

The Ripley Scroll of the Royal College of Physicians of Edinburgh

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Summary

Alchemical scrolls associated with George Ripley are unusual documents which illustrate the pursuit of the Philosophers Stone. Scrolls vary from about 5 feet in length by 5 inches wide to over 20 feet long and about 3 feet wide. There are 16 scrolls in libraries in the UK and 4 in the USA.

Ripley whose name is attached to the scrolls was a Canon of Bridlington in Yorkshire and lived from about 1415 to 1495. He is renowned as an alchemist and author of alchemical works in rhyme, and his verses are used on the scrolls. Some of the scrolls were produced in the 16th century, in Lubeck, probably at the request of John Dee the Elizabethan polymath.

A Ripley Scroll is in the library of the Royal College of Physicians of Edinburgh to which it was presented in 1707. The only published description of this scroll appeared in 1876, and it has not apparently been studied since.

Interest in Ripley scrolls has grown in recent years and there have been a number of publications describing them since 1990. The Edinburgh scroll is described and is compared with the other scrolls which have been seen personally or for which detailed descriptions have been published. The origin, significance and use of Ripley Scrolls are discussed in an attempt to define their contemporary role.

Résumé

Les rouleaux alchimiques qu'on attribue à George Ripley illustrent la quête de la pierre philosophale. Ils mesurent entre 5 pieds de long sur 3 pouces de large et 20 pieds de long sur 3 pieds de large. Ils sont particulièrement rares; il en existe 16 au Royaume-Uni et 3 aux Etats-Unis.

Ripley (1415-1495) était "Canon" à Bridlington dans le Yorkshire. Alchimiste réputé, il rédigea une série de travaux écrits en versets, dont certains à Lübeck, à la demande de John Dee.

Un de ces rouleaux appartient à la bibliothèque du Collège Royal des Médecins à Edinbourg où il fut présenté en 1707 puis publié en 1876.

Depuis les années 90, ce document fait l'objet d'un regain d'intérêt et notamment de comparaison avec d'autres rouleaux pour mieux saisir son intérêt potentiel.

Introduction

While studying the medicinal use of antimony from early times up to the present, it became clear that not only was Isaac Newton a keen

student of alchemy and of antimony in particular, but that he was familiar with the alchemical poetry of George Ripley. A reference in a book on Newton's alchemy (Dobbs, 1975) referred to a Ripley Scroll in the Fitzwilliam Museum in Cambridge. At the same time I was looking at accounts of alchemy in Scotland and came across a description of a Ripley Scroll in the Royal College of Physicians of Edinburgh.

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This has prompted me to try to place the Edinburgh scroll in the context of other scrolls in the UK, all of which I have examined, and those in the USA for which descriptions and illustrations are available.

A scroll is a roll of paper, vellum or parchment on which there may be writing or other symbols or drawings, paintings etc. The use of scrolls for written material preceded that of the codex or bound book, and scrolls were largely replaced by the codex from the 3rd century on. However massive use was made of scrolls in the middle ages and later particularly for state records e.g. Patent Rolls (Roberts and Skeat, 1983). Scrolls can be very long; in the Fitzwilliam Museum for example there is a 15th Century French *Chronicle of the World* in scroll form which is over 56 feet in length and covered with writing, with small painted illustrations.

The name of Ripley is associated with alchemical scrolls of which 20 are known (Linden, S J, personal communication) 16 of them in the UK and three in the USA. Most of them follow a set or conventional form. The written content of these scrolls is usually taken, at least in part, from the poetic alchemical writings of George Ripley but there is no evidence that he himself initiated or used such scrolls. The scrolls purport to describe howto make the Philosophers'Stone.

George Ripley, (1415-1490), "Chanon of Bridlington".

Ripley was probably born in Yorkshire at Ripley which is to the west of Knaresborough and south of Ripon and Harrogate. Some details about him are given in Ashmole's *Theatrum Chemicum Britannicum* (1652) where he is described as the son of a Yorkshire gentleman. Ashmole quotes a comment that he was a man of a quick and curious wit "who wasted almost his whole life in searching out the occult and abstruse causes of and effects of natural things". Ripley joined the Canons Regular of the Order of

St Augustine of the Congregation of St Genevieve, Bridlington in the diocese of York as a youth. When he took up the study of alchemy he was unable to understand it and decided to travel in order to learn more. He went to Italy in 1477 where he studied "The Hermetic Science" (alchemy), and obtained benefits from Pope Innocent VIII who made him domestic prelate of the palace and Master of Ceremonies.

On his return to England, Ripley found that his papal honours did not endear him to his colleagues as they thought that he would feel superior to them. Ripley resented this and joined the Carmelites in 1488 but was not happy and asked to become an anchorite without leaving the order. He was still a Regular Canon when he wrote the *Compound of Alchemy (The Twelve Gates)* in 1471. It was first printed in 1591 and again by Ashmole in *Theatrum Chemicum*. Ashmole gives a list of 25 works by Ripley.

Biebel in his introduction to Ripley's *Twelve Gates* (*Les douze Portes d'Alchimie*, 1979) comments that he is unaware where Ripley acquired his title of knighthood as neither of the two professions which he followed would lead to this; however Biebel also refers to him as "Chevalier d'Heliopolis". Ripley however had visited Rhodes and stayed with the Knights of the Order of St John to whom he is reputed to have given money lavishly to help in their war against the Turks, and it seems likely that his title derived from this. After his death, in 1490, he was regarded as a magician.

Elias Ashmole (1617-1692)

Ashmole was an English antiquary and lawyer who studied mathematics, astronomy, astrology and alchemy. In 1652 he published *Theatrum Chemicum Britannicum* which contains several of Ripley's writings including the text of his "The Compound of Alchymie" (1471), described as "A most excellent, learned, and worthy work, written by Sir George Ripley, Chanon of Bridlington in

Yorkshire, containing twelve gates", as well as "The Vision of George Ripley", and "Verses belonging to an Emblematicall Scrowle : supposed to be invented by George Ripley". The latter are included, in one form or another, in most of the scrolls especially in the predominant type (see Table).

Also included in *Theatrum Chemicum Britannicum* are Ripley's "The Mistery of Alchymists"; "The Preface prefixt to Sir George Ripley's MEDULLA" (1476); "A Short Worke That beareth the Name of the aforesaid Author, Sir George Ripley"; and a fragment from his Cantalena. Ripley, Ashmole says, is generally thought to have been the Master of the 15th century alchemist Thomas Norton of Bristol, whose long "The Ordinall of Alchimy" forms the first 106 pages of *Theatrum Chemicum Britannicum*.

Ashmole also gives biographical details of Dr John Dee the Elizabethan mathematician, astrologer and alchemist, one of whose books he edited in 1650.

John Dee (1527-1608).

In "Annotations and Discourses upon Some part of the preceding Worke" at the end of *Theatrum Chemicum Britannicum*, Ashmole devotes several pages to John Dee in addition to printing his "Testamentum" of 1568.

Dee, an Elizabethan polymath, has been associated with Ripley Scrolls. Two scrolls in the Wellcome Institute Library have written on them: "This long rolle was drawne in collours for me in Lubeck in Germany. 1588", and a similar inscription is on one of the small scrolls in the British Library (5025 (2)). It is known that Dee was in Germany at about this time, and he may have commissioned a scroll or scrolls. A letter from Sir Thomas Browne to Elias Ashmole in 1658 refers to a Ripley scroll in a list of Dee's hermetic works from his library (Linden, in press). This scroll

Browne describes as being in parchment about 7 yards long which is approximately the length of the specimen now in the Fitzwilliam Museum, Cambridge. There is also other evidence of Dee's interest in Ripley (Roberts and Watson, 1990).

The Ripley Scrolls

The Edinburgh Ripley Scroll has been in the Royal College of Physicians for over 280 years and belonged to Sir George Erskine who died in 1646. His birth date is unknown.

Sir George Erskine of Innertiel

Information about Erskine (or Areskine) is sparse. He was the third son of Sir Alexander Erskine of Gogar, a grandson of the Earl of Mar and brother of the first Earl of Kellie. He was tutored by the reformer George Buchanan (1506-1582) together with the son of King James V, Prince James, later James VI (Mackenzie, 1708). Erskine was the most important follower of hermetic philosophy or alchemy in the time of King James VI (Small, 1876) and according to the Earl of Cromarty who was his grandson, he had studied alchemy and corresponded with other alchemists abroad. A Dr Politius of the Society of Rosicrucians in Hess, with whom Erskine had probably corresponded, came from Poland or Silesia to Scotland to see him.

Erskine who was admitted a Senator of the College of Justice in 1617 (Brunton and Haig, 1836) was known as Lord Innertiel. Innertiel or Invertiel is part of the Linktown area in the south of Kirkcaldy in Fife, in the *quoad sacra* parishes of Kinghorn and Abbotshall (Groome, 1906). It may be significant that a short distance to the west, is Balwearie, also in Abbotshall parish, which is associated with the scholar, mathematician and astrologer Sir Michael Scott (d 175 - c1232), Scotland's most famous alchemist.

In June 1707 the Earl of Cromarty who in 1685 had been involved in an official capacity in

the ratification of the 1681 charter of the Royal College of Physicians of Edinburgh, presented it with six manuscript volumes which had belonged to Erskine, and a Ripley Scroll.

The manuscript volumes contain material on Rosicrucianism as well as alchemical subjects copied from a wide range of authors. Poems by Ripley, and a version of the "Hunting of the Green Lion by the Vicar of Walden" (sic) are included, all of which appear also in Ashmole's *Theatrum Chemicum Britannicum*.

The manuscripts which are listed by Small include :

Arbatel, or the magick of the auncient Philosophers the cheefstudie of wisdom. Anno Virginei partus saluberrimi 1602 Febii xiii. G.A.

Norton's Ordinal; Bloomfield's Blossoms; The vicar of Walden, his hunting of the Green Lyon; Ane book named the Breviarie of Philosophy, be the unlettered Scholler, Tho. Charnock; John Bristoll his Alchymie. (All but the last of these are contained in Ashmole's *Theatrum Chemicum Britannicum*).

Notes by Areskine; Out of George Ripley his wheill; out of Ripley's xii gates; Ex libro de mercurio Geo Riplaei; Ex arcano Hermeticae Philosophiae;

Directions for alchemical processes : The preparation of mercury fro the workes; the work be sal armonique; the work of common salt; the work of sulphur; from M.N. which a Ducheman gau to the B. Bristow.

The Ripley Scroll of The Royal College of Physicians of Edinburgh.

The scroll forms an appropriate and relevant part of this material. It was shown to the Scottish Society of Antiquaries in 1827 by Dr William Moncrieff the College librarian, and the only published description (Moncrieff and Small, 1876) is based on Moncrieff's detailed descrip-

tion of it, and it has not apparently been studied since.

The scroll is over 18 feet (5.5 m) long and 23 inches (57.5 cms) wide. It is fixed to wooden rollers at top and bottom. The top shows evidence of wear, and perhaps damp at some time. In style it is a version of the most common pattern and consists of a series of figures which are well and skilfully drawn, accompanied by English verses and some Latin phrases relating to alchemical processes.

It was copied for Moncrieff and Small's paper by a photolithographic process, much used from the early 1860s on, which gives a very clear illustration of the drawings. The text is impossible to read from this, but is contained in Moncrieff's account in great detail.

The scroll is made up of sheets of parchment mounted on a linen backing. Although the series of images is a continuous one and each leads into the next, it can be divided arbitrarily for descriptive purposes into four or five sections. Here it is not appropriate to go into great detail such as is given by Moncrieff, but sufficient to give an outline of its contents.

(1) It begins with a large bearded figure clutching an egg-shaped vase. The figure, in cap/headdress and robe, is almost certainly that of Hermes Trismegistus (thrice-greatest), the legendary founder of alchemy who is identified with the Egyptian god of healing Thoth. The appearance is consistent with other portraits of him over a long period : for example, Stefano's mosaic on the floor of Siena Cathedral (1488); an engraving in Barlet (1657) of Hermes in his laboratory; and in a painting of 1700 in the Basel Apotheke Museum.

The vessel which he holds is an Hermetic Vase (Vase of the Philosophers; Philosophers'Egg). The egg shape was highly significant and was symbolic of creation and in it the Great Work of making the Philosopher's



Fig. 1. Part of The Edinburgh Ripley Scroll showing Red and Green Lyons, and the Hermes Bird eating its wing. The bird is shown as a male figure crowned, but in some scrolls it is clearly female. The feather motif is evident. (Courtesy of Royal College of Physicians of Edinburgh)

has two seated figures holding a book; one of the figures appears to be Hermes again. In the top of the vase is a toad, and below it there are the words "The black sea, the black lune, the black soil", below this between two sets of verses is a furnace.

(2) The furnace is set on leaves at the top of a tree below which a curious female figure with a dragon's tail and webbed feet but a human trunk and head set between sun and moon, hangs downwards holding a male child. Below is a vine with grapes emerging from a seven sided pool or cistern bounded by 7 pillars on each of which stands a monkish figure clutching an hermetic vase. In the pool stand naked male and female figures. The whole rests on an angular pillar which itself is set in a second four sided pool. Embracing the pillar is a large male figure like Samson, with one foot in the water having on his left a winged angel, and on his right another human figure with an indeterminate spiky structure behind it. The front of the pool is decorated with a winged dragon spewing a toad from its mouth. A number of lines of verse come below this. These are in Ashmole.

At each of the four corners of the structure is a pillar with an hermetic vase. Each side of this section of the scroll is decorated with feathers.

The pool rests on a base at the front of which are a red lion (left) and a green lion (right) on either side of a furnace with the words "The mounthe of Cholerick beware".(fig. 1).

(3) A large sun with eyes and mouth follows then the striking figure of the crowned Bird of Hermes biting its left wing and standing on an orb into which seven feathers are stuck,(Fig. 1). More feather-like objects are apparently falling from the sun's rays. Some more verses are set below the orb, after which there is another orb of a different kind containing linked white, black, and green balls within it, and with rays emanating from it.

Stone was carried out (Read, 1939). Needless to say the vessel was hermetically sealed by a stopper.

The vase contains a series of eight roundels linked by chains to a larger central roundel. Each small roundel has an hermetic vase containing one or two homunculi, male or female, flanked by monk-like figures. The larger central roundel

(4) This orb is set in a lunar structure below which is a dragon whose wings do not seem to be attached to its body but to the orb on which it stands. The dragon is bleeding from its belly, the drops flowing into the orb which has three black balls in it. Three paragraphs of poetry follow.

(5) Finally two figures grasp either side of a column of poetry (fig. 2).

The figure on the left is either a mendicant or perhaps a philosopher (Ripley himself?) carrying a curious staff which, at its lower end, is a shod hoof and has its upper end clothed in a scroll. On the right is a figure in ecclesiastical robes with a crown and long staff, possibly Hermes again.

Interspersed throughout the scroll are phrases in English and Latin, some of the latter in abbreviated form. Most of the verse is in Ash moles' *Theatrum Chemicum Britannicum*.

Comparisons with other Ripley Scrolls in the UK

These are summarised in the Table; they fall into three broad categories :

A : conventional, of which the Edinburgh scroll is one. They are all very similar in content and style and layout but with marked differences in execution of the drawings and some divergences in the wording of the poems. The spelling is fascinating in its diversity both between and within scrolls.

B : Two reclining monks replace the Hermes figure and flask at the top in three of the scrolls, and there are other variations in the emblems.

C: One scroll is quite different in content and features a rose motif; this presumably exemplifies the Rosicrucian element in the history of the scrolls. This scroll is discussed and details of it are reproduced by Jung (1953).

Most scrolls are drawn on sheets of paper which are mounted on a backing of paper, linen, or vellum. A scroll in the British Library (Sloan 2523B; Roll 45) appears to be drawn on vellum sections of a map of part of east Germany and what is now part of Poland. The map is by Moses Pitt (d. 1696) and dedicated to Ralph Macro. MD Pitt was a map publisher at St Paul's Churchyard London, and produced three volumes of maps, the third being of Germany.

The Purpose of Ripley Scrolls and Their Use.

Almost nothing is known about the use of these scrolls, and there is no contemporary description of them even by John Dee. There is no evidence that Ripley himself designed or was involved in making scrolls, and although his verses in one form or another are commonly used in them, they are absent from some of the scrolls; some of these can only be described as Ripley scrolls because of similarities in form and style.

It has been suggested that scrolls were used as a "hocus-pocus advertisement" in alchemists shops (Robbins, 1966) but there is no evidence to support this, and indeed it seems most unlikely for a number of reasons. They would be very difficult to display because of their length and, with that sort of use, would either not have survived at all, or would be in much worse condition than most of them are. Furthermore they must have been expensive to produce and sell, so that they are likely to have been the property of the well-to-do. Indeed some of them are known to have had aristocratic associations. This was the case in the provenance of one of the Wellcome scrolls (693); the Fitzwilliam scroll was the property of Archbishop Sancroft (1617-93) who became Archbishop of Canterbury in 1678, and has his name on it; and the Edinburgh scroll was owned by Sir George Erskine, grandfather of the Earl of Cromarty.

Fig. 2. Dragon with unattached wings, bleeding from its belly and standing on an orb. Below are on the left the figure of a mendicant or perhaps an alchemist holding a staff which has a shod hoof on its lower end; and an ecclesiastical figure or Hermes Trismegistus on the right. (Courtesy of Royal College of Physicians of Edinburgh).

Some of the scrolls appear to have been designed so that they could be hung up but this would demand a large room for the very long ones. If not, a long table might be required if the whole sequence of the scroll was to be seen at a glance. The scrolls must have been unwieldy compared with even a folio edition of a book which could have been put on a lectern. However many of the scrolls are on rollers, so that it is possible to study them section by section on a small table and this seems to me to be the most likely way in which they were used.

Many of the scrolls which I have examined show wear and tear and soiling at the upper end which suggests that they were studied from the top downwards. However some are also damaged or have parts missing at the bottom. Where there is a title (e. g. Wellcome 692; British Library 5025 (4)), it is at the top.

While the predominant patterns of the scrolls are remarkably similar in style and layout, they differ in minor details of the drawings, verses and inscriptions. Some of them are clearly incomplete versions of an earlier one, being without text. A robed figure, which appears opposite the Philosopher or mendicant at the bottom of some scrolls but not in others, could be Hermes Trismegistus but in some cases looks more like an ecclesiastical dignitary. Scrolls also vary in the quality of the drawings and the calligraphy.

Finally it is unknown whether there were original scrolls from which the others were copied at a later date, and if so which ones are original, or whether the scrolls available now are all copies.

The Symbolism of the Scrolls

Some of the symbols are familiar alchemical ones: the hermetic vases, the toad, dragon, Bird of Hermes and the lions.



In general the toad often represents earthy matter, or "sophic sulphur" (sophic here implies that the grosser physical properties are absent); the Bird of Hermes is Mercury, and eating its wing has been interpreted as a stabilising act; the red lion is sulphur and the green lion mercury or vitriol or antimony (Read, 1939).

Mercury does not always represent quicksilver but may also refer to "sophic mercury"

or the philosopher's stone. The sun represents gold, maleness or sophic sulphur; the moon, silver or sophic mercury; the dragon is a solar or phallic emblem; if winged it represents the volatile principle, and without wings the fixed principle (Read, 1939).

Jung (1953) uses several illustrations from the four small scrolls in the British Library (see Table). In interpreting them he remarks on the major role in alchemy and in Ripley's works of feathers of the phoenix and other birds; the bird of Hermes eating his wing is described as "the plumed king who plucks out his feathers for food". "The sphere of water is represented with dragon's wings". The *spiritus mercurii* that lives in the tree is represented in the Ripley Scrolls as a Melusina, half woman half lizard celebrating the *coniunctio* (marriage) with the *filius philosophorum*. The Melusina, Litith is also *sapientia*. The three figures standing in the pool of water he interprets as the three manifestations of the Anthropos, body, soul and spirit, and the dragon and toad placed below, as preliminary forms. The red and white rose in BL 5025 (3) (see Table) is the golden flower of alchemy, birthplace of the *filius philosophorum*. The seven stages of the alchemical process are shown as a unity (BL Add MS 5025 (1)); that everything proceeds from the one is a fundamental tenet of alchemy. Finally the two dragons eating each others tail in BL 5025 (3) shows the alchemical process in the zodiac.

Dobbs (1990) in a study of a scroll in the Huntington Library, San Marino, California, emphasises the pervasive Christian symbolism in the scrolls, especially of death and resurrection. She comments on the obscurity of alchemical symbolism for the present day and suggests that rather than dismissing alchemy as irrational and incomprehensible, one may attempt to recover its meaning by historical methods, decoding it by analysis of premodern suppositions about life, death and resurrection. She makes a beginning by describing some of the

imagery, as does Linden, but there is so much detail in the scrolls' emblems that there is still a long way to go in explaining what lies behind them.

Other Scrolls

There are two other known scrolls (Adam McLean, personal communication); one in the USA which is now in The Resource Collections of the Getty Center for the History of Art and the Humanities, and one (formerly in the Dyson Perrins collection) in Egypt.

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References

- Ashmole, Elias (1967). *Theatrum Chemicum Britannicum*. London 1652, Reprinted in The Sources of Science; N° 39, Johnson Reprint Corporation, New York and London.
- Barlet, Annibal, (1657) *Le vray et Methodique Cours de la Physique Resolutive, vulgairement dite Chymie*. 2nd edition, Paris.
- Brunton, G. and Haig, D. (1836) *An Historical Account of the Senators of the College of Justice from its Institution in 1532*, Edinburgh.
- Burland, C.A. (1967). *The Arts of the Alchemists*. London, Weidenfeld and Nicolson. .
- Dictionary of National Biography*. Vol XVI Oxford

- University Press 1921-22. p 1202.
- Dobbs, B.J.T. (1975) *The Foundations of Newton's Alchemy or The Hunting of the Greene Lyon*. Cambridge, University Press. Reprinted 1984.
- Dobbs, B.J.T. (1990) *Alchemical Death and Resurrection : the significance of Alchemy in the age of Newton*. Washington DC, Smithsonian Institute Library pp 16-24.
- Groome, F.H. Edr. (1906) *Ordnance Gazetteer of Scotland*. Edinburgh.
- Hanford, J H. (1958). A sixteenth Century Scroll of Alchemical Emblems. *Princeton University Library Chronicle* xix Nos 3-4 pp 201-202.
- Jung, C.G. (1953) *Psychology and Alchemy*. Trans. Hull, R F C. London, Routledge and Keegan Paul, 2nd edition, 1993; London, Routledge.
- Linden, S.J. (1984) Alchemy and Eschatology in Seventeenth-Century Poetry. *Ambix* 28; 102-124.
- Linden, S.J. (1995) *Reading The Ripley Scrolls: Iconographic Patterns in Renaissance Alchemy*. Brill, Netherlands. In press.
- Mackenzie, George. MD FRCPE. (1708) *The Lives and Characters of the Most Eminent Writers of the Scots Nation with an Abstract and Catalogue of their Works; Their various Editions; and the Judgement of the learned concerning Them*. 3 vols. Edinburgh.
- Moncrieff, W. and Small, J. (1876). Account of an Alchemical Roll on Parchment presented by the Earl of Cromarty in 1707 to the Royal College of Physicians of Edinburgh. *Proc Soc Antiquaries of Scotland*. Vol XI. Session 1875-76. Edinburgh, pp 561-575.
- Read, J. (1936) *Prelude to Chemistry. An outline of Alchemy its literature and relationships*. London, Bell. Second edition 1939.
- Ripley, G. (1979) *Les Douze Portes d'Alchemie. La vision du Chevalier George. Le Traite du Mercure*. Introduction, notes et figures. Biebel, B. Tredaniel, Editions de la Maisnie; (ISBN 2-85-707-044-6)
- Robbins, R.H. (1966) Alchemical Texts in Middle English Verse : corrigenda and addenda. *Ambix* 13: 62-73.
- Roberts, C.H. and Skeat, T.C. (1983) *The Birth of the Codex*. London, The British Academy; Oxford University Press.
- Roberts, G. (1994) *The Mirror of Alchemy. Alchemical Ideas and Images in Manuscripts and Books from Antiquity to the Seventeenth Century*. London, The British Library.
- Roberts, J. and Watson, A G. (1990) *John Dee's Library Catalogue*. London, Bibliographical Society.
- Small, J. (1876) Sketches of early Scottish Alchemists : Michael Scot - King James iv - Sir George Erskine of Innertiel. *Proc. Soc. Antiquaries of Scotland. Sessions 1874-5; 1875-6. Vol. XI* pp 179-197. Edinburgh.
- Szulakowska, U. (1993) The Pseudo-Lullian Origins of George Ripley's Maps and Routes as Developed by Michael Maier. In: *Mapping invisible Worlds* ed. Flood, G D. *Cosmos. The Yearbook of the Traditional Cosmology Society*. 9 : pp 107-126.
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Table : SUMMARY OF RIPLEY SCROLLS

There are three types, according to content:
 A Hermes Trismegistus
 B Monks reeling
 C Rosicrucian

E=English; L=Latin

Scrol i	Date	Provenance	Approximate Size	Material	Type
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EDINBURGH. ROYAL COLLEGE OF PHYSICIANS

?16th C Sir George 18'5"x23" Paper on A
 (Moncrieff & Areskine (552. 5x57. 5cm) Linen Ripley and
 Smalt, 1876) (d. 1646) Carpenter
 Gifted 1707,
 Earl of Cromarty

WELLCOME INSTITUTE. LONDON

692	c. 1600	Sotheby 1911	10' 11"x16." (327. 5x40cm)	Paper on linen	A Floral borders
693	c. 1600	Wm Paston, (2nd Earl of Yarmouth (1652-1732). John Ives. (1751-1776). Earl Ashburnham, 1897. Sotheby 1934	11'.5"x15ti" (34.2. 5x38. 6cm)	Paper on linen	A Floral borders

BODLEIAN LIBRARY. OXFORD

1018:	MSI. Mid 15th C.	17'7"x22" (527. 5x55cm)	Vellum	A; Part of top missing; E & L.
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1209:	Ash 40. Early 17th C	16' b\l" x13\l" (496. 25x34cm)	Paper on paper; vellum top	A; incomplete colouring E & L.
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1213:	Ash 52 16th C	17' 1 1H>"x21!4" (538. 75x53. 75cm)	Paper on linen; vellum top	A; part of bottom missing; E & L
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1216:	Ash 53 17th C	18' x21te" (540x53. 75cm)	Paper on linen	B; no poems; Latin phrases. Copied by Simon Forman
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1222:

Ash 54 16/17th C	16'5"x21fe" (492. 5x53. 75cm)	Paper on linen; vellum top	A part top missing; no colour or text; bottom panel damaged and incomplete. E & L
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The Ripley Scroll of the Royal College of Physicians of Edinburgh, Vesalius, II, 1, 39 - 49, 1996

FITZWILLIAM MUSEUM. CAMBRIDGE

MS 276	16th C.	Archbishop W Sancroft (1617-93) Gifted 19U	22'5"x22H" <672.5x57cm)	Paper on Iinen	A; E & L
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BRITISH LIBRARY. LONDON

Sloane 2524A	16th C	13' x18" (390x45cm)	Vellum on Iinen	B; Incomplete, no verse. Latin phrases.
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Sloane 2523B	16th C	19'fc"x20" (570.6x50cm)	Vellum map sections on Iinen.	A; L & E
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MS 32621	16th C	14'2"x1'6»" (424.7x46.9cm)	Vellum	A
	Bought from G Smith, 1865		Floral borders. Incomplete E & L Drawn by James Standish	

The following are framed, with glass front and back:

MS 5025(1)	16th C	5'x6Jt" (150x15.6cm)	Paper	B E & L at top; No verses. Unfinished.
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MS 5025(2)	16th C	4'2"x5>i" (125x13.8cm)	Paper	A; Ripley verses.
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MS 5025(3)	16th C	5' 7"x5" (167.5x125cm)	Paper on paper	C; L & E Rosicrucian
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MS 5025(4)	16th C	4' 2*x5»" (126.9x14.4cm)	Paper on paper	A; 'Invented by Bacon ¹ . E & L
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PRINCETON UNIVERSITY LIBRARY. NEW JERSEY. USA

MS 93.	16th C.	Bought London (Hanford, 1958)	Gifted 1957	18. 1'x22" (542.5x55cm)	Vellum	A; Ripley & Carpenter.
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YALE UNIVERSITY LIBRARY. CONNECTICUT. USA

Mellon MS 41. c 1570	19'6" x2114"					
Christie 1904	(585x54cm)	Paper on Iinen	A;	Ripley, Carpenter, Arnold.		
			E & L			

HUNTINGTON LIBRARY. SAN MARINO. CALIFORNIA. USA

HM 30313.	16th C.	Sotheby 1958 (Dobbs, 1990; Linden, 1984)	(ex Perrins)	10' 10"x15li" (325x39cm)	Parchment framed in glass	A; Ripley & Carpenter
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