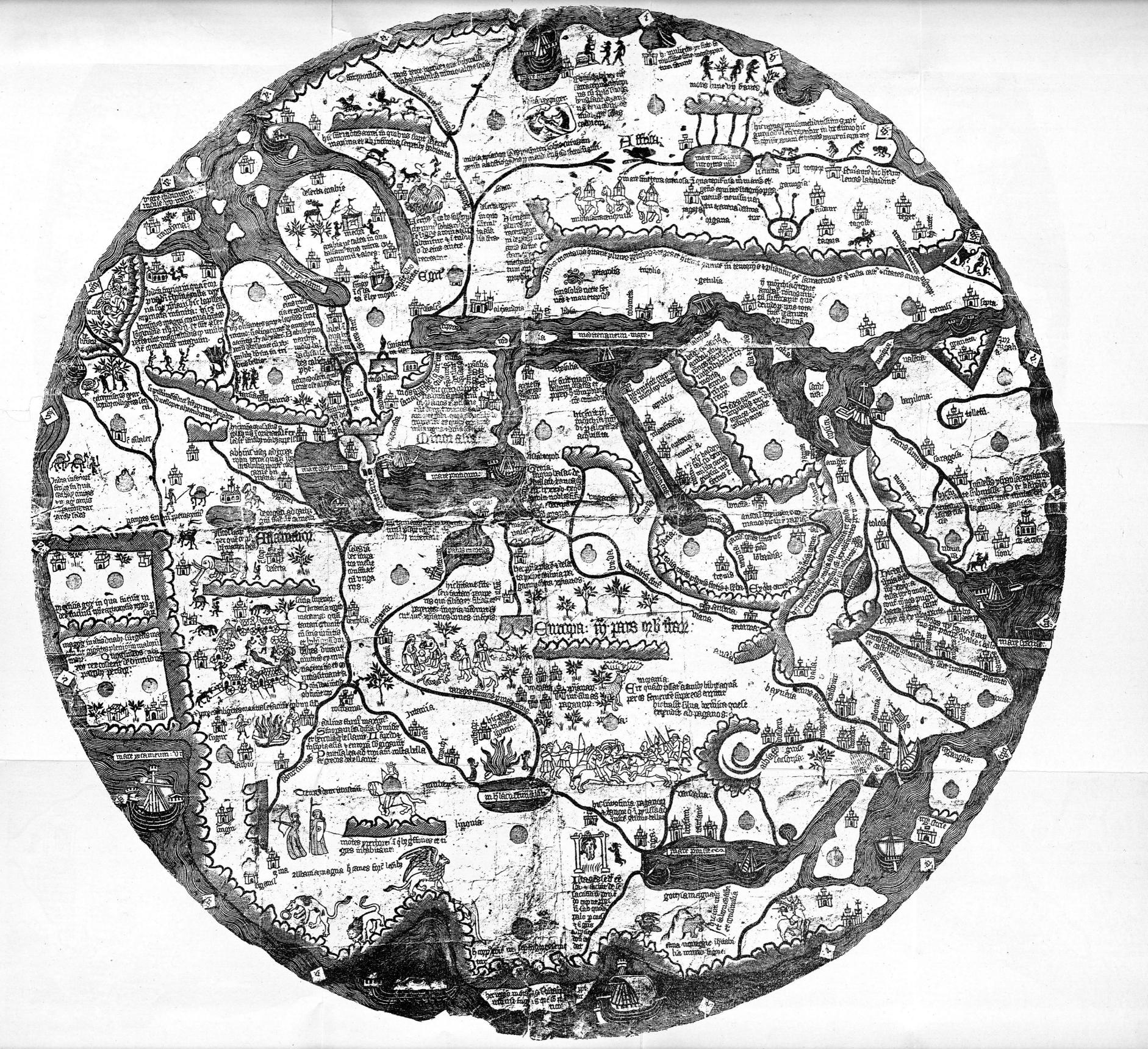
A

FIFTEENTH CENTURY

MAP

OF THE

WORLD.



AN ACCOUNT OF A COPY

From the 15th Century

OF

A MAP OF THE WORLD

ENGRAVED ON METAL,

WHICH IS PRESERVED IN CARDINAL STEPHAN
BORGIA'S MUSEUM AT VELLETRI.

BY

A. E. NORDENSKIÖLD.

Copied from "YMER," 1891.

STOCKHOLM:
PUBLISHED BY A. L. NORMAN.
1891.

The copy of the Map referred to throughout this article is now preserved in the John Rylands Library, Manchester.

Printed by Hasell, Watson, & Viney, Ld., London and Aylesbury, 1893.

An Account of a Copy of a 15th Century Map of the World Engraved on Metal, which is preserved in Cardinal Stephan Borgia's Museum at Velletri.

By A. E. Nordenskiöld.

THE map here given in a somewhat reduced facsimile is in all probability the oldest printed map which is at the present time preserved. Hitherto it has been considered that the oldest print of this kind was (i) partly a map of the world and a map of Palestine, both engraved on wood, which occurs in the Rudimentum Novitiorum, an especially remarkable work,

¹ These maps, which are very imperfectly executed, and without any acquaintance with Ptolemy's works, are given at fig. 2, p. 3, and fig. 3, p. 5, in A. E. Nordenskiöld's *Facsimile-Atlas*, Stockholm, 1889.

in a typographical respect, published at Lübeck, in 1475; (ii) partly the 26 maps engraved on copper, which are in an edition of Ptolemy's Cosmographia, dated Bononiæ, 1462,2 as in a book of older date than the aforementioned work from Lübeck. Various circumstances indicate, however, as well known, that the latter book's conclusion (Colophon), "Hic finit Cosmographia Ptolemei impressa opera dominici de lapis civis Bononiensis Anno MCCCCLXII, Mense Junii XXIII. Bononie," 3 is encumbered with a misprint, in that an X has been omitted. The correct year of printing should consequently be 1472. Other Bibliographers have accepted the years 1482 or 1492 as more probable. For my part I regard, for reasons which are set forth in my Facsimile-Atlas, the year 1472 to be the correct one, and that so the maps printed in Bologna are older than the maps in the Rudimentum Novitiorum, but these latter can always claim to be the first printed maps, for which the year of printing (1475) can with certainty be assigned.

² For fuller information about this edition and the literature about the same, I must refer to my above-named *Facsimile-Atlas*, p. 12. One of the maps in this rare edition of "Ptolemy" is given at p. 4 in my Atlas.

² Here ends the Cosmographia of Ptolemy by Dominicus de Lapis, of Bologna, Anno MCCCCLXII, June 23rd, Bologna.

Without doubt the map here in question is considerably older than both those named. I obtained it from Venice, where it was exposed for sale as an old German wood-engraving. A closer examination of the details of the print soon show, however, that one has here not to do with a wood-engraving, but with a very imperfect metal-engraving. For the sake of certainty I consulted upon this point with several wood-engravers and engravers on metal, who were all agreed that the map was not printed from a wood-engraving, although, on the other hand, they were not agreed as to the kind of copper-engraving which was here exhibited. This is clearly owing to the fact that the map is not a copper-engraving in the ordinary sense, but such an impression as goldsmiths take of their art work designed for enamelling or guilloche work, to be able to follow the progress of the work and to see how it would appear when finished. In the history of the art of copperengraving one recognises many prints of this kind, which are highly prized by the collector. I have certainly not had access to any originals of such work, but by comparison with carefully executed facsimile copies, it seems to me evident that the map in question originated in this way, and that it is thus not a copy of a plate designed for printing. It should be remembered that such copies, for the most part, were not taken directly, but indirectly, as a cast was first prepared, in melted sulphur or other suitable material, which cast was afterwards used for the impression on paper. Remarkably enough, I can, in this case, refer to the metal-original itself, which is not only found in existence, but likewise has been the subject of very comprehensive treatises. The map is then clearly, as regards the engraving, identical with the map engraved in metal which Vicomte de Santarem in his Essai sur l'histoire de la cosmographie et de la cartographie pendant le moyen-âge, III, Paris 1852, p. 247, describes under the name of Mappemonde du Musée du cardinal Borgia, and whose history, so far as is at present known, is briefly as follows.

It was first seen in Italy by the French archæologist and numismatologist Seroux d'Agincourt, who, after having acquired considerable wealth as Farmer-General, some time before the French revolution, undertook, at the end of the last and the beginning of the present century, extensive journeys into different countries to collect and study old coins and works of art. Of his investigations he has published a comprehensive work, the conclusion of which came out at Paris in 1823, after the author's death. It has since been translated into Italian, German, and English. I have used the Italian

edition. D'AGINCOURT says therein (t. iii., p. 149, and iv., p. 64), that he saw this map, the first time, in Italy, at an Antiquary's in 1794, but that it was · afterwards bought by Cardinal STEPHAN BORGIA, for the rich museum of art treasures of all kinds which the latter had established at Velletri. After the Cardinal's death at Lyons, in the year 1804, the map came to the archives of the congregation for the propagation of the faith, where it is probably still preserved; at least according to the inquiries made for me it has not, along with the congregation's library, been transferred to the library Vittorio Emanuele. D'AGINCOURT's short account of the map, composed from an artistic point of view, is of value because it is the only one which is founded upon an autopsy of the work. Besides, D'AGINCOURT gives in Plate XL. partly a very defective drawing of the whole map, on a much diminished scale, and partly a facsimile of a smaller portion of the same, of the original scale. In that plate the map is called: Mappamondo inciso sopra una lastra di rame, specie di lavoro alla damaschina.4

The learned Cardinal was not content, in the meantime, with merely heaping up Art-treasures

⁴ Map of the world engraved on a copper plate, a species of Damascene work.

upon Art-treasures in his museum. He was anxious that this should be for the benefit of Science and Art-history, by means of suitable descriptions and monographs. Such a one was indeed composed on the map now under consideration, the immediate occasion of which was the Cardinal's election as an honorary member of the Royal Society of Science at Göttingen. Shortly thereafter he sent to the said Society some copies, printed on copper (Apographa) of his map of the world, which he justly regarded as one of the greatest ornaments of his museum. By means of these and a communication by letter from the Cardinal, the celebrated historian ARNOLD HERMANN HEEREN left the following copious work executed with great learning and critical acuteness: Explicatio Planiglobii Orbis terrarum faciem exhibentis, ante Medium Seculum XV. Summa arte confecti; Musei Borgiani Velitris; printed in the Commentationes Societatis Regiæ Scientiarum Gottingensis, vol. xvi., 1808, pp. 250-284. Heeren's work is not accompanied by any plate, but he has left a full account of the many inscriptions on the map.

⁵ An exposition of the map of the world, showing the face of the globe executed with consummate skill, before the middle of the 15th Century. From the *Borghese Museum*, at Velletri.

An extract from the letter about the map had already, some years earlier, been introduced into the third French edition of CHR. GOTTLIEB V. Murr's L'histoire diplomatique de Behaim, Strassburg 1802, pp. 26, 28.6 Further, the work is spoken of very fully by Lelewel (Géographie du moyen âge, Prolégomènes, p. lxxxiv, note, and ii., p. 96), who amongst other things says, that the copies which the cardinal sent to Göttingen, are not found in the present university's library. The copies, printed on copper, which were sent to Heeren are probably identical with the reproduction of the map which, according to Santarem (the work aforementioned, p. 250) was published by the cardinal's nephew under the title: Apographon descriptionis orbis terræ, figuris et narratiunculis distinctæ, manu Germanica opere nigelliari discoloris circa medium Sæc. XV tabulæ æneæ Musei Borgiani Velitris consignatæ, quod Camillus Joh. Paulli F. Borgia, Cruce Hieros. ornatus, ab intimo cubiculo Electoris Bavarici, Patrui Cardinalis exempla imitatus. Summa fide, maximoque artificio expressum, recognitumque Eruditis spectandum proponit. A. C.

⁶ According to Lelewel, *Géographie du Moyen Age*, Bruxelles, 1852, Introduction, p. lxxxiv, note. I have not myself had access to this edition of Murr's work on Behaim.

MDCGXCVII.⁷ It seems now, however, that most of the examples of these copies have been lost—a fate which usually befalls all loose prints of maps distributed to amateurs. During the long time that I have been engaged in cartographical studies I have only heard of a single example of the same spoken of as being still in existence. It was, according to a communication from the librarian, E. Dahlgren, exhibited by M. Hamy in the geographical section of the Paris Exhibition of 1889.

The original of the map, or the engraving plate, of which my print is an impression, consisted of two parts, fastened together with rivets; it was two feet one inch in dimensions (according to HEEREN), who, however, does not state what kind of "foot" he means. My map is 646 mm. across. It agrees fully in scale with the calculation which D'AGINCOURT has left of a small portion of the

⁷ Copy of a map of the earth illustrated with figures and short narratives, which was engraved in Niello work by a German hand about the middle of the 15th Century, on a copper-plate in the Borghes Museum at Velletri. This copy, executed and revised with the greatest care and the utmost skill, is now issued for the inspection of the initiated by Camillus J. P. F. Borgia, of the order of the Cross of Jerusalem, after copies of his uncle, the Cardinal, from the private library of the elector of Bavaria, Anno Christe 1797.

map. The parts, which in the impression appear black, were in the original filled up with a melted substance, for the most part brown, but where ship's sails are represented, white, and for flames, red.

The copy I have acquired is clearly very old. Compare it with the full descriptions of Borgia's metal engraving, left in the aforementioned works, also with D'Agincourt's drawing of a part of the same in full size, and hardly any doubt can arise that my map is an indirect impression of a metal engraving before the latter was filled up with "Niello."

The work is not dated. But, as HEEREN points out, it must have been executed after the year 1401, for the conflict at Ancyra, in which Bajazet was besieged by Tamerlane, is mentioned in one of the numerous inscriptions (Savastra in qua Tamburlan devicit Basac). As at Constantinople no inscription notices the capture of this city by the Turks, it may be assumed that the map is older than 1453. The map must therefore have been executed during the first half of the 15th century. For several other reasons, of which HEEREN in his treatise gives a full account, he considers that the work was executed at the beginning of the century mentioned, namely about 1410.

As in nearly all the maps of the world of the

Middle Ages, the earth is here represented as a disc, surrounded by the ocean. It differs from the Ptolemeian picture of the world, (i) in that Africa is not joined with Asia, and that the Indian Ocean is thus an open and not an inland sea; (ii) through the delineation of Scandinavia, which is here represented as a peninsula and not an island; and (iii) through the numerous inscriptions, which only occasionally agree with Ptolemy's legends, and besides are in an entirely more descriptive style than Ptolemy's crude geography. No inscription in the map indicates any knowledge of the Portuguese discoveries on the African coast, or of the Scandinavian discovery of Greenland. With regard to the designs and legends occurring on the map, I must for further information refer to the table at the end of this essay; to the annexed facsimile; to HEEREN'S excellent monograph, and to SANTAREM'S work.

As appears from the key of the map, which accompanies this paper, it is not exclusively a geographical drawing of the earth. It seeks to give an idea not only of the geography of the different countries, but also of their ethnography, natural conditions and religion, and of the most momentous periods of their history. The didactic nature of the map is so striking, that it almost seems as if

it had been composed to illustrate instruction in the elements of the globe, or, more correctly, according to the cosmographical conceptions of the age, the geography, natural conditions, ethnography and history of the earth's disc; and it forms a singularly telling and valuable picture of the conception, in that respect, of the educated classes in Europe at the end of the 14th century and at the beginning of the 15th. Moreover, it seems that the map was composed, not by some scholar by study of older authors, more or less classical, but by a practical, much-travelled man, ex audidis et orsis (from what he had heard and seen). It is this circumstance which bestows upon this, at first sight, coarse and imperfect work, an entirely distinct significance for the study of the development of geography and cartography during the period that just preceded the great wave of geographical discovery. Also from an artistic point of view the descriptions in all their imperfection betray a sure hand.

Finally, I must call attention to a peculiarity in the map, of which I cannot discover any satisfactory explanation. A number of large, irregularly distributed, round and extended spots are seen on the map, which have not anything to do with the print itself, but on the contrary often operate in a disturbing manner, as they are sometimes laid right over a name or a figure. Santarem says that they are the marks of the nails with which both halves of the map were fastened together. That this is a mistake is seen from the note at page 258 of Heeren's treatise, also at page 149, tome iii., of D'Agincourt's work. Possibly they are the unfilled holes intended for figures in relief on the map, answering, for example, to the kings in full dress, with which Portuguese maps are so often adorned.

What I have related will show how great an interest is attached to this work, and, as no other reproduction of it is now accessible, except the plate left by D'AGINCOURT, which, for the present requirements, is altogether incomplete, a reproduction of the map with explanation, along with the short description and history of its discovery here given, will warrant its place amongst the writings of the Anthropological Geographical Society.

THE LEGENDS APPEARING UPON THE MAP.

These were doubtless restored in uncertain cases according to the interpretation of Santarem, who, where variations occur, is probably more correct than Heeren. It seems as if a palæographist had

copied the original itself for Santarem, whilst Heeren only had the aforementioned "Apographon" at his disposal.

EUROPE: THE THIRD PART OF THE WORLD.

[The extreme North.]

This region mountainous and uninhabitable on account of the excessive cold, because it is under the North Pole.

[Scandinavian Peninsula.]

The extreme part of Norway uninhabitable on account of the excessive cold.

Here are bears, white falcons and such like.

Gothia Magna.

[Britannia.]

Kingdom of Scotland.

Kingdom of England.

[Between the Don and the Rhine.]

Prussian Sea.

Riga.

Here are the confines of the Pagans and Christians,

who are continually fighting with one another in Prussia

> Litefani. Vandalia. Tarelant. Sacsonia. River Albia.

Dresdem. Gurse. Mangobres. Standar.

Frisia.

The great river Don.

Seven Christian camps in Pagan forests.

Polonia.

Moravia.

The stag when pressed by dogs drinks water which it vomits upon them boiling.

Here cross the Bohemian forests, which extend to the Pagans.

> Austa. Bayveria. Patavia.

River Danube. Buda.

Austria. Viana.

Sclavonia. Ungaria.

These provinces are flat, and deserted on account of the fighting of the Pagans against the Christians.

Rusia.

Here dwell the Scythians or poor Tartars who through want sell their children and parents in the market, just as cattle amongst Christians.

Boxiana.

Magna Valachia.

Capha.

[West of the Rhine.]

River Rinus.

Ays.

Basla.

Brogundia.

Trasbourc.

Seina.

Colonia.

Roam.

Paris sine . . . pare bonitate et dominio sedet in . . . sitate planito et castelleto.

. . . ania.

Nantes.

Orleans.

Spanish Sea.

Angers.

Bordeaux.

King John of France taken prisoner here in battle by the Prince of Wales.

Here in Alunnia in 432, Attila King of the Huns fought against the Romans, and 180,000 were killed of both sides.

Tolosa.

Lake Loxane.

Avignon.

Here the mountains divide Italy from Almania and Gallia.

Crossing of Hannibal with 70 eliphants over the Rhone here in Ludanum.

[Pyrenean Peninsula.]

The Pyrenees.

Navara.

Here were slain the twelve Peers of France.

River Eurus.

Lioni.

Sancti Jacobi. Gallicia.

Saragosa.

Infidel Spain subjected to Christianity by Charles the Great, after much fighting.

Tolletum.

Granata.

Barzilona.

Portugalia.

Valencia.

[Italy.]

Italy, beautiful, fertile, brave and proud, where, futile, justice wants a single lord.

Istria.

Lombardia.

Trevis.

Paudus oriens ir imchro f.

Verona. Padua.

Sal.

Hannibal defeated the Romans here in the region of Papia.

Saluris.

Ferrara.

Bononia.

Janua.

The apostolic and imperial seat triumphed for seven years.

Sila and Calabria.

Battle of Cannæ in which Hannibal slew 44,000 Romans, and collected from the soldiers three modia (bushels) of golden rings.

Labour district.

Here reposes the body of the blessed Niccolay de Baro.

Apulia.

Marchia. Rimina.

Manfredonia.

Ancona.

Here Hasdrubal was slain, with 43,000 Carthaginians.

[Balkan Peninsula.]

Here the third monarchy of the world was acquired by Alexander.

Here was the great fight of Cæsar and Pompey. Here Rome lost the Commonwealth.

Thesalia.

Athens the sole seat of learning of the world.

Constantinople.

Greece in which Basac conquered the Christians 1395, of whom he beheaded many French nobles.

Burgaria.

Racosa.

[Mediterranean.]

Mediterranean.

Sicilia.

Ciprus.

Sardinia.

Rodus.

Corsica.

Sinus Adriaticus.

Majorca.

Asia Major.

[North Russia.]

Here the body is put to be preserved by the cold.

This race considers itself sacred, and they make of themselves a sacrifice, placing a particular head on a pole by the hair, and then they adore it on their knees until it falls.

Albani Magna. Here are dogs stronger than lions.

Ergauil.

Ezma.

Hyperborean mountains, in which Griffins and tigers dwell.

Livonia.

The land formerly of illustrious women. In this lake . . .

The great river Edilius.

Sinopa conquered many kingdoms and vanquished Hercula. Pampedo and Insipia subjugated Asia and Europe. Pantisalea at Trcy won many battles and vanquished many Greeks.

Rostrama.

[Between the Don and the Volga.]

Rostaor.

Here the Pagans worship fire.

Torachi. Cifer. Intania. Enogaria. Berchlina. Catania. Palus Meotis.

The seat of Iambec, Emperor of Mesia, borders upon the Hungarians.

Here Tamaris, queen of the Scythians, slew Cyrus with 300,000.

Mare Ponticum. The iron gates. The Caspian Sea.

[East of the Volga.]

Singin.

Sugur.

Iachion.

Scitia Superior.

Sebur State.8

The great district of Tartary, which the Tartars traverse with their beasts of burden and cattle as long as there is grass.

They construct their towns of many tents and skin.

Here they burn the bodies with the implements belonging to them, and the faithful wives cause themselves to be burned along with their husbands.

Civitas sop.

Desert.

⁸ The town is marked east, the name west of the Volga. It will be Sibir.

Lake Ysicol, upon which rested the body of the blessed Matthew.

Organti...

From Organti to Cathagium, camels go in four months.

From here to the ocean a land uninhabitable on account of cannibalism.

Mount Caucasus extends from here under many names to the East.

[Eastern Asia.]

Mare Yrcaneium.

Magog, in these two are races big as giants, full of evil manners, Jews whom King Artaxor collected from all parts. Province of Gog, in which the Jews were confined in the time of Artaxor, King of Persia.

The great river Ganges.

Lower India in which is the City of Cathay, and the seat of the great Canis, Emperor of the Tartars.

The State of Cambalec.

The distant Seres collecting silk from the trees.

[Southern Asia.]

Paradise.

Upper India, in which is the body of the blessed Thomas. Many Christian Kingdoms. Here are an infinite number of precious amber stones. Here also are huge men having horns four feet long, and there are serpents also of such magnitude, that they can eat an ox whole.

The river Indus, where there are elephants, gold and precious stones innumerable, and no one wants for gold ornaments.

Here Alexander vanquished Darius with fifteen thousand men in three battles.

Babylon, the first monarchy of the world.

Baldachia, the seat of the Caliph.

Trees preserved where Alexander and his soldiers were.

Tarsis.

Tauris.

Niniveh, three days' journey in length.

Persian Sea.

Trapobana.

The Indian Sea in which are seven thousand islands.

[Mesopotamia, Arabia, and Syria.]

Babel, where seventy-two languages were invented.

Caldea. Mesopotamia. Desert of Arabia.

The Euphrates.

Arabia or Sabea, in which there is balsam, frankincense, myrrh, cinnamon, and aloes.

Mount Sinai, where was given the law of Moses. Crossing of the Children of Israel.

> Damascus. Syria.

Holy Land. Mount Libanus.

[Asia Minor.]

Capadocia.

Trapesanda.

Mountain of Armenia where is Noah's Ark. Savastra, where Tamburlan vanquished Basac. Of 800,000 men slew 2,000.

Cilicia.

Pamfilia.

Here the Greeks, with the help of a part of the world during ten years, fought against the Trojans and the other part of the world, whom by . . . they destroyed, from which Trojans were made many kingdoms and dominions.

AFRICA.

Egypt.

Alexandria.

Phœnix, the sole most beautiful and solitary bird in the world, burns itself in an aromatic fire, and in three days is recreated from its ashes.

The desert of Egypt, in which are many wild animals.

Many Saracen pilgrims come here to Mecca on account of their Prophet.

[North of Mount Atlas.]

Lory.

Libia.

The fountain of the sun, boiling at night and tepid in the morning.

Petapolis. Colometa. Tripolis. Getulia.

The second monarchy, which in the time of Hannibal greatly harassed the Romans, and was then totally destroyed by them under Scipio.

Tremili.

Septa.

In these mountains are many princes and kings, and they dwell continually in tents, and fight against the Saracens. There are also many strongholds and states beyond.

Passage into the Land of the Negroes.

[Middle and Southern Africa.]

Hyfuret.

Tagaza.

Teget.

Fudaur.

Tagost.

The golden river here eight leagues broad.

Tocoror.

Ganugia.

The sea, or land, of sand, in which the way is found as at sea, and the people travel under cover lest the wind and sand should destroy them on the way.

Organa.

Tagaza.

Nubia of the Saracens.

Mare Missa believed to be the Source of the Nile.

Here reigns Musameli, very rich on account of the gold which is found in this river. Here the Ethiopian Christians begin to appear very poor.

Mountains of the Moon, 7 brothers.

Here women hairy and very savage bring forth without males.

Abinichibel is king of the Ethiopian Saracens, with his people having the face of a dog, and they go naked on account of the heat of the sun.

Ethiopian Sea.

Here rules King Piger.

Nubia of the Christians, the seat of Prester John, whose empire extends from the mouth of the Gandis to the river of gold.

The great river Nile.

The part of the earth beneath the torrid zone uninhabitable on account of the excessive heat of the sun.

Here are golden mountains, in which are vast deserts inhabited by innumerable snakes.

The Province of Offir.

