, was learned in this art), then certainly the Revealers were much to be blamed for communicating such a mysterie to a woman's tongue, which they might as safely have committed to the winds. That shee had that knowledge by divine revelation, I will not take alchemist's word for warrant, *credo quod haud*, the rather that in all my observations by perusing most authours vpon this subject, or conversing with some chiefe professors of this chimera, I have never found truly demonstrated that there was or is such a thing *in rerum natura*, as alchemists dreame this Philosopher's Stone to be. I confesse I have seene many texts wrested to wrong constructions, that I have heard much thundring of the perfection to which this Nothing has been brought; but because *ex nihilo nihil fit*, nothing did ensue but consumption of the vndertakers' estates and losse of their labors. Therefore, since words without deeds are weake proofs, I reject such authorities as apochryphall, and am so far from beleeving such fairded suggestions that if the Phylosophers' positions were literally to be understood, I should never hold them other than like mathematicall demonstrations, wherein by many fayre propositions is prooved much, whereof no artificer can make use upon wood or stone." Scot was also on his guard as to what would be the injurious effect of the artificial production of gold in large quantity, and he remarks, "If it were possible to multiply or transmute a greater proportion of other vnrefined mettals into gold by proiection, what benefit should thereby arise either to the philosophers, or from them to others? They should acquire nothing by it but the corruption of manners, and staine of their profession, others but eversion of all politike government, mutuall commerce and industrious exchange. Kings should be inferiour to philosophers in the purchase of so great treasure: And so all soueraigntie (to whom by all nationall lawes belongs the prerogative of all gold and siluer mynes) would turne againe to a confusion and hotch-potch: many that are now holden wise, would perhaps turne fooles, and those that have now little wit would haue then none at all. Wee should see every covetous

[1] Printed at London in 1623.

pennie-father, mercilesse usurer, and Jewish broker become philosophers, and convert the blood of the poore, vpon which they now feed, into the new found Elixar. We should see the philosophers pearne their cloaks and become insatiable wordlings, usurious caterpillars, hellish pawn-mungers, and cut the garments of the necessitous to make them riding coates in their journey towards hell. O what a pitifull sight were it to see the offalls of heaven, the drugges of the earth and hell's fit fagots inuested in heaven's richest endowments? But what more tragical spectacle were it to behold vertue stript naked, spoyled of her beautie, heauen's gate which now stands open for her close shut up, and the entrie confined to the narrow passage of a needle's eye, through which how hard it is for asses loaden with golde and corruption to enter, the master of heauen when hee was vpon earth hath foretold. I tremble as in an Ague to heare of this exchange that vice should reach heaven and vertue enter in the right way to hell." [1]

An account of the latter end of Patrick Scot is related by Calderwood in his History,[2] where he states that he died in great indigence, and was buried at the expense of the Bishop of Ross, for the good service he had done to the king and to the bishops.

From the notices given of the Scottish alchemists, it will be observed that they attained not merely to local but even to European reputation. Although we cannot attribute to their labours any great discovery by which these would have been handed down to future times, still they kept alive in their country that spirit of inquiry into matters pertaining to chemical and physical science, which a century or two later produced men like Black, Playfair, and Leslie, by whose discoveries the domain of science has been widely increased. It is also satisfactory to know that, although the former search for gold among the bleak hills of Scotland ended in loss and disappointment, that country has, by the discoveries of science in recent times, yielded, and is now yielding, from her mineral treasures, truly golden harvests to a far greater extent than could have been dreamt of in the wildest and most visionary aspirations of her most sanguine alchemists.

[1] The Tillage of Light, pp. 11 and 19.

[2] Vol. vii., p. 583.

Note to paper on the Earlier Scottish Alchemists, in the Proceedings of the Society, vol. xi. p. 179.

JAMES IV.

In the "Epistolæ Regum Scotorum" is a letter from James IV. to Mr James Inglis, relative to some volumes of alchemical works which the king was anxious to possess.

This James Inglis, we learn from the Privy Seal Register, was appointed in April 1510, to sing for the souls of King James III. and his queen in the church of Cambuskenneth, with a fee of twenty marks a-year. On 23d July 1511 he got a grant of a pension of L.40 yearly till he obtained a benefice of 100 marks in value. In the half yearly payments of this he is called "clerk of the king's closet." He also held the chaplaincy of the Virgin Mary's Chapel, near the Bridge of Bannockburn, to which he was appointed on 20th December 1517.

The king's letter to him is in Latin, but is translated as follows:—

"James, by the grace of God King of Scots, to his beloved Mr James Inglis, greeting: We have received with pleasure the proof you have given of your friendly disposition in intimating in your letters to us that secret books, containing the sounder philosophy of alchemy, are in your possession; and that although most worthy men were soliciting these works from you, you have kept them, though with great difficulty, for our use, because you had heard that we were engaged in the study of that art. We give you thanks, and will give you due recompense when occasion requires, and have despatched a confidential messenger James Mercheinstoun to you, who will take charge of such books as you may wish to transmit to us, and whom you will trust in our name. Farewell. At our palace of Edinburgh,"[1] &c.

Another letter is preserved in the same collection, with reference to the mining operations of King James IV., from which it would appear that he had called in the assistance of a foreign adept to aid in the discovery of gold mines in Scotland. It is addressed to some foreign prince.

"James, by the grace of God King of Scots: Illustrious prince, and dearest kinsman,—your subject, John Habochi, a washer of gold [auri lotor], during several months skilfully devoted himself to the work here, though from the nature of the place the attempt did not succeed. He has now requested to be

[1] Epist. Reg. Scot., No. lxxii. To Mr James Inglis.

allowed to return home to visit his wife and children. We give you thanks, and are much indebted to you for granting us the aid of your subjects. What minerals and especially what gold may be found in this country your subject will report to you; we commend him to your Highness, to whom we wish prosperity and happy years. At our palace of Edinburgh, 8th July in the year 1511."[1]