I.

SKETCHES OF EARLY SCOTTISH ALCHEMISTS: MICHAEL SCOT—KING JAMES IV.—SIR GEORGE ERSKINE OF INNERTIEL. By JOHN SMALL, M.A., F.S.A. Scot.

The first well-known Scottish alchemist was the famous wizard or magician, Michael Scot of Balwearie, who was born in Fifeshire about the year 1200, after the commencement of the reign of Alexander II. He was thus the contemporary of the great English alchemist or natural philosopher, Roger Bacon, who, from his vigorous intellect, and information far in advance of his age, was dreaded by the people, and eventually poisoned by his monastic brethren. Devoting himself from his early years to the cultivation of letters, Michael Scot repaired to the University of Oxford, which then enjoyed a high reputation, not only for the sciences of ethics and philosophy, but for those of astronomy and chemistry. This last science comprehended within its range the mystery of alchemy, an art which then was not only very passionately cultivated by the most learned men of the kingdom, but which had become the subject of royal patronage and munificence. The sagacious and politic Edward I. seems to have been so far transported by his belief in the transmutation of metals that he invited the famous Raymond Lully, one of the greatest philosophers of his time, into his dominions, and it was then currently reported that the gold which was expended in fitting out an expedition to the Holy Land had issued, not from the exchequer of the king, but from the laboratory of the sage.

To show how long this belief remained, the following passage occurs in a work entitled an "Essay on Critical and Curious Learning," by T. R., printed in London in 1698: "I have read in some of their (the Alchemists') late books that it is authentically recorded that Ripley, an English adeptus, sent for many years successively a hundred thousand pounds of artificial gold to the knights of Rhodes to maintain the war against the Turks; and that Raymond Lully, another adeptus, furnished Edward the First with six myriads of the same metal to carry on the holy war in the Holy Land."

After leaving Oxford Michael Scot studied for some time at the Uni-

versity of Paris, where he applied himself to the study of mathematics with such success that he acquired the name of Michael the Mathematician. He also devoted himself to the study of divinity, and received the degree of doctor in theology. Having possessed himself of all the information he could acquire in his pursuits at Paris, he resumed his travels, and visited many foreign countries and universities. At Padua he distinguished himself by his essays in judicial astrology, and his predictions of future events rendered him as well known in Italy, where they were first promulgated, as he ever afterwards was in Scotland.

The well-known description of Scot by Dante-

"Quell 'altro, che ne' fianchi è così poco, Michele Scotto fu, che veramente Delle magiche frode seppe il giuoco,"

"That other, round the loins So slender of his shape, was Michael Scot, Practised in every slight of magic wile,"

proves that his appearance, at least as described, was familiar to the great Italian poet.

Besides the testimony of Dante there is that of a popular Italian versifier, Theophilus Folengius, who, in his Macaronic poem, published in 1549, describes Michael as a magician able to perform various enchantments, to summon fiends from the four quarters of heaven, to ride on an enchanted horse, to sail in an enchanted ship, and to wrap himself in a cloak which rendered the wearer invisible, unless he got into the glare of the sunbeams, when his shadow would be discovered. After speaking of Solomon, Zoroaster, Medea, Thibet, and Picatrix as celebrated magicians, Folengi introduces Michael Scot in the following lines, which have been translated into verse by Professor Blackie:—

"Behold the rule of Michael Scot concerning incantation,
By which six forms appear of him who reigns in hellish nation.
And first a waxen shape is made in Saturn's mould of lead,
This in the fragrant fire is hung by vermeil silken thread,
Whereby through heart of chariest maid love's kindly warmth is spread.
Behold this wizard Scot he stands beneath a shady tree,
And on the ground with many signs a circle draweth he,

Four spirits then with mighty voice he calls, and to his hest, One spirit from the east appears, another from the west, From south and north a third and fourth his mighty power attest; When by their aid he makes a rein, which rules with magic force, Well known to all, a wondrous beast, a black, infernal horse, Which him o'er land and sea more swift than Turkish arrow bears, And ever and anon he burns that horse's sacred hairs. Then doth this wizard paint a ship, a ship with right good oars, That cuts the brine from sea to sea and reacheth many shores. And then the marrow from human spine he burneth in dun smoke, That teaches him with whispered spells to consecrate a cloak— Spells which the spirits hear and fear, for well they know the token, Nor man nor spirit can stop his ears when potent words are spoken; This cloak who wears through all this vasty world may wander wide Unseen, if only he beware in the sun's light to ride, For thus his shadow will be seen, and he himself espied."

From Italy Scot made his way into Spain, and took up his residence at Toledo, the university of which was then highly celebrated for the cultivation of the occult sciences. While there he began and concluded a translation from the Arabic into Latin of Aristotle's "History of Animals," which procured him the notice of Ferdinand II., who gave him the office of royal astrologer. At the request of that monarch he composed a work entitled "Liber introductorius, sive Judicia quæstionum," which embraces the whole science of astronomy and astrology. His famous treatises entitled "Physiognomia" and "De hominis procreatione" were also written while he resided at the court of Spain.

After the lapse of some years Michael, who probably received from the king little but empty praise, as he was known to be an experienced alchemist, went to Germany, where he resided for some years, practising medicine with considerable success. He then passed over to England, where he found a patron in Edward I., who, as above related, was a firm believer in alchemy and the occult sciences. He returned to his native country shortly after the death of Alexander III.

There is but little known of his subsequent life, with the exception, perhaps, of his having been sent as an ambassador to Norway with Sir David Wemyss to bring over the young Queen Margaret, the maid of Norway, grand-daughter of the deceased monarch. He died in the year 1292 at

an advanced age, and was buried according to some authorities at Holme Coltrame in Cumberland, and according to others in Melrose Abbey.

Popular traditions are still vividly retained of many wonderful feats performed by the famous wizard "Auld Michael." In his native country also his powers are still remembered, and Sir W. Scott, in his notes to the "Lay of the Last Minstrel," describes how, according to fame, Michael evoked a fiend in the shape of a huge black horse, and, mounted on his back, flew through the air to France to demand satisfaction from the king of that country for piracies committed by his subjects on the Scottish coast; how by his power over spirits he caused one of them, for whom he had to find constant employment, to build a cauld or dam across the Tweed at Kelso, which was executed in a night, and which still does honour to the infernal architect; and how by the same agency, and in the same short space of time, he caused the Eildon Hill to be divided into the three picturesque peaks which it now bears.

Notwithstanding the terrible powers which Michael Scot possessed, the wizard was not deficient in human sympathies. In one of his singular books, called the "Mensa Philosophica," or the Philosopher's Banquet, he states that it is furnished not only with "a few dishes for health, but a large discourse for pleasure." These pleasurable discourses consist of "certaine jests and merry conceits to exhilarate and solace our bodyes and mindes at our tables, which are to be serued in like carrawaies at the end of our feast." It is interesting to remark that several of these jests seem to have been so popular as to have been incorporated in the original edition of "Joe Miller," printed in 1739.

The fame of Michael Scot as an alchemist rests on more than tradition: one of ten chapters in his "Liber introductorius," is a "Quæstio curiosa de natura Solis et Lunæ." This singular chapter has been incorporated into the "Theatrum Chemicum" of Lazarus Zetzner, 2 a work which contains the

"Sol gold is, and Luna silver we threpe;
Mars iron, Mercury quicksilver we clepe:
Saturnus lead, and Jupiter is tin,
And Venus copper, by my father kin."

¹ The names for gold and silver in the language of the alchemists were Sol and Luna.

⁻Chaucer, Canterbury Tales, 16,294.

^{2 5} vols. 12mo, Argent. 1622.

writings of the most celebrated alchemists. In it Michael, while he expresses his belief in the existence of the Lapis Philosophorum, chiefly endeavours to show the creative power of the sun and moon upon gold, and speculates as to the reducing of that metal to its first materials. He cautiously records his belief that the great difficulty in making gold was the want of a proper place for so doing, because gold being a perfect body requires an appropriate place for its generation, "Quia aurum eo quod ipsum est corpus perfectum requirit sibi proprium locum suæ generationis, videlicet ventrem terræ vel venas, sicut vinum ventrem vitis, ergo non potest fieri nisi in proprio loco."

While the alchemical labours of Michael Scot may thus after all have been limited to vague theories and conjectures, the investigations of subsequent Scottish inquirers assumed a more practical character, and the experiments of King James the Fourth amply sustained the reputation of the art.

KING JAMES IV. AND THE ABBOT OF TUNGLAND.

King James IV. was a monarch who, during the time he swayed the sceptre of Scotland (1488–1513), enjoyed the affections of his people in a remarkable degree. His mind was acute, and while he excelled in all warlike exercises and manly accomplishments, he was a zealous patron of learning, and did all that lay in his power to promote the arts and sciences.

Among his other accomplishments he conceived that he possessed, and not improbably actually did possess, considerable skill in surgery and medicine, and it is stated by Lindsay of Pitscottie that "he was weill learned in the airt of medicine and was ane singular guid chirurgiane; and thair was nane of that profession if they had any dangerous cure in hand but would have craved his adwyse." It is not surprising that to a monarch of such tastes the art of alchemy should have possessed the greatest attractions. The King was aided in his scientific labours by John Damian, a foreigner of pleasing address and great ingenuity, who in 1501–2 held an appointment in the royal household as a physician. Bishop Leslie says that he was an Italian. In one of the poems of Dunbar he is stated to have been a native of Lombardy, and to have practised surgery and other arts in France before his arrival in Scotland.

In the accounts of the High Treasurer of Scotland he is styled "the French Leich," "Maister John the French Leich," "Maister John the French Medicinar," and "French Maister John."

Under the guidance of Damian, the King established at Edinburgh and Stirling furnaces for prosecuting alchemical experiments, and continued during the rest of his reign to expend considerable sums of money in attempts to make "Quinta Essentia," which should convert other metals into pure gold, heal all diseases, and prolong human life far beyond its ordinary bounds. The four elements, fire, air, earth, and water, then believed to be the indispensable components of the whole of nature, were supposed to have a fifth principle common to the four. This was the quintessence of creation, the only true element, of which the four generic principles were nothing but derivative forms or embodiments, and it was the idea of this principle which guided the King and Damian in their experiments.1 These are referred to by Bishop Leslie as follows: "Maister John causet the King believe that he be multiplyinge, and utheris his inventions, wold make fine gold of uther mettal, quhilk science he callit the Quintassence; whereupon the king made great cost, but all in vain."

The following entry in the Treasurer's accounts is one of the earliest notices of Damian that occurs: "Item the thrid day of March (1501-2) send to Striuelin iiii hary nobles and to the Leich for to multiply, summa £9." The day following, "Item to the King and the Franch Leich to play at the cartis £9. 5." On the 29th of May 1502 the King's Treasurer paid to Robert Bertoun, one of the King's mariners, "for certain droggis brocht home to him to the Franch Leich £31. 4s." and the day after he gave "to the Franch Leich, quhen he passit his way 300 Franch crownis," or £210. Scotish money. This probably refers to a temporary visit to the Continent in furtherance of his schemes.

The ascendency of Damian was such that in 1504 King James appointed him Abbot of Tungland in Galloway. But, although appointed to an office of high preferment in the church, the newly-made Abbot

¹ The search after the "quintessence," or elementary principle of bodies, resulted afterwards, and under riper skill, in the discovery of quinine, morphia, theine, and other drugs of great value in medicine.

busied himself more with his experiments than with his clerical functions. "This Dignitary" says Dunbar, "never chose to go to Mass though warned by the holy bell or skellat." He also disobeyed the ecclesiastical law which required persons of his rank in the church to say matins. He neither put on stole nor fanon, lest they should have been defiled with the smoke of his laboratory. Notwithstanding his little attention to ecclesiastical matters, and the ridicule which he brought on himself by an unsuccessful attempt to fly with artificial wings from Stirling Castle to France,1 the Abbot retained the favour of the King, and the books of the Treasurer (1507-8) repeatedly mention him as having played at dice, cartis, &c., with his majesty; and on the 8th September 1508, "Damian, Abbot of Tungland, obtained from the King a license to pass out of the realm and remain in what place he pleases at the study, or any lawful occupation during the space of five years, without incurring any hurt, prejudice, or skaith, anent the Abbay and place of Tungland." He must have returned to Scotland previous to the death of James, as on the 29th March 1513, £20 was paid to "the Abbot of Tungland to pass to the myne of Crawford Moor." The King had then artisans at work upon this mine from which gold had been obtained.

That the experiments of the King and the Abbot were carried on to a large extent is shown by the accounts of the Treasurer. In them are numerous payments for the "Quinta essentia," including wages to the persons employed, charges for utensils of various kinds, coals and wood for the furnaces, and for a variety of other materials such as quicksilver, aquavitæ, lithargyrum auri, fine tin, brint silver, alum, salt, and eggs, saltpetre, salaramoniack, &c. Considerable payments were also made to several "potingaris" for stuff of various kinds. The King sometimes got gold coins from the Treasurer to put into the quinta essentia.

¹ Bishop Lesly in his "History," noticing an embassy sent to France in 1507, says that the Abbot of Tungland "tuik in hand to flie with wingis and to be in France befoir the saidis ambassadouris. And to that effect he causit mak ane pair of wingis of fedderis quhilkis beand fessinit upoun him, he flew of the Castill wall of Striveling, but shortlie he fell to the ground and brak his thee (thigh) bane: but the weyt thair of he ascryvit to that thair was sum hen fedderis in the wingis quhilk yarnit and covet the mydding and not the skyis. In this doinge he preissit to counterfute ane king of Yngland callit Bladud, quha, as thair histories mentiones, decked himself in fedderis, and presumed to flie in the aire, as he did, bot falling on the temple of Apollo brak his neck."—Hist. p. 76, Edin. 1830, 4to.

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Several other curious entries from 1502 to 1508 are as follow:—
1502-3.—Item, the vii day of Januar, be the kingis command, to quinta essencia xlijs.
Item [xx Februar] for v pund quyk siluer for the furnes of
quinta essencia xxs.
Item, the xvi day of March, for xxv1 pund of quik siluer,
quhilk yeid to Striuelin to mak quinta essencia thare, of
diuers pricis iiij lib. vijs. xd.
Item, for xij pund litargiri auri, ilk pund vs. Summa . iij lib.
Item, for $ix_{\frac{1}{2}}$ pund of fyne tyn, ilk pund xiiijd. Summa . xjs. jd.
Item, that samyn day to quinta essencia, be the kingis com-
mand, and dischargyt xx vnicornis to himself (Johne
Auchlek goldsmyth) and his fader. Summa . xviij li b
1503.—Item, the penult day of March, to ane boy that kepit the
furnes fire, be the kingis command vjs. viijd.
Item, the viij day of September, payit to Andro Aytoun that
he laid down at divers tymes for pottis of lame to
Maister Alexr Ogilvy for the furnesses in Striuelin . xiiijs.
Item, the viij day of September, payit to Andro Aytoun for
xxv pund of allum to Maister Alexr Ogilvy, and quinta
essencia xiiijs. vijd.
Item, to the said Andro, he laid down for ane mortair of
metall, weyard thre stane xi pund, for Maister Alexr
Ogilvy, and quinta essencia iij lib. ixs.
Item, for colis to quinta essencia, xi owkis efter Pasch iij lib. xvijs.
Item [xxiiij October], to Andro Aytoun, that he gaif for
chercole to quinta essencia in Striuelin . iiijs.
1507.—Item [September xxix], for aqua vite to the quinta
essencia
Item [xxx Sep.], to the boy that kepis the quinta essencia iijs.
Item, the xxvj day of November, for certane irne graith to
the quinta essencia, maid be the smyth of Cambus-
ine quinta essencia, maiu be the smyth of Cambus

Item [xxij Dec.] to the smyth of Cambuskinneth for making
of ane irne kist for quinta essencia xiiijs.
Item [xxxj Dec.], payit to Andro Aytoun quhilk he laid
doun for wod, colis, and Caldwellis wage for quinta
essencia, v li. xixs. xd.
1507-1508.—Item, the penult day of Januar, to Johne Mosman
for stuf to the quinta essencia x li. vjs.
Item [vij Februar], to Andro Aytoun for lvij laid coles to
quinta essencia sen Yule, ilk laid vd. Summa xxiijs. ixd.
Item, for xviij laid wod to the samyn ixs.
Item to Caldwellis wage
Item [xxiiij Februar], for iiij pycharis to quinta essencia . vs.
Item [v March], for ij pund sal aramoniak to quinta
essencia iij li. xs.
Item, for vj pund quyk siluer xxiiijs
Item, for coles and wod for the quinta essencia in
Striuelin, iij li. iijs. vjd.
Item to Caldwell, ane monethis wage, xxviijs

On the 13th October 1507 the King's Treasurer paid £6 for a puncheon of wine to the Abbot of Tungland to make quinta essentia.

What adds to the interest of these curious entries in the accounts of the Treasurer, is the recent publication by Mr Furnivall for the Early English Text Society of a manuscript of the period, in which all the processes for making the quintessence are fully detailed. The title of this MS., the contents of which were probably well known to the King and to the Abbot, is as follows:—"The book of quinte essence or the fifth being; that is to say man's heaven. A tretice in Englisch breuely drawe out of the book of quintis essenciis in Latyn that Hermys the prophete and kyng of Egipt, after the flood of Noe, fadir of philosophris, hadde by revelacioun of an aungil of God to him sende."

According to this learned work, wine was one of the principal requisites for making the Quintessence, which was to be obtained by the following process:—A quantity of good wine was directed to be put into a "distillatorie of glas with an hoole aboue in the heed where the water schal be

putt yn and be take out." This vessel was then directed to be put into a furnace, when the vapour of the wine was to be condensed and again distilled, till the quintessence was obtained and separated from the other four elements of the wine. Although at first sight this seems a simple process, it is declared necessary that this distillation should be repeated "vnto a thousand tymes, so that by contynuel ascendynge and descendynge by the which it is sublymed to so myche hignes of glorificacioun. it schal come that it schal be a medicyne incorruptible almost as heavene aboue and of the nature of heauene. And therefore our quinta essentia, worthily is clepid mannys heuene. And after manye daies that it hath been in this sotil vessel of glas distillid ye schulen opene the hoole of the vessel in the heed, that was selid with the seel of lute of wiisdom maad of the sotillest flour, and of white of eyeen, and of moist papere ymeyngid so that no thing respire out. And whane ye opene the hoole, if ther come out a passynge hevenly swete flauour that alle men that come yn naturely draw therto, thanne ye haue oure quinta essencia, and ellis sele the vessel and putte it to the fier agen till ye haue it."

Mr Furnivall submitted this famous treatise for the opinion of a chemist, Mr C. H. Gill of University College, London, who states (with reference to the directions given for the repeated distillation of wine) that it is a good practical suggestion for the obtaining of strong alcohol, and that the apparatus employed seems to have been arranged to ensure a very slow distillation, so as to obtain a product as colourless and scentless as possible. As the product obtained by King James and Damian would thus in all likelihood be the strongest spirits of wine, it is easy to suppose that a very little would serve to produce that elevation which might seem to bring back the spring of youth, and possibly put the King and the Abbot into a state of great "hignes of glorificatioun."

The unfortunate death of James the Fourth at the battle of Flodden, in 1513, put an abrupt termination to those experiments, but his successor, James V., if he did not patronise the labours of the alchemists, at least pursued with much zeal the mining operations which his father had also commenced. In those times the soil of Scotland was supposed to be teeming with gold and other precious metals, and we are informed by Bishop Lesly that in 1526 the King gave a grant of the Scottish mines to a company of Germans, who worked for many years most laboriously in Clydes-

dale, seeming to be only employed in rolling up great balls of earth, from which, however, they were supposed to have enriched themselves by extracting quantities of the purest gold.

SIR GEORGE ERSKINE.

In the reign of King James VI. there were many followers of the hermetic philosophy in Scotland, the most important of whom perhaps was Sir George Erskine, or Areskine, of Innertiel. He was the third son of Sir Alexander Erskine of Gogar, and brother of the first Earl of The date of his birth is uncertain, but it must have been in the latter part of the 16th century. There are few particulars known of him from which a biography might be drawn up. It is stated, however, in Mackenzie's "Lives of the Eminent Writers of the Scots Nation," that he had the advantage of being in his youth under the tuition of the famous George Buchanan along with King James the Sixth, and it is on his authority that Mackenzie gives his interesting account of the death of Buchanan. Several particulars are given with reference to him in Brunton and Haig's "Account of the Senators of the College of Justice." In 1617 Sir George was admitted a lord ordinary of the Court of Session, under the title of Lord Innertiel, in place of Sir James Wemyss of Bogie. He was in 1621 appointed a commissioner for regulating the tax roll of the shire of Kincardine. He is stated in Balfour's "Annals of Scotland" to have refused the Covenant in 1638. In November 1641 an Act of Parliament was passed declaring that the judges of the Court of Session should in future hold their places ad vitam aut culpam, and Sir George was the first judge named in the new commission. He sat on the bench till his death in 1646, when he was succeeded by Sir Alexander Gibson of Durie. George had two daughters—Anne, married to John, 3d Lord Melville of Raith, and Margaret, married first to Sir John Mackenzie of Tarbat, and mother of the first Earl of Cromarty.

According to Lord Hailes, Sir George drew up some decisions of the Court while he sat on the bench, but no trace of these has been discovered. Some remains of his alchemical labours are to be found in his manuscripts, several volumes of which were presented by his grandson, Lord Cromarty to the Library of the Royal College of Physicians of Edinburgh in 1707. On one of these volumes, remarkable for the variety of its contents, and the

beauty of its caligraphy, as also for the manner in which it came into the possession of Sir George Erskine, is the following inscription by the Earl:—

"I haveing found by letters directed from one Dr Politius (a Polonian or Silesian) to my grandfather Sir George Areskine of Innertile, brother to the Earl of Kellie and grandchild to the Earle of Marr, a Senator of the Colledge of Justice, and Privy Counsellor to King James the 6th and to King Charles 1st, who was a great student of naturall philosophy, evn to a considerable advancement in the hermetick school, and had a correspondence in very remote parts with the sonnes of Hermes, and of whose fruits of his expensive and secret correspondence with them I have depositat some volumns of manuscripts mostly of his own handwritt.

"This was sent to him by the society at Hess, and directed under the convoy of the said Dr Politius, who by his letters to Sir George declares that by direction of that society his chief errand to Scotland was to confer with him. And I judged it a monument not unworthy to be consigned to the Honorable Colledge of Phisitians at Edinburgh, both for its convoyance and matter, evn tho perhaps much of it may be or is now in print; yett this being long or it was, [it] is to print as ane αυτογραφου, and hath more be much then is printed, and many authors not mentioned in the print.

"To the Royal Colledge of Phisitians this vol. and severall other volumns is affectionately and humbly offered on the nynteen of June An. Chr. 1707 by

"Geo. Cromertie."

In June 1685 the Earl of Cromarty (then Viscount Tarbat) had signed, as "Clerk to His Majesty's Parliament, Council, Register and Rolls," a ratification of the privileges of the Royal College of Physicians of Edinburgh, granted by their charter, to which the great seal of Scotland was appended on St Andrew's day, 1681.

From the interesting statement of the Earl above given, and from the manuscripts of Sir George Erskine containing several treatises relative to the rules of the Society of Rosicrucians, it is not improbable that the Dr Politius above named was one of the missionaries sent from Germany to propagate their tenets, and that Sir George had been in active correspondence with them.

The Rosicrucians, or followers of Christian Rosencreutz or "Rose Cross,"

a German philosopher, who died in 1484, created about the year 1605 a great sensation in Germany. His followers believed that the philosopher's stone, like the quintessence, was not only a means of obtaining wealth but also health and happiness, and that by it mankind could acquire the most intimate knowledge of all the secrets of the universe. According to Michael Mayer, a celebrated physician, who had wasted his fortune in alchemical researches, their tenets were "that the meditations of their founders surpassed everything that had ever been imagined since the creation of the world, without even excepting the revelations of the Deity; that they were destined to accomplish the general peace and regeneration of man before the end of the world arrived; that they possessed all wisdom and piety in a supreme degree; that they possessed all the graces of nature, and could distribute them among the rest of mankind according to their pleasure; that they were subject to neither hunger nor thirst, nor disease nor old age, nor to any other inconvenience of nature; that they knew by inspiration and at the first glance every one who was worthy to be admitted into their society; that they had the same knowledge then which they would have possessed if they had lived from the beginning of the world, and had always been acquiring it; that they had a volume in which they could read all that ever was or ever would be written in the books till the end of time; that they could force to and retain in their service the most powerful spirits and demons; that by virtue of their songs they could attract pearls and precious stones from the depths of the sea or the bowels of the earth; that God had covered them with a thick cloud, by means of which they could shelter themselves from the malignity of their enemies, and that they could thus render themselves invisible from all eyes; that the eight first brethren of the 'Rose Cross' had power to cure all maladies; that by means of the fraternity the triple diadem of the pope would be reduced into dust; that they only admitted two sacraments, with the ceremonies of the primitive church renewed by them; that they recognised the fourth monarchy and the emperor of the Romans as their chief and the chief of all Christians; that they would provide him with more gold, their treasures being inexhaustible, than the king of Spain had ever drawn from the golden regions of Eastern and Western Ind."

These singular beliefs of his followers had been kept, by the rules of ¹ Mackay's Popular Delusions, vol. iii. p. 145.

the order, profoundly secret till 1604, viz., six times twenty years after the death of Rosencreutz, but after that period were promulgated for the welfare of mankind. Missionaries were sent by the Society from Germany to all the more important countries of Europe, where they obtained many converts; and it has already been remarked that it is not improbable that Dr Politius was one of those who visited Scotland, for the purpose of meeting with Sir George Erskine and other believers in these doctrines.

Among the Erskine MSS. is the first part of a kind of Rosicrucian treatise, entitled "Arbatel, or the magick of the auncient Philosophers the cheef studie of wisdom," and stated to have been written "Anno Virginei partus saluberrimi 1602 Febii. xiii. G. A." This work seems to have been projected on a somewhat extensive plan, viz., in "Nyne tomes eache having seaven septeans of Aphorismes," but of these only the first tome or volume is extant, called the "Introduction or the booke of the institutions of magick or spiritual knowledge, wiche conteaneth the general praecepts of the whole art in nyne and fourtye Aphorismes."

The volumes presented to the Royal College, as above stated, amply sustain the reputation of Sir George Erskine as an accomplished alchemist. They contain fine copies of the treatises and poems most in vogue with students of the occult sciences, such as Norton's "Ordinall;" Bloomfield's "Blossoms;" "The vicar of Walden, his hunting of the Green Lyon;" "John Bristoll his Alchymie;" "Ane book named the Breviarie of Philosophie, be the vulettered Scholler, Tho. Charnock," &c. 1

There are besides various curious extracts and notes made by Sir George from approved alchemical works, such as "Out of George Ripley his wheill," "Out of Ripley's xii gates, "Ex libro de mercurio Geo. Riplaei," Ex arcano Hermeticæ Philosophiæ," &c., &c. In addition, there are many directions for alchemical processes, such as "the preparation of mercury for the works," "the work be sal armonique," "the work of common salt," "the work of sulphur," and one "from M. N. which a Ducheman gaue to the B. of Bristow."

The following account of one of these processes is very curious, as showing the singular terms under which the alchemists disguised their great secrets. After minutely describing a glazed pot or vessel, it required a

¹ Most of these will be found included in the Theatrum Chemicum, of Elias Ashmole, printed in 1652.

quantity of fæces to be put into it, after which it was directed to be subjected to the action of heat in an oven for "sixtein weekes." It was believed that by the decomposition of this matter venomous reptiles like scorpions would be generated, which would leave a piercing or penetrating power in the residuum, and this when applied to the baser metals would purify them into gold or silver. This process, described by Sir George, apparently had been found so efficacious that although ten pounds of Mercury had been put into the fluid, it is stated "zou suld haue had it all hard and fixt, and yett the watter no thing diminished, bot 10 tymes stronger than if no mercury had been put into it."

"The pott must be maid of zellow close earth weill baked, a good inche thik, of potters claye weill glased in the insyd, and then brunt againe in a potters oven, and the pott salbe in that fashion sett out above with a wyde mouth which must have a cover with a round hole in it, so wyde as a mans fiste may easily pass throch it; And the pott must have three strong feete, tuo great strong eares to carry it by, which is very materiall for him that will woorke it, for if it suld crak or brek in pieces, if the ayre do but strik thy face it kills presently.

"Thairfoir when all the matter which must be in, is gathered togither into the pot, tak a good lute maid of potters clay, and mix it with bolus and rust of iron tempered with whitts of eggs and chopt hair, and mingle and worke thame weill togither, and lute zour pott ane inche thick thairwith, and mak a stopple of potters earth weill brunt to shut close in the hole that is in the top of the cover of the pott, and lute the pott and the cover very close togither, so as no avre may brek furth, and when any craks cum into it, in the drying of the lute, dawbe thame up againe, and when the lute is perfectly drie in the sunne, then take a course linen cloth or canvas, and soke it weill in the whitts of eggs mixt with iron rust, and spred this cloth round about the luting, and then wett it weill again with whitts of eggs and vpon the luting; wett it befoir zow put on the cloth bot stop not vp the eares of the pott with the cloth because of removing to and fro, and tak good cair and provyd that the luting crak not which the cloth will hold in, as also the prope and the cover togither, and thus zour pott is praepared. In the mids of May tak this pott thus praepared and shut zourself vp in zour chalmer, not coming into the ayre, till suche tyme as zou haue done the business zou propose to doe. (And thrust or wring a thik linen cloth, in the hole in the top of the cover, so that no agre may brek furth at any parte of the pott.)

"In this chalmer zow most remaine four or six dayes, and from the first day zou enter into zour chamber till the end, lett zour dyett be eggs drest in wyne vinager, rye or wheaten bread which zou best lyke, good store of butter, Rhenishe wine the best you can gett, all sorts of meates both rost and sod, as beiff, mutton porke, and such like, with all sort of the best hearbes, and with zour meat eat good store of spices, as cloves, ginger, mace and pepper, etc. the moir the better. Now the first three dayes zou must (when zou keepe this dyet) emptie zour bellie where zou please, bot not in the pott till ze fourth day. The fourth day tak the linen cloth out of the hole in the cover of the pott and unburthen nature in the pott, sitting als close to the pott as zou can with zour buttokes, and whilst zou doe this receave zour urine with ane urinall, and when zou ryse poure it quicklie into the pott stopping it spedelie close againe with the linen cloth, and losing as litle ayre as you can possibly: and zou must ease zourself at least four severall tymes, every tyme pouring zour urine into it, and stopping it againe closs and spedelie, though zou keep zour chalmer a day or two longer.

"Then break up the hearth, where zou vse to keep fyr continually, and cause a four squarre pitt to be digd, three quarters of a zaird deep, and three quarters square, and terrace it in the bottome and sides, and all about with plaister of Paris half a brik thik, in the same maner as we vse to do places, where we will keepe raine watter; and when it is all weill terrased about put into it a pan of coles and drie it well. Then fill the pitt with these substances, first hors dung, cow dung, quik lyme weill wrought togither with mans pisse, as if zou wold dawbe with it, then put it into the pitt, and sett the foirsaid pott in the middle of it and stop it all about and on the top with a towell and between the dung and the terrace put sand the thicknes of a hand, to the end zou hurt not zour terrace, and put sand above the thicknes of a hand and paue it vp. Then mak a gentle fyr upon it, and keep the earth alwayes warme day and night for sixtein weekes, bot the last weeke zou must keepe a good fyr upon it day and night.

"Item on the side of the chimney, must be maid a baker's oven, and the mouth thairof must be so wyde that the pott may go into it and it must have a stopple fit for the mouth. And when the sixtein weekes are cum about, three weekes befoir hand mak fyr into the oven, and the last day mak it glowing heat all within, then break zour hearth open, and tak out the pott with all the speed you can, and put on a thik pair of gloves, and lett all those that are neere it or about it stop themselfs weill, for feare of ill vapors that may breath forth, and lett two or three persons help zou and lett one vther draw the fyr spedelie forth of the oven and do zou als spedelie thrust zour pott into the oven, and als quickly stop the oven and lute it very closs, so that no ayre may breath furth, and then tak old clothes and cover the oven all aboute so warme as zou can, and the pott must stand in this oven eight dayes. Then tak off the clothes and open the oven, and run quicklie away least any ayre suld yet come forth, and stop zourself weill against the smoke, and also all those that ar with zou. And when the oven hath stand one day open then go to your oven, and put zour gluffs on, and stop zourself weill,

and drink befoir hand a draught of wyne vinagre, and eat white zedoari and hold sume of it in zour mouth, and stop your nose with bombast moystand in vinaiger. Then tak the pott out of the oven and carie cleirly behind into a garden, where no body cumes neare befoir the nixt day. Bot if zou will sie be experience, what the ayre of it can do, put zour pot under a grein trie that is weill stored with leaves, and the nixt day the trie wilbe as it were brent, and will never grow againe for it is dead. Thairfoir I charge zou to keep and stop zour selff safe, from the cruell and violent avre that first shutts out of the pott, for in it is the greatest venome in the world, and three of the most dangerous creatures that may be found ly within this pott which will all three shutt forth thair venome als soone as the pett is opned, thairfoir loosen it spedelie with a sharp knyf, and bind a long cord about the cover of the pott, and set it vp to the middle in the earth, that it may stand fast, and go a good way from the pott with the cord in zour hand, and pluck the lidd aff quickly, and get the gone, and lett the pott stand 24 houres. Then go frielie to the pott without feare, for these three venemous creatures have shot furth thair poyson, but thair power and vertew they have keen by thame which lyes secretly covered with in the matter in the pott, and efterward when they cum to be mixed with the metals, they will shaw furth and discover thair forces, and do wounders in metalls as zou zourself sall sie and vitness.

"Now I will tell zou what these three creatures ar that lye in the pott, first they call it a Scorpion, for it pearceath and penetrateth all bode is of metals, thairfoir call they it be the name of Scorpion which no man understandes bot the philosophers, or those to whom they please to reveale it. This watter hes in it the power and vertew of the Scorpion in pearcing and penetrating as is afoirsaid. Secondlie they gave the name of a dragon devouring his awen taile, for this watter hath power and vertew to devoure, bite and consume all the blaknes of metall without purging thame befoirhand. Thridlie they give the name of a Basilisk, becaus as that creature hath power to kill all things that hath receaved lyff only with his syt, so lykwayes hath this watter power and force to do away all the blaknes and filth of the earth which metals have receaved from the earth without any forgoing purging or clensing of thame; some philosophers call this watter the blak lyon, the green lyon, or the red lyon, for as the lyon hath ane hoat stomok and consumes all he swallowes doune into it, so doth this watter consume and digest all the hardness of metals and all the imperfectiones which the have contracted within the earth, making thame soft and fusible; and thair be vthers that call it our stone, because they will hide it from mens understanding, bot aneugh of this.

"Item now tak the pott out of the earth and carye it secreatlie into zour chalmer, where zou meane to worke, and look merely into the pott, for in it zou may

behold the substance of Rebis! converted into watter: this is that Rebis so muche talked off, this is blaker than blak, this is our stone, the stone that is not named in any booke, bot one freind reveales it to ane vther, and so they keep it by tradition closs amongst thame selffs only; in treuth this is that great stone of which all the great doctors and philosophers speik so obscurely, thairfoir look cheerfully into the pott and be merry now, for zou sall have greater cause of joy heerefter.

"Item zou must haue a long pott baked of earth very strong, and in the top it must have ane round hole, and in it put a white felt hatt sowed to a hoope that fitts the hole, and hang the felt in the top of the pott with the hoope in it, and fill the felt full of gross sheepes woll, and poure the watter throch the felt into the long pott. Item when it is now distilled throch the felt then zou must distill it fyve tymes per alembicum in sifted ashes, give it first a small fyre till the glass growes warme, and then make a strong fire and lute the glass very closs with lutum sapientiae: when zou distill it fyve tymes over tak the feces every tyme and keep thame, for out of thame zou sall distill ane oyle, as I will teache zou heirefter.

"Heerefter zou sall cause tua round earthen bodies to be brent which sall shut one into ane other so as the nek of the one may go into the nek of the other, and these bodies must be very weill glassed, and in the vndermost nek zou must put a litle pan full of small holes and upon it must the vther nek stand so as the oyle may pass throch the holes into the vndermoist bodye; the vppermost pott must be luted ane inch thik, and burie the vndermost pott within the earth vp to the nek. In the vppermost vessell put all the feces and close the one vessell in the other with lute, suffering it to drie, and mending the craks if any come, with fresh lute, so as no vapour may breath forth. Then build a wall round about the pott a foot higher than it, and lett the oven be open at the toppe, for the flamme to goe out of and leave ane hoale on the side to put in zour fyre at. At first for half a day give it a gentle fyre, then increase it the space of 24 houres moir, then lett the fyre go out and the vessells coole as they stand. Tak the vppermost and in it zou sall find zour earth calcined very white: keep it. Then break the earth open, tak out the vndermost pott, and thairin zou sall find ane oyle shyning lyk gold. Poure this oyle out of the pott into ane cleene Venise glass and keepe it cairfully, till I teache zou what to do with it, for with this oyle zou sall effect wonders, the power and vertew of which I am not able by wreting to expresse.

"Item tak the pott zou first placed vnder the hearth, and put the calcined white earth, and the watter zou distilled into it, and if zou be desirous to sie what it can do, put tuo or 3 lib of \S^2 into the pott and stop it closs as befoir that no ayre may get foorth of it, and place it in the same pitt vnder the

¹ Excrementum alvi. (Rulandus Lexicon Alchem.) ² Mercury.

harth, paue it up againe, and keep a good fire vpon the hearth for 16 dayes; and unless zou will, zou need not put any \$\infty\$ into it, bot it doth not hurt, for the watter wilbe much better, and moir powerfull thairby; and when the 16 dayes be past, make the great oven hoatt againe, one day befoir glowing hoate which wilbe aneugh. Tak the pott spedielie out of the hearth, and put it in the oven, and stop the oven presentlie, and lett it stand thairin 24 houres. Then tak it out, bot tak heed zou open it not till it be throchlie cold. Then zou sall lett the watter sooke throch a felt with wool againe, as befoir, into the long pott and in the bottom zou sall find zour \$\infty\$ hard and fixt: And though zou had put 10 lib of \$\infty\$ (mercury) in, zou suld have had it all hard and fixt and yett the watter no thing diminished, bot 10 tymes stronger, then if no \$\infty\$ had been put into it. Now my sone may demand whither the watter be not growen black, out of order and worse because of so much \$\infty\$ purified in it. No, I assure zou, it wilbe neither blacker nor worser bot as I sayd befoir, moir powerfull and better by much then it was befoir."

Such was the singular form which scientific knowledge could assume in the early part of the reign of James VI. !



From a drawing in the MSS. of Sir George Erskine.