

Wasserzeichenforschung

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5. Mai 2022

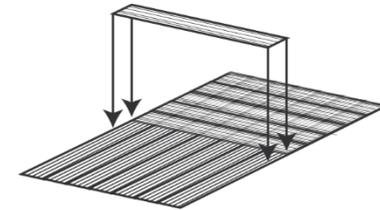
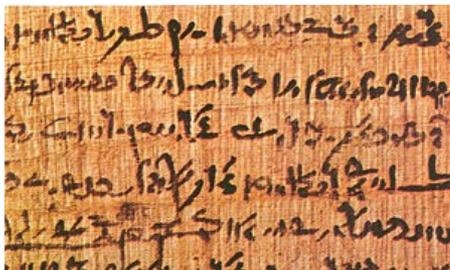
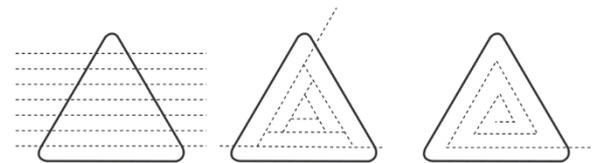
Agenda

- Papiergeschichte
 - IPH (<http://www.paperhistory.org>)
- Wasserzeichen
- Wasserzeichensammlungen
- Aufnahmeverfahren
- Bernsteinprojekt
- Online-Demonstration

Papyrus - Papier

Wort Papier ← griech. Wort 'Papyrus [πάπυρος]
wichtigster Beschreibstoff in der Antike.

Stängel des echten Papyrus.



Papier

Substanz aus Pflanzenfasern (Dard Hunter)

- zu Zellstoff mazeriert (Fasersuspension)
- Sieb (Entwässerung, Blattbildung)
- Verdichtung (Presse)
- Trocknung
- Nachbehandlung

Verwendung in nahezu in allen Bereichen

China

(Schildkröten) Knochen, Bambusplättchen oder Seide

ältestes Papier: Han Dynastie, 2. Jh. vChr.

Verpackung und Füllmaterial für wertvolle Objekte und Medikamente

Ab 3. Jh. nChr Beschreibstoff

875 AD Toiletpapier

960 AD Papiergeld

Buddhist. Mönche: Vietnam (3rd cent.), Korea (4th cent.), Japan (early 7th cent., 610 AD)



hemp fiber paper, used for wrapping not writing, on display at the Shaanxi history museum in Xi'An, China. Excavated from the Han Tomb of Wu Di (140-87 BC) at Baqiao, Xi'An. Photo by Yannick Trottier, 2007

Cai Lun

China, **Cai Lun** (Ts'ai Lun 50-121 AD, Han dynasty),

105 AD: Lumpen, innere Rinde der Maulbeerbäume und Bambusfasern werden in Wasser mit einem hölzernen Hammer verstampft. Danach schüttet man diese Mixtur auf ein flaches dichtgewebtes Tuch und lässt das Wasser abfließen, sodass nur die Fasern auf dem Tuch bleiben. Wenn alles getrocknet ist, hat man eine qualitative hochwertige Oberfläche, die relative einfach zu machen ist und leicht ist..

Nummer 7 im Buch *The 100: A Ranking of the Most Influential Persons in History* (Michael H. Hart).



Japan

Buddhist. Mönche von Korea

Kunstform, führender Produzent

Japanpapier

Washi: innere Rinde von

- Kozo (Maulbeerbaum),
- Mitsumata (jap. Papierbusch)
- Gampi (~Seidelbast)

Restauratoren und Künstler



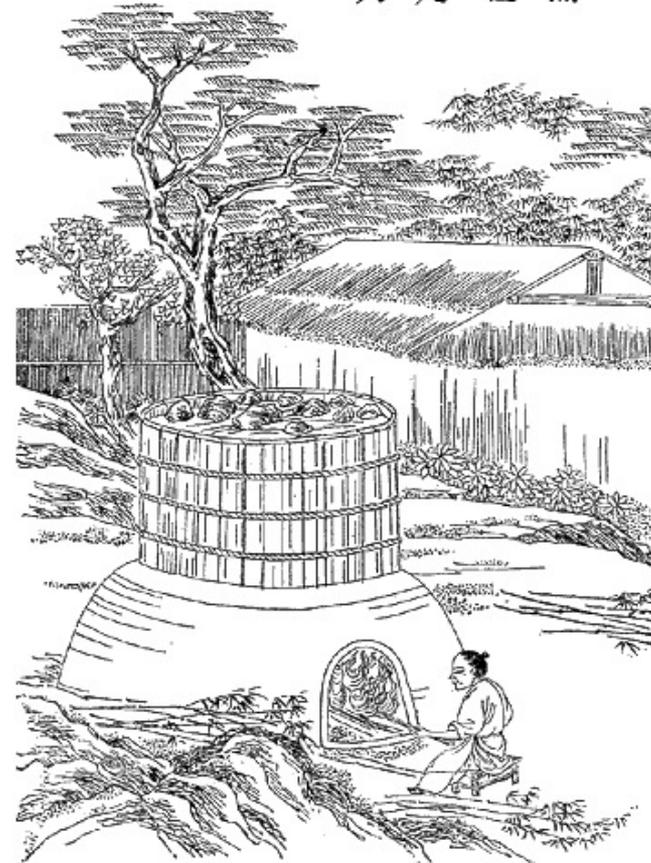
Hauptstufen der Papierproduktion

塘漂竹斬



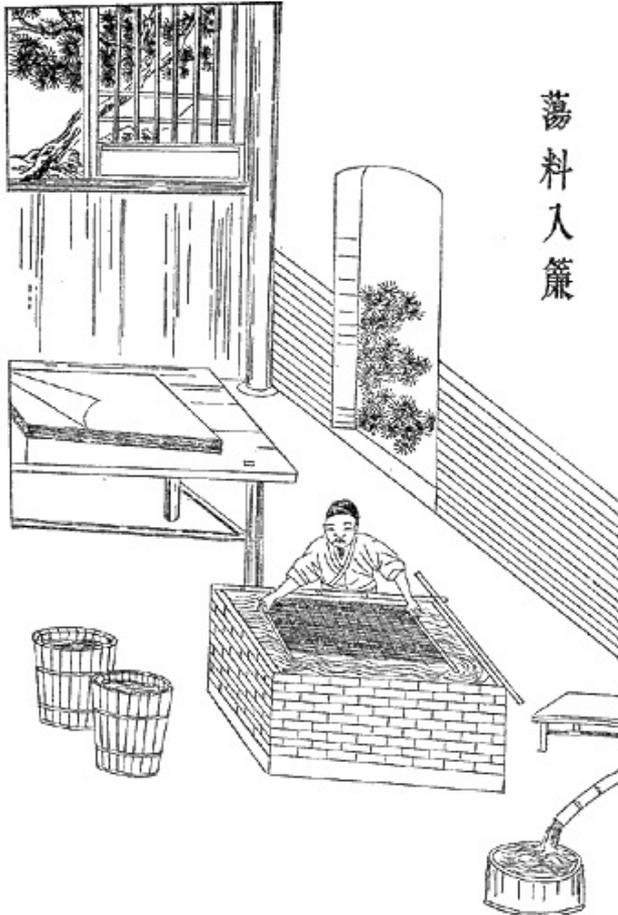
Ernte des Rohmaterials

火足槿煮

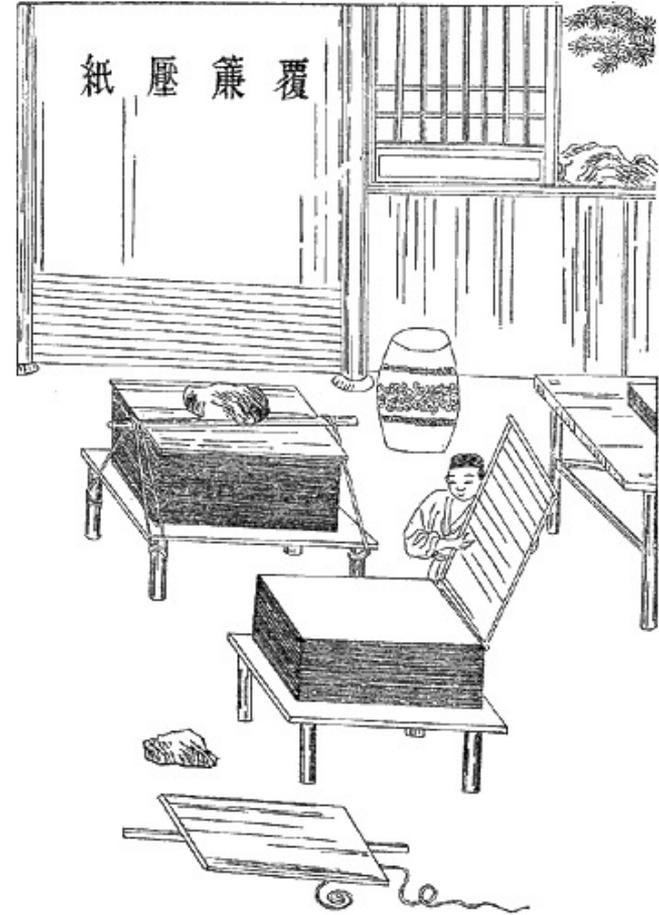


Produktion eines Faserbreis (Halbstoff) durch Stampfen und Kochen der Fasern gemischt mit Wassern

Hauptstufen der Papierproduktion



Schöpfen eines Blattes



Pressen um Wasser zu entfernen

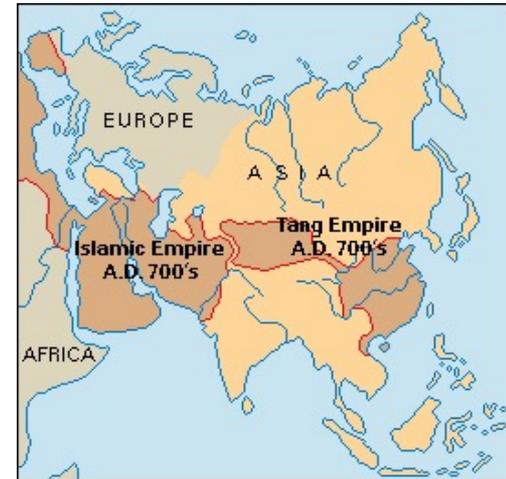
Hauptstufen der Papierproduktion



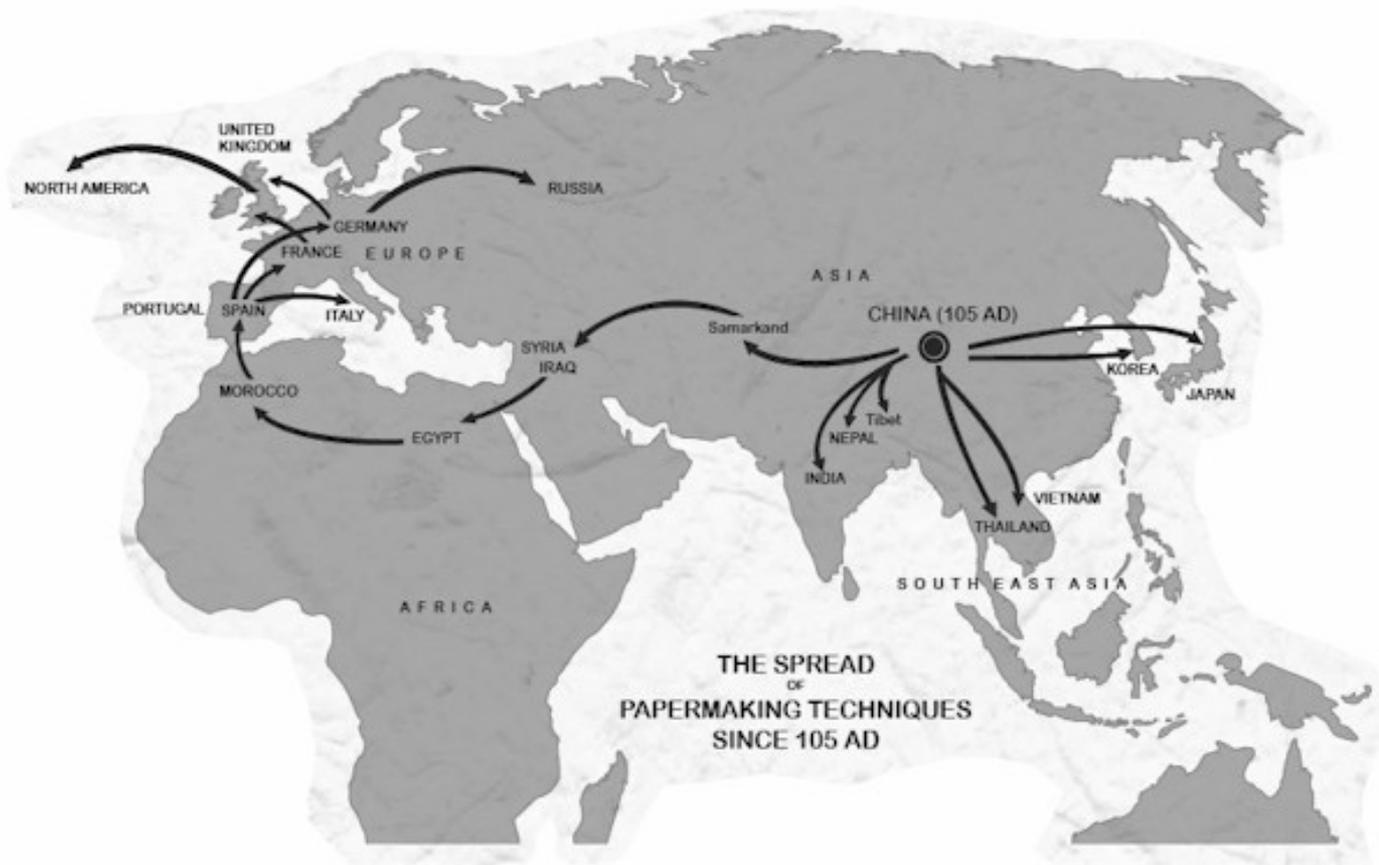
Trocknen des Papiers

Verbreitung des Papiers

- The Japanese got acquainted with paper via Korea, which at the time belonged to China. At around 610 A.D. they started manufacturing the first paper. For a long time the Chinese closely guarded the secret of paper manufacturing.
- Samarkand was the region where during the Arab-Chinese war in 751 A.D. (battle of Talas) some Chinese soldiers and paper makers were captured and the latter were forced to show how to make paper.
- In the following centuries many paper manufacturing facilities were built in Syria, Palestine, Persia, and in the towns of India ruled by Arabs.
- Bagdad (795), Damascus, Cairo, Fes (472 paper mills, 12th century)



Migration des Papiermachens

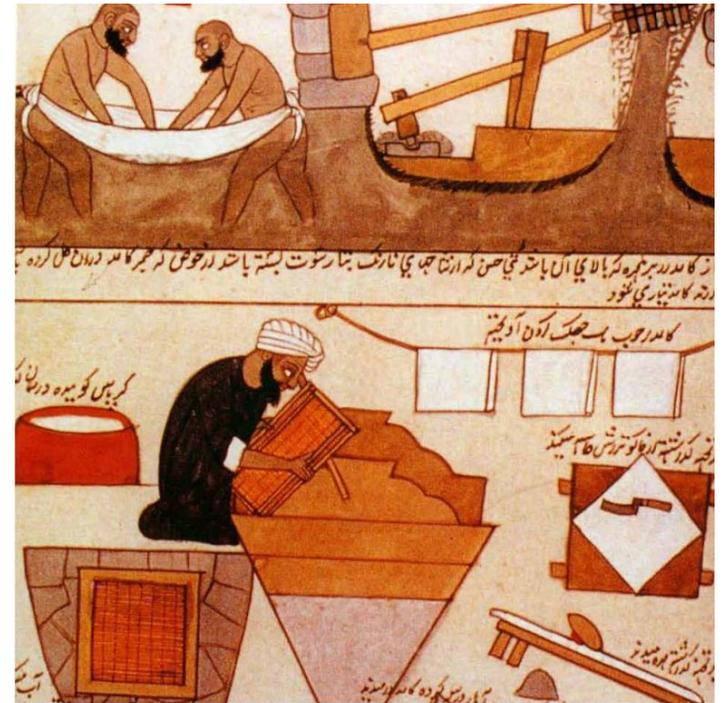


The westward migration of Chinese papermaking techniques.
(Graphic Design by Anchalee Wannasupring)

Papier in Europa

Al-Idrisi (1144): Papierproduktion in Xativa nahe Valencia
1238 verlassen die Mauren Valencia
bleibt ein wichtige Ort für die
Papierproduktion

Missale of Silos ist das älteste
bekannte christliche Buch auf Papier
(1151)
Klosterbibliothek von Santo Domingo
de Silos in der Provinz Burgos
(Spanien).



Actas de la reunión de estudio
sobre el papel hispanoárabe

Xàtiva

29-31 octubre 2009

Papierverbreitung in Europa



- 1144 Xativa (SP)
- 1250 Amalfi (I)
- 1260 Fabriano (I)
- 1321 Leesdorf (A)
- 1326 Ambert (F)
- 1348 Troyes (F)
- 1390 Nürnberg (D)
- 1432 Belfaux (CH)
- 1469 St. Pölten (A)
- 1490 Stevenage (GB)
- 1563 Klippan (S)
- ~~1576 Moskau (RU)~~
- 1690 Germantown (US)

Stromersche Papiermühle



1493 (der Gebäudekomplex im unteren rechten Eck). Wie alle Papiermühlen lag sie aufgrund ihres Gestanks und Lärms außerhalb der Stadtmauern.

Papiermachen in Italien

From the 13th century onwards, papermakers at two early Italian centres, Fabriano and Amalfi, tried to improve the Arabian technique. Their efforts focused not on the raw material but on its preparation and the actual papermaking process was improved. The Italian papermakers developed:

- the use of water power
- the stamping mill (derived from the stampers and milling machines used in textile handicrafts)
- the mould made of wire mesh (as a result of progress in wire production), which triggered the introduction of couching on felt
- watermarks
- the paper press (screw press) with slides for feeding in the material
- drying the sheets on ropes
- dip sizing (animal gelatine)



Schöpfen

Papier wurde Blatt für Blatt geschöpft mittels eines Siebs

Bütte mit Faserbrei (Zeug)

Sieb (mould) und Deckel

Siebpaare (Zwillingsmarken, Lagen)

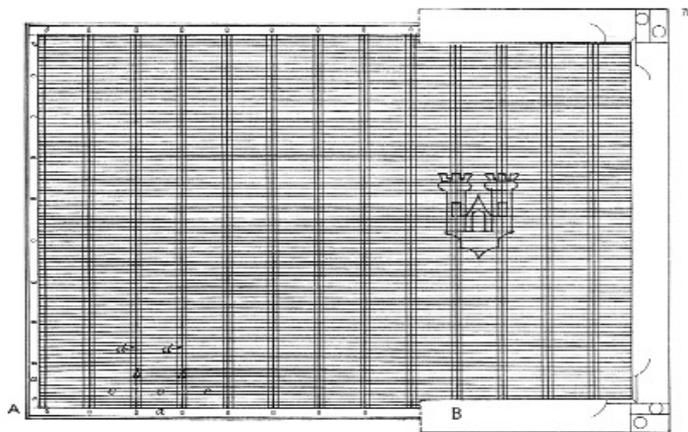


jap./chin. Bambussieb



Schöpfsieb (Schöpfform)

Sieb und Holzrahmen (deckle)



geripptes Papier

Kettdrähte (chain lines)

Rippdrähte (laid lines)

Wasserzeichen



feinmaschiges Sieb (Velinsieb) -

Rohmaterial

Baumwoll- oder Leinenfasern von Lumpen

- sortiert und gereinigt
- eingewässert und zerstampft zu einem Brei
- gebleicht um Farbstoffe zu entfernen



Moderne Papierproduktion

- Um 1845 wird es möglich Holzfasern (Holzschliff) zu verwenden. Allerdings tendierte Papier, das aus einem Brei aus Holzschliff gemacht wurde zu vergilben (wegen Lignin). Daher wird Qualitätspapier weiter aus Lumpen gemacht.
- Ende des 19.Jh. werden Papiermaschinen im großen Stil eingeführt. Donkin in England und Robert in Frankreich entwickelten die ersten Papiermaschinen Ende des 18. Jh. Mongolfier and Fourdrinier entwickelten das Prinzip weiter: Siebpartie (wet end), Pressenpartie und Trockenpartie. Die heutigen Papiermaschinen arbeiten noch immer nach dem selben Prinzip. Sie werden daher oft Foudrinier-Maschinen.
- Ende 19.Jh. Bleichprozess in Skandinavien eingeführt, der Lignin aus dem Papier entfernt. Damit wurden die Lumpen als Rohmaterial unwichtig.

Moderne Papierproduktion

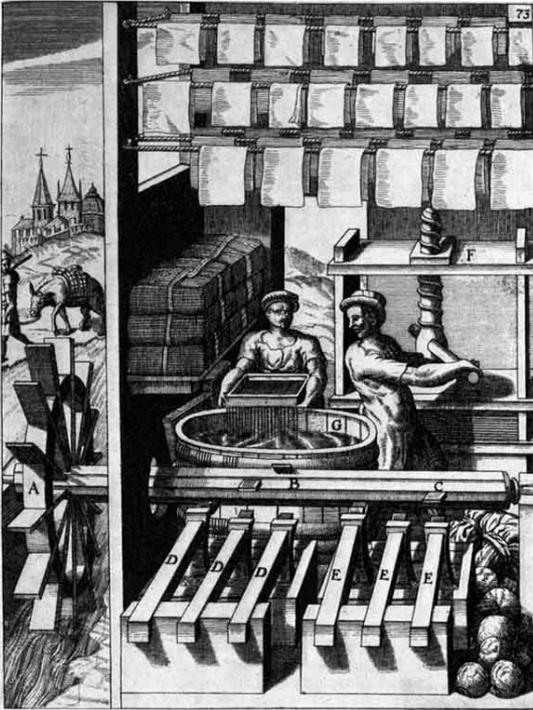


Abb. 21. Eine »Pappmühl« im 17. Jahrhundert. (Nach Böckler: »Schauplatz der mechanischen Künste und Mühl- und Wasserwerke«, Nürnberg 1661.)

A = Wasserrad, B C = Dammeile mit Nocken, D E = je drei, mit Eisen beschlagene Stampfhammer, G = Bütze, aus der der Bützele schöpft, F = Kantscherstuhl und Handpresse. An der Decke die zum Trocknen aufgehängten Papierbogen.



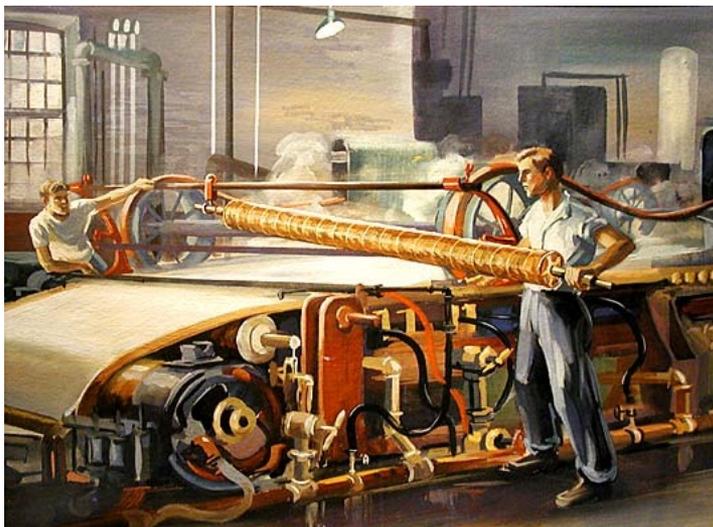
Wasserzeichen

- 13. Jahrhundert in Europa (Fabriano),
- Indikator für die Papiermühle (Herkunft) und Qualität
- Variation in der Dicke des Papiers
- Drahtwasserzeichen
- Licht-Schatten-wasserzeichen



Modern watermark types

- Light and shade watermarks are formed from relief sculptures impressed into the woven wire fabric of the paper mould.
- Dandy Roll



History of watermark research

- Begin of the 19th century: **Gotthelf Fischer von Waldheim** (1771-1853 Moscow) - a German anatomist, entomologist and palaeontologist living in Moscow since 1804 – wrote a history of printing books. There he also shows 30 watermarks with the hint: “that with the help of watermarks the age of a document can be guessed”. So he was one of the first researchers in watermarks.
- During the 19th century all over Europe there were generated various repertories of watermarks with the intention to facilitate dating (esp. medieval documents). (<http://www.paperhistory.org/Watermark-catalogues/>)
- Bishop **Aurelio Zonghi** (1830-1902) published in the 1880ies two essays with the description of more than 1800 watermarks. However the whole collection of his tracings was printed not until 1953. Zonghi concentrated on the watermarks of Fabriano.
- Mould needed to be replaced/restored after a couple of month
- Watermarks were used for a short time
- Paper was rare and expensive and was not stored for a long time

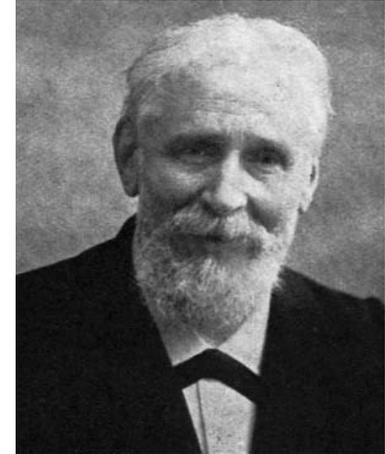
Zielgruppen

Alle, die mit Papier zu tun haben

- Geschichte (e.g. Kodikologie), Kunstgeschichte, Wirtschaftsgeschichte
- Musikforschung
- Archive, KonservatorInnen, Bibliotheken
- Antiquariate, Kunsthandel, Auktionishäuser (Echtheit)
- RestauratorInnen, PapiermacherInnen, KünstlerInnen
- Computerwissenschaften
- forensische ExpertInnen

Forscher und Sammler

- Vinzenz Franz Werl (1810-1861)
- Aurelio Zonghi (1830-1902)
- **Charles-Moïse Briquet (1839-1918)**
- Nikolai Petrovich Likhachev (1862-1936)
- Edward Heawood (1863-1947)
- William Algernon Churchill (1865-1947)
- Karl Theodor Weiß (1872-1945) Wisso Weiß (1904-1991)
- Vladimir Alexeyevich Mošin (1894-1987)
- Edmundas Laucevičius (1906-1973)
- Zoia Vasil'jevna Uchastkina (1906 – 1975)
- **Gerhard Piccard (1909-1989)**
- Радоман Станковић
- Gerard van Thienen (1939-2015)

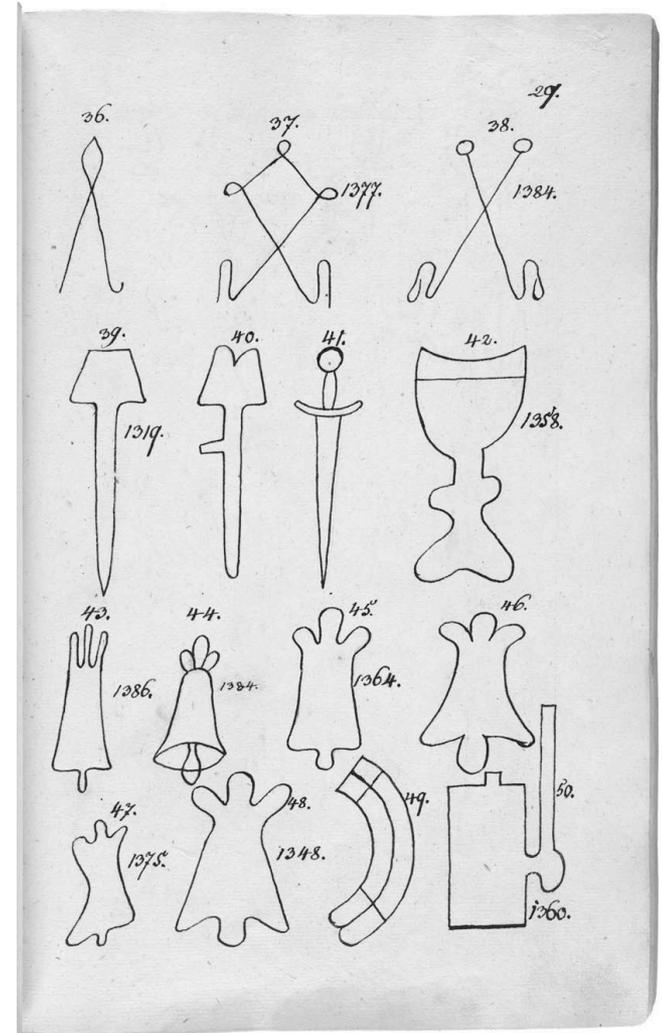


Monumenta Chartae Papyraceae

- Hilversum : Paper Publications Society, 1950-1994
 - Watermarks / Edward Heawood
 - The Briquet album
 - Zonghi's watermarks / A.& A. Zonghi
 - Paper-mills & papermakers in England 1495-1800 / A. Shorter
 - The ancient paper-mills of Basle and their marks / W.Fr. Tschudin
 - The ancient paper-mills of the former Austro-Hungarian empire and their watermarks / G. Eineder
 - A history of Russian hand paper-mills and their watermarks / Z.V. Uchastkina
 - The paper-mills of Berne and their watermarks 1465-1859 / J. Lindt
 - Tromonin's watermark album
 - Paper and watermarks in Catalonia
 - Anchor watermarks / V. Mosin
 - Paper and watermarks in Norway and Denmark / H.M. Fiskaa and O.K. Nordstrand
 - Likhachev's watermarks.

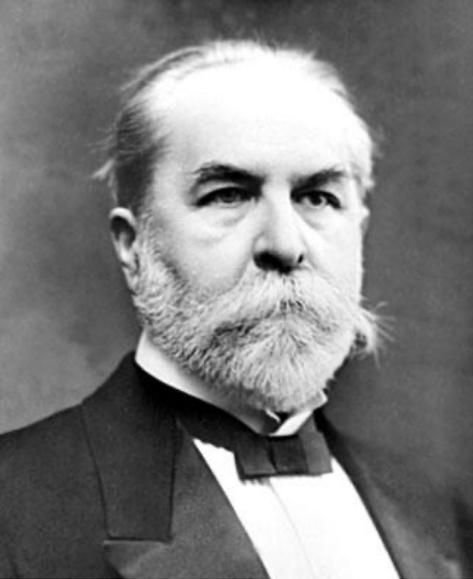
Vinzenz Franz Werl (1810-1861)

Benedictine monk at the Abbey Göttweig
Professor of theology
Catalog of the manuscripts of the Abbey
Göttweig, 1843
with 306 watermarks (1844)

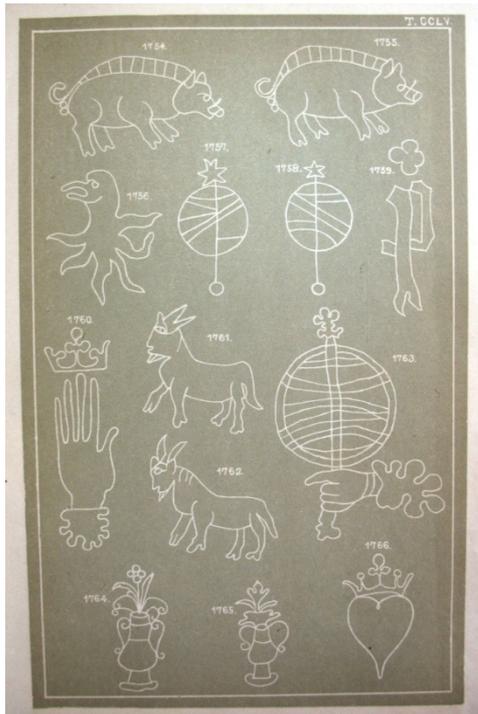


https://manuscripta.at/diglit/werl_1

Nikolaj Petrovich Likhachev (1862, Kazan – 1936, Leningrad)



- member of the Russian Academy, outstanding historian, nobleman. Had one of the largest collection of icons, coins and manuscripts.
- *Paper and the oldest paper-mills in Moscow state. S.Petersburg, 1891.* research on paper production and usage in Russia in the XIV – XVIII c., 783 tracings of watermarks (30 Russian) systemized in groups by countries and producers. The work has indexes of dates and sources.
- *Paleographic significance of paper watermarks. S.Petersburg, 1899. Vol. I-III.* 4258 tracings of watermarks from libraries, archives in Moscow and St. Petersburg. They were published on a black background.
- original way of systematization by arranging the wms in groups according to the usage in manuscripts. It was a new source study method that became actual only to the end of the XX c. In additional two volumes of indexes with analyzes of the evolution of certain wm types and wm description in accordance with their usage in manuscripts.
- English version with different systematization by types of images was published 1994 in two volumes (**Monumenta Chartae Papyraceae Historiam Illustrantia XV**),



Briquet (1839-1918)

One of the best known collectors of watermarks was Charles Moise Briquet from Geneva. Briquet collected material in 235 archives and libraries in Italy, France, Germany, Austria-Hungary, Switzerland, Belgium, and the Netherlands. In 1907 he published his 4-volume opus “Les Filigranes”. There are printed more than 16000 tracings of watermarks from the end of the 13th century to 1600. Also nowadays it's one of the standard works for watermark research.

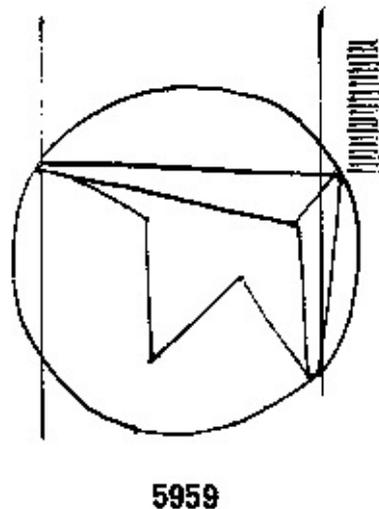
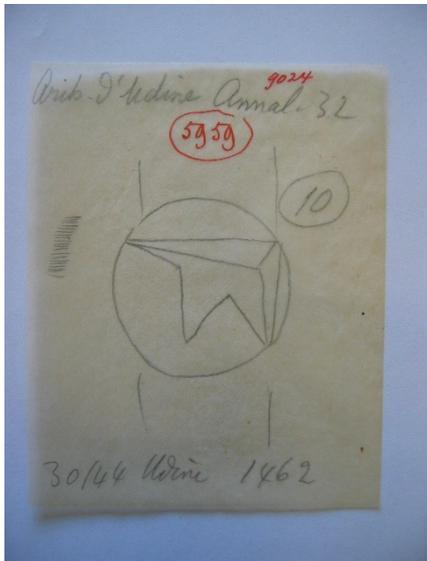


Briquet reloaded

Neil Harris, Ilaria Pastrolin (Udine, Paris)

- vollständige Dokument
- Zwillingssmarken
- Briquet's handschriftliche Aufzeichnungen
- neue digitale Aufnahmen

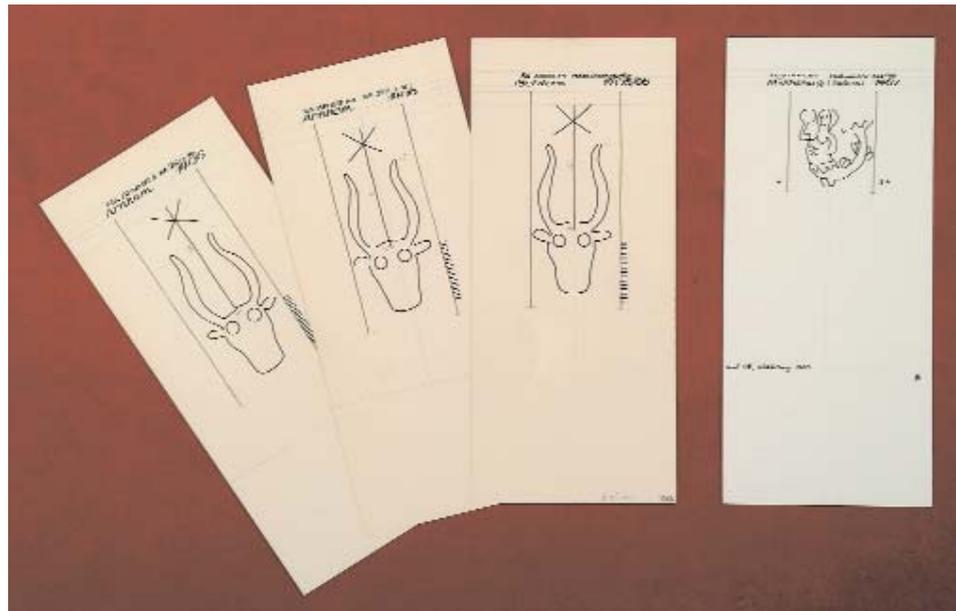
<https://memoryofpaper.eu/briquet/?refnr=5959>



Piccard (1909-1989)

The most comprehensive collection of watermarks was created by Gerhard Piccard. Piccard was from Berlin and from his profession painter and pianist. He settled down in Stuttgart.

Piccard visited about 85 archives and libraries mostly in the southern parts of Germany but also in the neighbouring countries. In 40 years of research he produced 92,000 copies of watermarks which he transferred onto file cards. These cards are stored in big filing boxes in Stuttgart in the Hauptstaatsarchiv. There they could be used by researchers but it was a laborious research to run over all these single file cards.



Piccard (1909-1989)

So at the archive they started to publish those cards in the so called “Findbücher”. All in all 17 “Findbücher” were printed, for example for the motives bull’s head, crown, tower, and so on. But only a part of the collection was published in this way. And so some years ago all the cards were digitized and now you can search on more than 90000 watermarks on the web via Piccard-online.



Bull's head

[Ochsenkopf, tête de bœuf, cabeza de buey, testa di bue, голова быка, ökörfej, cabeça de touro, κεφαλή βοός, ossenkop]

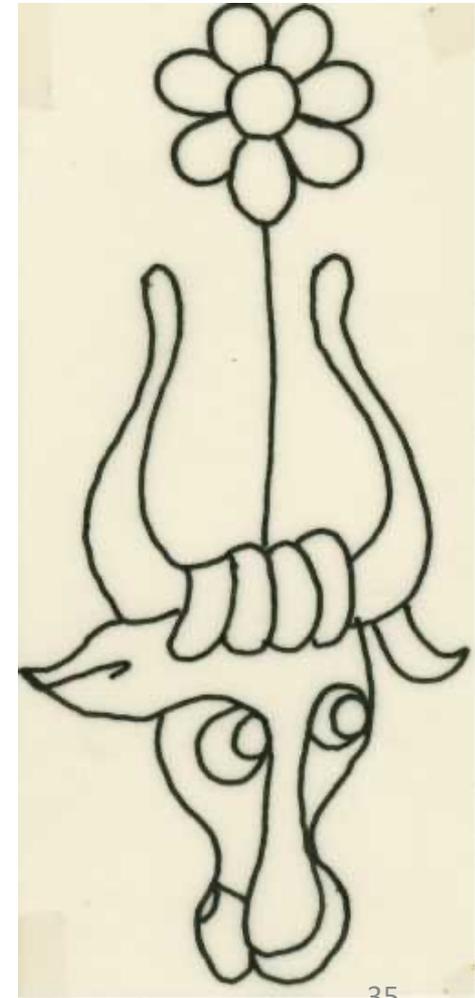
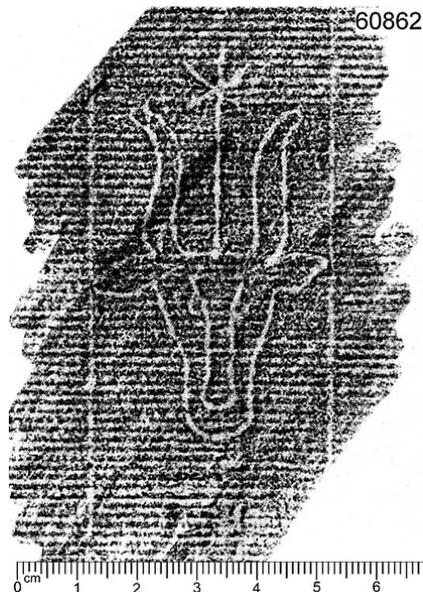
45.478 (40.142) Ochsenköpfe im Bernstein-Portal

Wappenzeichen von Turin und Handelsmarke des Piemont:
Stier (Ochse)

Caselle (um 1400), Basel (1448), ...

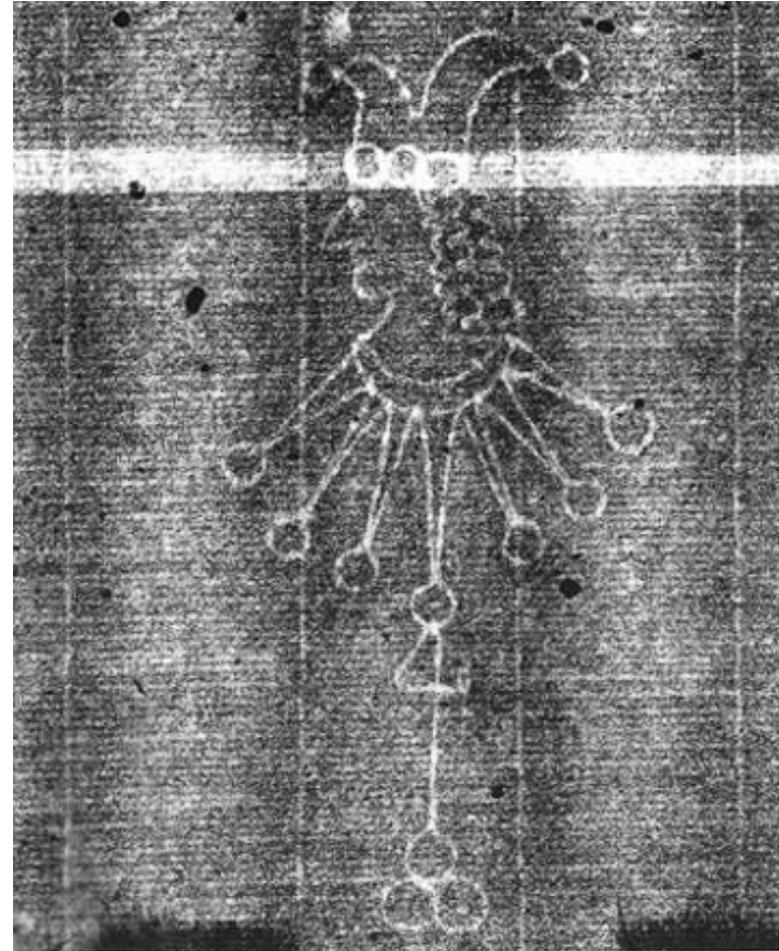
Verwendung: 1400 bis Mitte des 16. Jh.

Piemont. Elsass, Lothringen

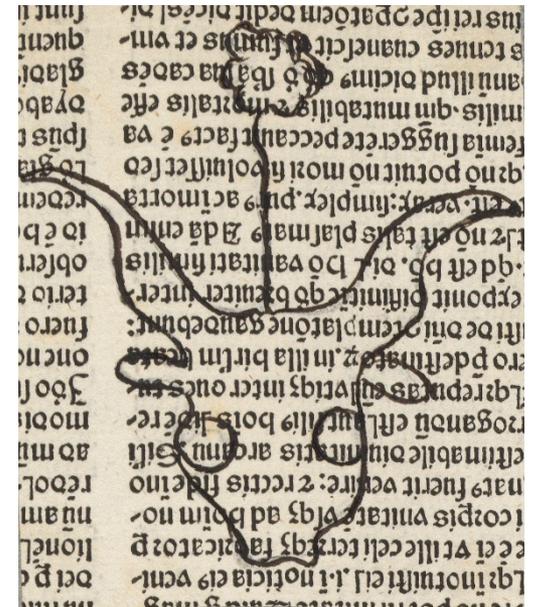


Aufnahmeverfahren

- Nachzeichnung
- Abreibung
- Dylux-Papier (ultraviolet. Licht)
- Betaradiographie
- Elektronenradiographie
- Soft-X-ray Radiographie
- Digitalphotographie+
Nachbearbeitung
- Infrarotphotographie



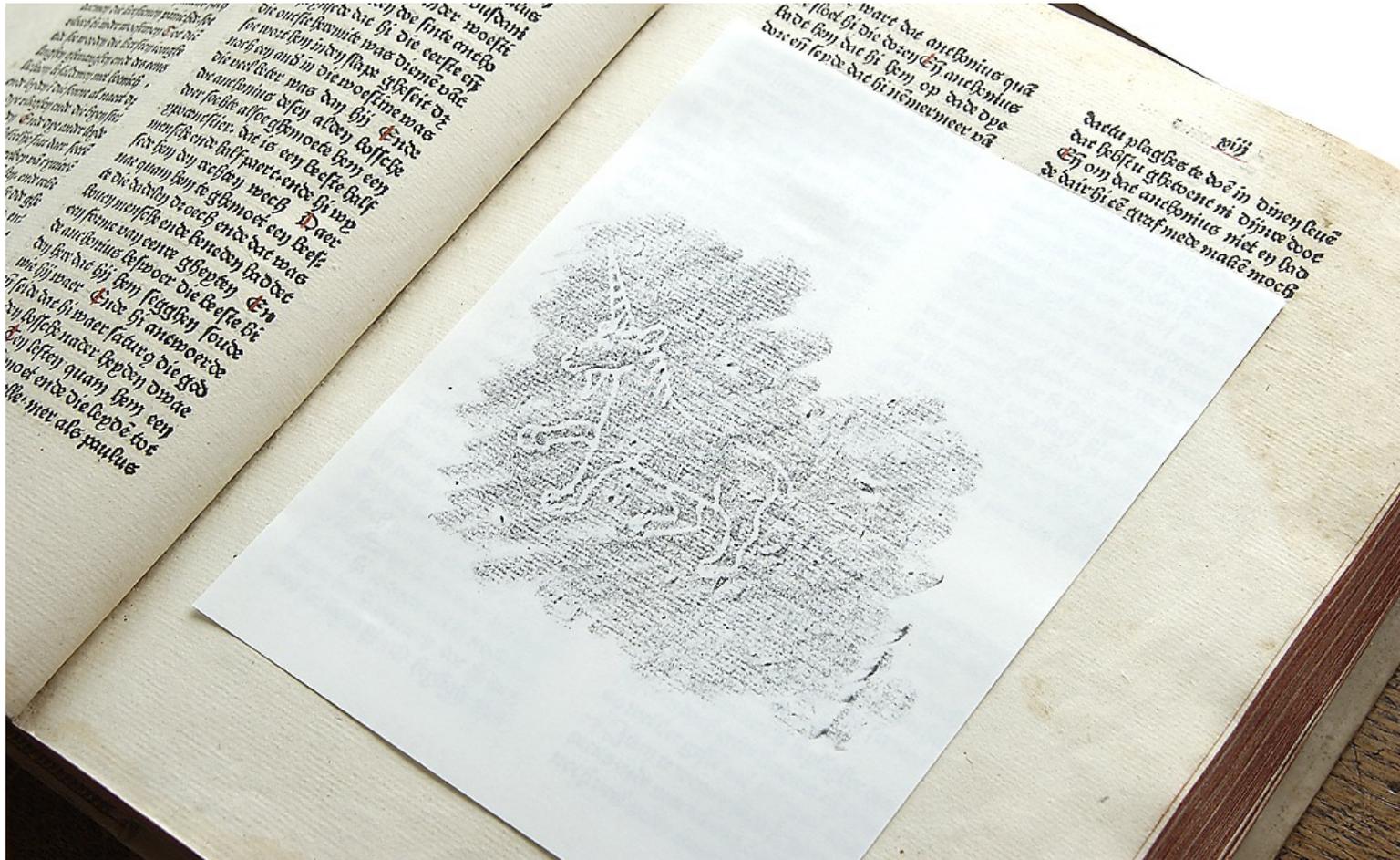
Nachzeichnungen



Abreibung

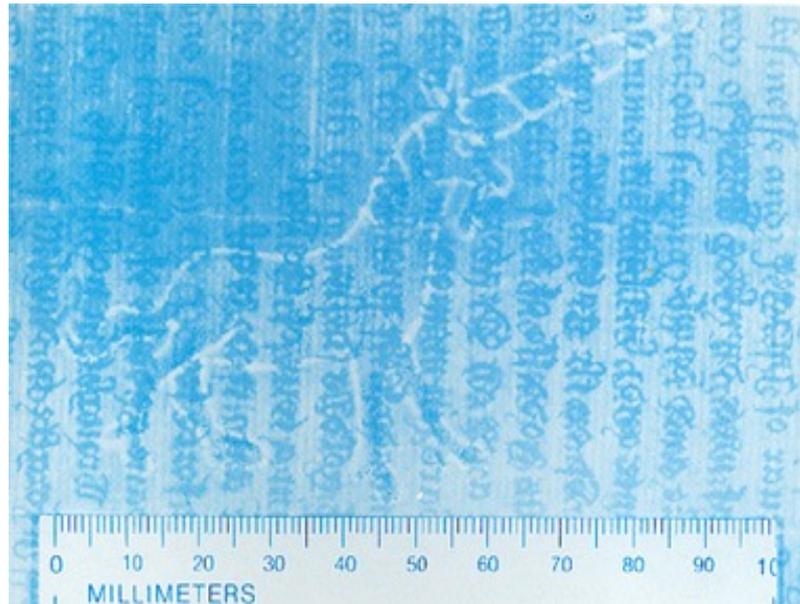


Abreibung



Dylux 503

- Lichtsensitives Papier
- blaues Tageslicht(410-500 nanometer Bereich)
- ultraviolettes Licht im200-400 nanometer Bereich
- fixiert bei Tageslicht
- Tom Gravell



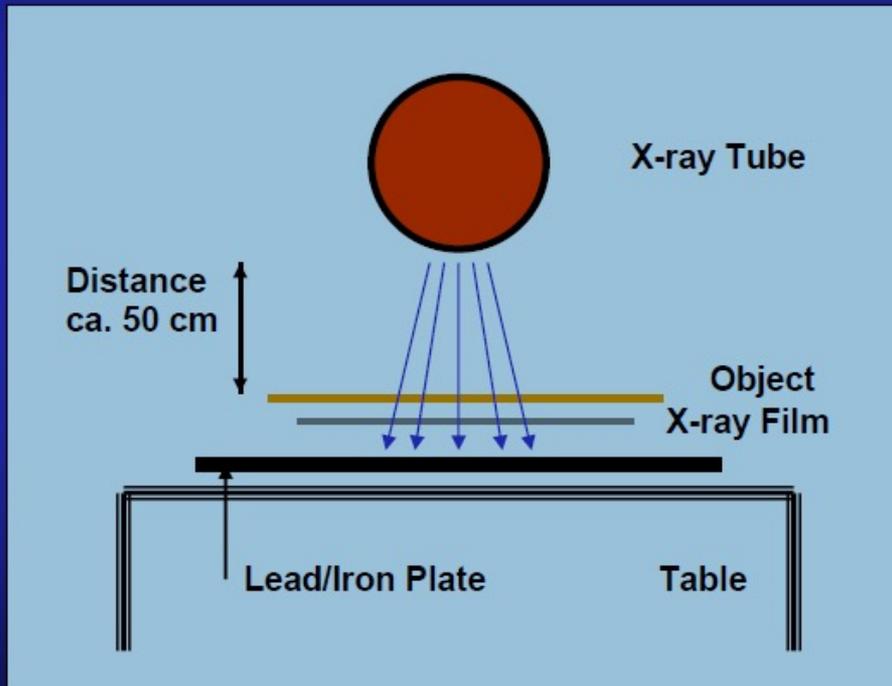
Beta radiography



Erastov, D.P. "The Beta-radiographic Technique of Reproducing Watermarks Found in Documents," Academy of Sciences of The U.S.S.R. Laboratory for the Techniques for Restoring and Preserving Documents and Books. *Collected Works for 1958*. In Russian.

5 minutes up to 8 hours dependent on the intensity of the beta radiation

X-ray Radiography with Soft X-Ray Radiation



X-ray Tube:
Baltospot 100 kV
Fa. Balteau NDT

Exposure:
ca. 8-12 kV
7-15 min

Film:
Agfa Structurix D4
or D2

Bildsubtraktionsmethode

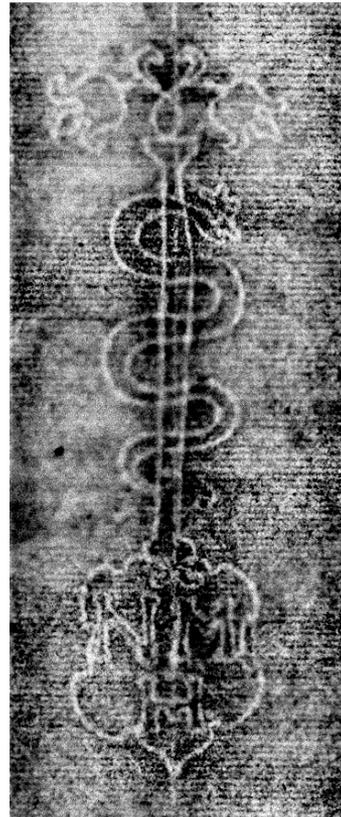


- Digitalkamera (calibrated) und Maßstab,
- Beleuchtung (z.B. Leuchtpult, slim light Folie),
- Software (z.B. Photoshop, Matlab)

Aufnahmeverfahren



Dylux



Betaradiographie



X-ray Radiographie

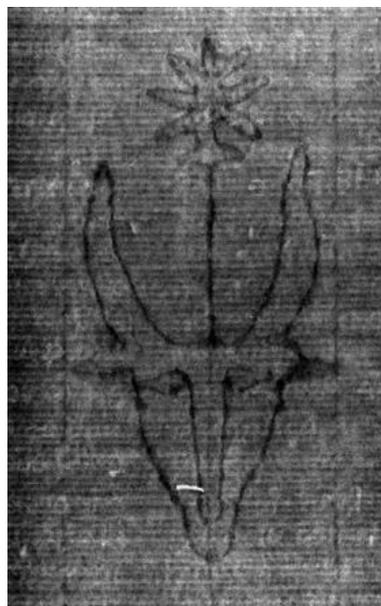
Bilder von Prof. Manfred Schreiner

Infrarot-photographie

An Innovative Apparatus for Efficiently Documenting Watermarks in Manuscripts developed at the UB Graz: ATWISE 5242

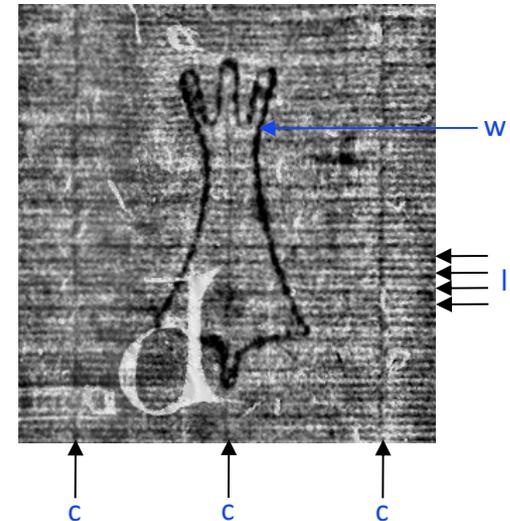
Austrian Watermark Imaging System, 52*42 cm

Eisengalltinte



Bernstein – the Memory of Paper

- Project eContentPlus: 2006-2009
- Creation of a portal for online databases (4) and information about paper and watermarks
- Provide a multilingual interface in six languages
- Presentation of the results in form of a list, a map or a statistic summary
- On-line bibliography on paper with more 31.000 entries



w ... watermark
c ... chain lines (Steg-, Kettdrähte)
l ... laid lines (Boden-, Rippdrähte)

Main result: Bernstein portal www.memoryofpaper.eu

Mai 2022

Australia, Austria, Belgium, Brazil, Cuba, Ecuador, Estonia, France, Germany, Great Britain, Italy, Luxembourg, The Netherlands, Portugal, Russia, Serbia, Spain, Switzerland, USA

50 Datenbanken mit 272,491 Wasserzeichen

- WILC
- WIES
- WIGB

- Piccard
- Briquet
- Likhachev
- Mošin (in work)
- Heitz
- Mazzoldi
- Wittek

10 Sprachen (Englisch, Französisch, Deutsch, Ungarisch, Italienisch, Portugiesisch, Russisch, Spanisch, Griechisch, Niederländisch)

31,000 Bibliographische Einträge (2009)



www.memoryofpaper.eu

ABOUT THE PROJECT

- English
- Deutsch
- Français
- Español
- Italiano
- Русский
- Magyar
- Português
- ελληνικά
- Nederlands

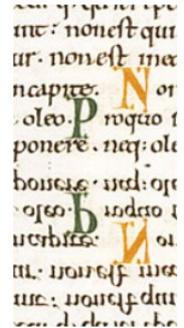
This website is about paper, paper study, and paper history. It provides various resources in the following areas: historical research of paper in Europe, expertise for paper documents, measurement of structural characteristics of paper, support for the creation of new paper databases, introduction into digital paper studies.

6thInternational conference on watermarks in digital collections, Bernstein meeting. Fabriano, Italy, 26-27 May 2022 ([Emanuel Wenger](#)).



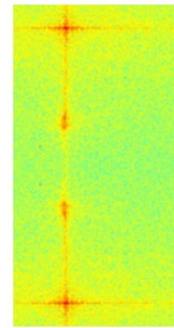
Catalogue

Search for watermarks and paper data



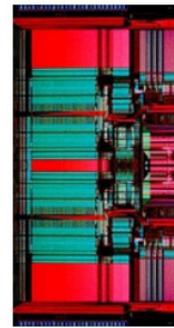
Bibliography

Bibliographic database about paper and the history of paper (provided by the German National Library, Leipzig)



Expertise

Software tools for undertaking paper expertises (image processing, measurements, dating)



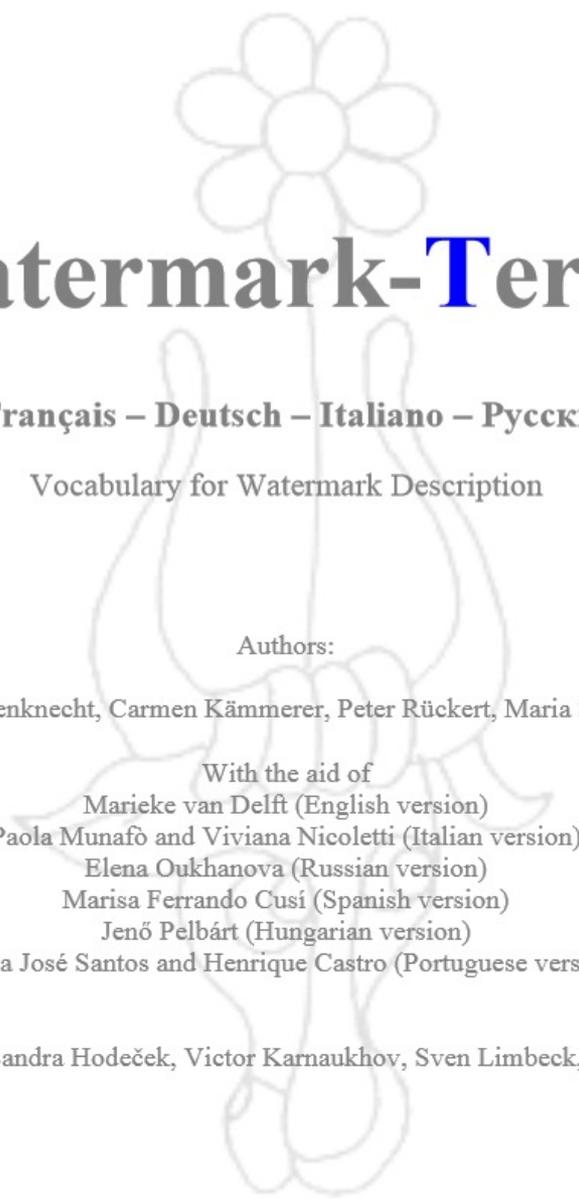
Paper Study Kit

Software tools for the creation and maintenance of watermark databases; link collection



Links

A collection of links



Watermark-Terms

Português – English – Français – Deutsch – Italiano – Русский – Español – Magyar

Vocabulary for Watermark Description

Authors:

Erwin Frauenknecht, Carmen Kämmerer, Peter Rückert, Maria Stieglecker

With the aid of

Marieke van Delft (English version)

Paola Munafò and Viviana Nicoletti (Italian version)

Elena Oukhanova (Russian version)

Marisa Ferrando Cusi (Spanish version)

Jenő Pelbárt (Hungarian version)

Maria José Santos and Henrique Castro (Portuguese version)

Special thanks go to Alois Haidinger, Sandra Hodeček, Victor Karnaukhov, Sven Limbeck, Emanuel Wenger, and Luis Weruaga.

Version 9.1p: May 2016

ICON	PORTUGUESE	ENGLISH	FRENCH	GERMAN	ITALIAN	RUSSIAN	SPANISH	HUNGARIAN
	alvenaria	stone-work	maçonnerie	Mauerwerk	muraglia	каменная кладка	mampostería	várfal
	ameiado (her.)	dove-tailed (her.)	enclavé (hér.)	zinnenförmig (Her.)	merlato (arald.)	зубчатый (геральд.)	enclavado (her)	orom alakú
	ameiado (her.)	embattled (her.)	crénelé (hér.)	gezinnt (Her.)	merlato (arald.)	зубчатый (геральд.)	almenado (her)	párkányos
	ameias	battlements (tower)	créneau (tour)	Zinne (Turm)	merlo (torre)	зубец (башня)	almenas (torre)	oromzat (torony)
	amêndoa	almond	amande	Mandel	mandorla	миндаль	almendra	mandula
	ancinho	rake	râteau	Rechen	rastrello	грабли	rastrillo	gereblye
	âncora	anchor	ancre	Anker	Ancora	якорь	ancla	horgony
	ancorada na base	anchory at the lower end (mark)	ancrée à la base (marque)	Ankerfuß (Marke)	ancorato alla base (segno)	якорь в нижней части (марка)	ancorada en la base (marca)	horgonykar (jel)
	andorinha	swallow	hirondelle	Schwalbe	rondine	ласточка	golondrina	fecske
	anel	finger ring	bague	Fingerring	anello da dito	кольцо	sortija	ujjgyűrű
	anel	ring	anneau	Ring	anello	кольцо	anillo	gyűrű

BERNSTEIN THE MEMORY OF PAPER

CATÁLOGO ATLAS BIBLIOGRAFIA RECURSOS FERRAMENTAS

Acerca do projecto Português

ACERCA DE Pesquisa simples Pesquisa avançada Procure motivos Ayuda

Pesquisou: 'sereia'

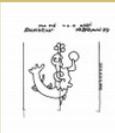
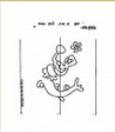
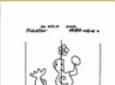
Palavras-chave traduzidas:
'sereia' [mermaid, Meerjungfrau, sirène, sirena, sirena, сирена, sellō]

Motivo sereia Todos ÍNDICE

Acrescentar pesquisa genérica Acrescentar pesquisa específica da BD PESQUISAR REINICIAR

1 - 20 Esconder miniaturas Exportar resultados Marcadores (0) Anterior Próximo

Marcador Seleccionar todos Seleccionar nenhum

	Miniatura	Base de dados	Número de referência	Motivo ↑	Local de utilização	Data	Altura
#1		HERIDATE	DE-KKDD-A130298	circle, mermaid (?), six pointed star (?)	Italy	1506	41
#2		HERIDATE	DE-KKDD-A86163	circle, mermaid, six pointed star	Italy	1560-1570	73
#3		WZIS	DE2040-PO-21196	Fabelwesen - Meerjungfrau - frei, mit Beizeichen - Blume	Bensbur	1484	48
#4		WZIS	DE2040-PO-21197	Fabelwesen - Meerjungfrau - frei, mit Beizeichen - Blume	???	1484	47
#5		WZIS	DE4500-PO-21195	Fabelwesen - Meerjungfrau - frei, mit Beizeichen - Blume	Kaster	1484	47

Bases de dados

Bases de dados	Resultados
<input checked="" type="checkbox"/> WZIS	108 37.5%
<input checked="" type="checkbox"/> WILC	29 10.1%
<input checked="" type="checkbox"/> WIES	0 0%
<input checked="" type="checkbox"/> WIGB	10 3.5%
<input checked="" type="checkbox"/> WZMA	57 19.8%
<input checked="" type="checkbox"/> BRIQUET	51 17.7%
<input checked="" type="checkbox"/> LIKHACHEV	0 0%
<input checked="" type="checkbox"/> MOSIN	0 0%
<input checked="" type="checkbox"/> HEITZ	0 0%
<input checked="" type="checkbox"/> MAZZOLDI	2 0.7%
<input checked="" type="checkbox"/> WITTEK	13 4.5%
<input checked="" type="checkbox"/> NIKI	11 3.8%
<input checked="" type="checkbox"/> FILIGRANA	0 0%
<input checked="" type="checkbox"/> IVC+R	0 0%
<input checked="" type="checkbox"/> PFES	3 1%
<input checked="" type="checkbox"/> FIL-DPZ	0 0%
<input checked="" type="checkbox"/> FIL-CUBA	0 0%
<input checked="" type="checkbox"/> SHM	0 0%
<input checked="" type="checkbox"/> GRAVELL	2 0.7%
<input checked="" type="checkbox"/> S_ZANDERS	0 0%
<input checked="" type="checkbox"/> SFH	0 0%
<input checked="" type="checkbox"/> RISM SALZBURG	0 0%
<input checked="" type="checkbox"/> RISM_D	0 0%
<input checked="" type="checkbox"/> MARCOSMIUS	0 0%
<input checked="" type="checkbox"/> HERIDATE	2 0.7%
<input checked="" type="checkbox"/> EEP	0 0%
<input checked="" type="checkbox"/> WZLUI	0 0%
<input checked="" type="checkbox"/> CTMV	0 0%
<input type="checkbox"/> PO	
<input checked="" type="checkbox"/> Seleccionar todos	
TOTAL	288 100%

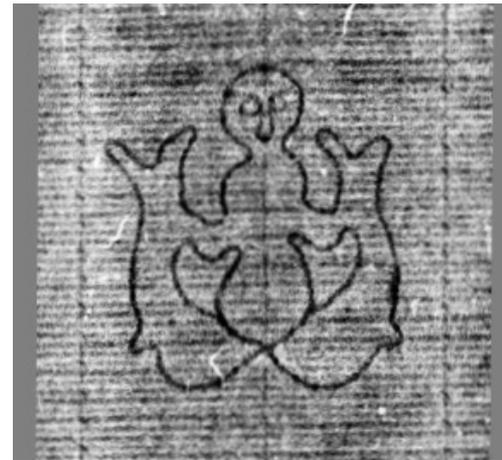
Utilizar vocabulário

Data fields

IPH-standard for the registration of papers with OR without watermarks 2.1 (2012)
standard for the data fields (aprox. 65) and the classification of the motifs (six languages)

The following data fields are searchable in Bernstein (new data fields can be added easily)

reference number	laidline density
watermark motif	IPH class
watermark height	Briquet number
watermark width	shelf mark
chainline distance	creator (autor, composer, artist, ...)
place of use	paper mill
depository	paper maker
date	counter mark



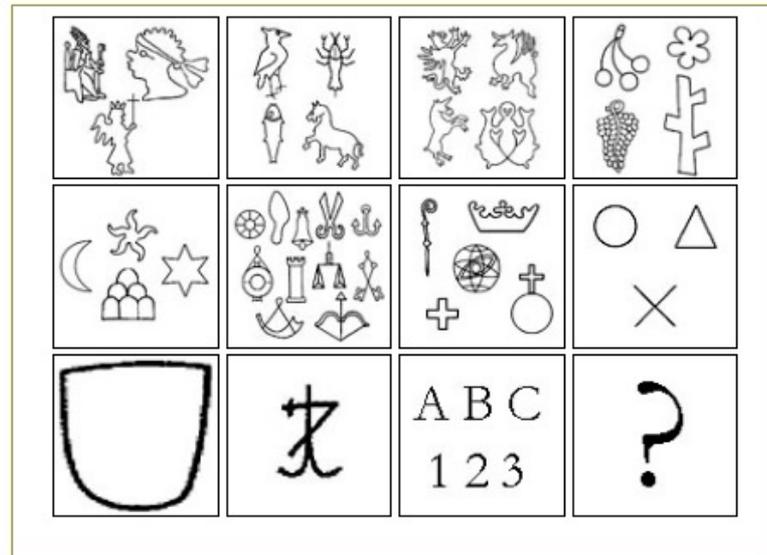
Watermark classification

Watermarks are classified according to their motif in an hierarchical organized type system. Unfortunately, this classification is not standardized and different in many databases: classification with three levels in ten languages

“Browse Motif” in catalogue allows the search for watermark types through icons.

переведены ключевые слова:

- + фигура, антропоморфная
- + Фауна
- + фантастическое животное
- + Флора
- + горы/небесные тела
- + предметы
- + символы/атрибуты власти
- + геометрические фигуры
- + герб
- + марка
- + буквы/цифры
- неопределенный знак



CATÁLOGO

ATLAS

BIBLIOGRAFÍA

EXPERTISE

KIT

SOBRE EL PROYECTO

Español

ACERCA DE BÚSQUEDA SIMPLE

BÚSQUEDA AVANZADA

NAVEGAR POR MOTIVO

Ayuda

Ha buscado por: 'concha'

Palabras clave traducidas:

'concha' [conch,Muschel,coquille,conchiglia,раковина,kagyló,concha]

Motivo concha

Todo

ÍNDICE

Añadir Búsqueda General

Añadir Búsqueda Específica

BUSCAR

REINICIAR

1 - 20

Ocultar miniaturas

Exportar resultados

Marcadores (0)

Anterior

Siguiente

Añadir a favoritos

(De)Seleccionar todo

Deseleccionar todo

	Miniatura	Base de datos	Ref. número	Motivo ↑	Lugar de uso	Fecha	Altura
#1		SFH	DE-SFH-3052	C P C ; Muschel	Reims	1896	---
#2		Marcosmus	52	concha:PORRATA	---	???	---
#3		Marcosmus	188	concha:SP	---	???	---
#4		IVC+R	1476.1	Fauna - concha - sin motivo accesorio	Valencia	1404	45

TOTAL 84 100%

#3	<input type="checkbox"/> Añadir a favoritos Anterior Siguiente Cerrar detalles					
	Cuadro	Información				
#4	Ref. número	001408				
	Motivo	Águila coronada con las alas extendidas y banda sobre un círculo con las letras CC D en su interior y B en la parte externa inferior.	Barcelona	1493	[45]	
#5	Distancia entre corondeles	---				
	Anchura	58				
	Altura	107	Barcelona, Cata...	1493	[38]	
	Fecha	1697				
	Lugar de uso	Agüera, Asturias.				
#6	Topónimo normalizado	Agüera, Asturias.				
	Depositario	Archivo Municipal de Oviedo.				
	Base de datos	PFES	Barcelona	[1495]	48	
	Emlace	Ir a PFES - Papel y Filigranas en España, España				
	Información detallada Fecha	---				
#7	Creador	Ayuntamiento de Oviedo.	Barcelona	[1495]	43	
	Signatura	Bienes de la Obra Pía de Escuelas y Estudios. B-80-5.				
	Doble marca	---				
	Nº Briquet.	---				
#8	Establecido línea	22.0				
	Fábrica de papel	---	Barcelona, Cata...	[1421]-[1429]	62	
	Mainclass IPH	D.01.05.00				
	Paper Maker	---				
	Contra filigrana	---				
#9	<input type="checkbox"/> 	PFES 001078	Anfóra, en su base Fco. GAVARA/CPA.	Oviedo, Asturias.	1816	94

Marcas de água e tipos de papel

Marcos Portugal, 52



id

Nome

Dimensões

Rastra

concha:PORRATA

218 x 300 ou menor

10 / 172,5 / 7,5



Obra

Te Deum Ré M, V5

Obra

Autor

Arquivo e cota

Fonte e localização

Caracter. Fonte

Catálogo

Marcos Portugal

P-Ln, FCR 168/103 (3)

p.c. v1 I

Apógrafos-p.c.

04.08

Filigranas del Archivo de Protocolos Notariales del Real Colegio Seminario de Corpus Christi de Valencia (APCCV)

Ref. número: XV05

Signatura: XV05

Fecha: 1406

Depósito: Archivo de Protocolos Notariales del Real Colegio Seminario de Corpus Christi de Valencia (APCCV)

Autor: Manso, Bernat de / 683

Tipología: Notal

Lugar: Valencia

Encuadernación: Pergamino

Lugar: Valencia

Medidas: 29X22'3cm

Denominación: criatura fabulosa - dragón - aislado - sin motivo accesorio

Medidas filigrana: 6'6X5'1cm

Corondeles: 7

Ancho de los corondeles: 3-3'9cm

N folio: 34

Sentido: Revés



La investigación fue realizada por Marta Soliva Sánchez y Desamparados Cervera y Cristina Valero Amat bajo la supervisión de Marisa Ferrando Cusi ([Instituto Valenciano de Conservación y Restauración](#)). Los datos se insertaron en la base de datos por Emanuel Wenger. La presentación de la página se llevó a cabo por Emanuel Wenger ([Viena, ÖAW](#)). Para obtener más información sobre el proyecto, haga clic [aquí](#).



M^a Dolores Díaz de Miranda Macías
Ana María Herrero Montero

PFES

Papel y Filigranas en España

Nº Filigrana: 002146

◀ 1/2 ▶



FILIGRANA HOJA DOCUMENTO

Tipo de filigrana: Sencilla

Parte estudiada: Toda la filigrana

Código del Motivo: D.01.02.00

Descripción: Ave sobre una rama dentro de un doble círculo; en la base las letras SOTERAS.

Estructura: Tradicional de líneas

Altura: 51 **Anchura:** 56

Tipo de papel: Verjurado

Posición en la hoja: Medio centro

Distancia entre corondeles:

Situada entre el corondel: 9 **y el corondel:** 12

Posición en relación al texto:

Origen de los datos: Datos obtenidos del original

Información adicional:

Lugares donde se ha utilizado este papel: - 1788. Hidalgo (1986), filigrana 000430. - 1794, Olot. Valls (1970), filigrana 000975. - 1795, Oviedo. Papel sellado. Archivo Municipal de Oviedo. Acuerdos A- 108, 1^a. Filigrana 000064.

- WILC
- WIES
- WIGB
- WZMA
- BRIQ
- LIKHACHEV
- NIKI
- FILIGRANA
- IVC+R
- PFES
- GRAVELL
- SZ
- SFH
- EEP
- AES
- RISM_D
- HERIDATE
- WZLUI
- SHM 6 100%
- PO
- Выбрать все

ИТОГО 6 100%

Использовать словарь

Сортировать результаты по

Затем сортировать по

Сортировку

Ограничение записей

Записей на страницу

Найти

Список Статистика Карта

Сюжет Все

1 - 6

	Изображение	База данных	Номер в БД	Сюжет ↑	Место использования	Дата	Высота
#1		SHM	RU2000-Ер053_079	фантастическое животное - единорог - самостоятельный, целая фигура - ohne Beizeichen	???	1451-1475	90
#2		SHM	RU2000-Ер279_060	фантастическое животное - единорог - самостоятельный, целая фигура - ohne Beizeichen	???	1451-1475	74
#3		SHM	RU2000-Ер279_061	фантастическое животное - единорог - самостоятельный, целая фигура - ohne Beizeichen	???	1451-1475	84
#4		SHM	RU2000-Ер053_233	фантастическое животное - единорог - самостоятельный, целая фигура - ohne Beizeichen	???	1451-1475	76
#5		SHM	RU2000-Ер387_030	фантастическое животное - единорог - самостоятельный, целая фигура - ohne Beizeichen	Moscou	1501-1525	90

Russian watermarks and Bernstein project



S t a t e H i s t o r i c a l M u s e u m

Watermark Information

Сюжет: фантастическое животное / единорог / самостоятельный, целая фигура / ohne Beizeichen

Дата: 1501 -1525

Номер в БД: RU2000-Ер387_1

Высота: 88 **Ширина:** 49

Расстояние между понгюзо: 27

Создатель: Житие Сергия Радонежского

Место хранения: Государственный Исторический музей





водени знак

14



Број в. знака

Назив воденог знака

Бадем

Назив (Руски)

миндаль

Назив (Французи)

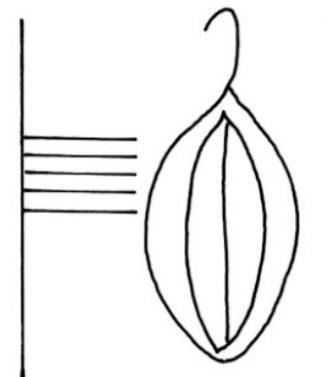
amande

депозитар

Манастир Хиландар

Време настанка

1360/70



14 (1360/70)

Рукописна књига

256

Сигнатура рукописа

наслов

ТРИОД ПОСНИ

страница

295; 280 x 200 мм

опис

Слово G са крстом, идентично Хил. 257 из 1360/70, Загреб, ЈАЗУ III b 15 (M-T 5262) из 1360/70, M-T 5264 из 1360/80. и Лихачов 2302 из 1350/70. године. (Сл. 766–768). Два круга на мотки, врло слично M-T 1981 (Загреб, ЈАЗУ, III b 15) из 1360/75. године. (Сл. 373–374). Два круга са пречком, врло слично Хил. 143, Хил. 154 и Хил. 652, сви из 1360/70. године. Остале паралеле види у Хил. 143. (Сл. 434–435). Кључ са крстом, врло слично Хил. 144 из 1355/65, Хил. 265 и Хил. 473, II део из 1360/70. и Хил. 470 из 1355. године. Остале паралеле види у Хил. 144. (Сл. 295–296). Крушка са два листа, идентично Хил. 127, Хил. 128, Хил. 143, Хил. 177 и Хил. 257, сви из 1360/70. и Хил. 144 из 1355/65. године. Остале паралеле види у Хил. 127. (Сл. 539–540). Секира, идентично M-T 5262 (Загреб, ЈАЗУ III b 15) из 1360/75, врло слично M-T 5264 из 1360/70, Лихачов 2302 из 1350/70, ЦСВП, D.гг. 143 из 1368. и Зонги 149 из 1372, слично ЦСВП, D.гг. 233 из 1371, а сличан тип D.гг. 131 из 1360/70. године. (Сл. 731–732). Лук са стрелом, идентично: Хил. 143, Хил. 177, Хил. 647 и Хил. 758/VII из 1360/70. године. Остале паралеле види у Хил. 143. (Сл. 802–804). 51 Бадем, идентично Дечани 35, Дечани 88 и Дечани 103 (П-С 56–58, M-T 132), сви из 1360/70, M-T 127 из 1360/68, M-T 128 (Дубровник, DC XIX, Лихачов 2057–2059) из 1364 (1360/70). и M-T (Дубровник, DC XX) из 1364. године. (Сл. 14–16). На касније додатом листу анђеу у кругу са крстом и контрамарком SS из XVI века. (Сл. 930).



wzma.at

Wasserzeichen des Mittelalters

- de
- de
- en
- fr
- it
- es
- ru
- pt

- ▶ Suche
- ▶ Sammlungen
- ▶ Online WZ-Datenbanken
- ▶ Gedruckte WZ-Repertorien
- ▶ Materialien
- ▶ Karte
- ▶ Projekt
- ▶ Projektteam

- Intitut für
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Abteilung Schrift- und
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- ▶ Home
 - ▶ Kontakt und Feedback

Visuelle Navigation **Erweiterte Suche**

Anzahl der Wasserzeichen in der Datenbank WZMA: 16613

Motive

Figuren, anthropomorphe



Fabelwesen



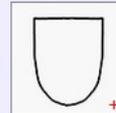
Berge/Himmelskörper



Symbole/Herrschaftszeichen



Wappen



Buchstaben/Ziffern



Fauna



Flora



Realien



Geometrische Figuren



Marken



unbestimmte Zeichen



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THEOLOGISCHE SAMMELHANDSCHRIFT, ÜBERWIEGEND THOMAS DE AQUINO

Papier 292 Bl. 290x210. Köln, 2. H. 15. Jh.

Provenienz/Letztsbesitzer: Jesuiten Hall

- ▶ [Abbildungen von 1r; 61r; 85r; 157r](#)
- ▶ OLIVER - Online manuscript description (HMML).
- ▶ [hebraica.at](#) – Hebräisches Fragment in dieser Handschrift: [HDS](#)
- ▶ Wasserzeichen: [Metadaten](#) | [Vorschau Bilder](#) | Einzelbilder: fol. [1](#), [5](#), [11](#), [27](#), [31](#), [74](#), [109](#), [293](#).

→ AT4000-435_1 (A)		
=	AT8500-Ink2E35_5	um 1463
Var. 1	HSTAS-115962	1464
Typ	PiccP-10-301-427	1459-1487
→ AT4000-435_5 (B)		
=	HSTAS-115946	1463
Typ	PiccP-10-301-427	1459-1487
→ AT4000-435_11 (C)		
Var. 1	HSTAS-115928	1463
Typ	PiccP-10-301-427	1459-1487
→ AT4000-435_74 (D)		
=	HSTAS-115982	1463
Var. 1	AT4000-435_109	7. Jahrzehnt 15. Jahrhundert
Typ	PiccP-10-301-427	1459-1487
→ AT4000-435_109 (D1)		
Var. 1	AT4000-435_74	7. Jahrzehnt 15. Jahrhundert
Var. 1	HSTAS-115982	1463
→ AT4000-435_27 (E)		
Var. 1	HSTAS-107697	1465
Var. 2	HSTAS-107704	1464
Var. 3	HSTAS-107705	1465
Var. 4	HSTAS-107706	1464
Var. 5	HSTAS-107710	1465
Var. 6	HSTAS-107775	1466
→ AT4000-435_31 (F)		
Var. 1	HSTAS-107627	1464
→ AT4000-435_293 (G)		
Typ	PiccP-16-301-329	1462-1468

[close]

Literatur zur Handschrift: [Kat. Innsbruck 5](#), 280-285, Abb. 27 (Stempel).

Weitere Literatur zur Handschrift (Anzahl: 4)



- ▶ Suche
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- ▶ Karte
- ▶ WZMA
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Signatur:

Innsbruck, Universitäts- und Landesbibliothek Tirol (ULBT), Cod. 506

JIČHAQ BEN QALONYMUS NATAN (ME'İR NATĪB. EXPOSITIO HEBRAICAE CONCORDANTIAE), HEBR. UND DT. (deutsch/hebräisch)

Olim: II 2 E 6 S. 2 Papier 98 Bl. 210x150. Entstehungsort unbestimmt, Anfang 16. Jh. zwischen 1522 und 1527

Provenienz/Letztsbesitzer: Jesuiten Innsbruck

- ▶ [Abbildungen von Vorderdeckelspiegel](#); 1r; 1v
- ▶ OLIVER - Online manuscript description (HMML).
- ▶ hebraica.at - Hebräisches Fragment in dieser Handschrift: [LINK](#)
- ▶ Wasserzeichen: [Metadaten](#) | [Vorschau Bilder](#) | Einzelbilder: fol. [2](#), [34](#), [96](#).

→ AT4000-506_34 (A)			[close]
Typ	PiccP-17-12-42	1526-1534	
→ AT4000-506_2 (B)			
Var. 1	HSTAS-114857	1528	
Typ	PiccP-17-12-42	1526-1534	
→ AT4000-506_96 (C)			
=	HSTAS-56182	1526	
Var. 1	HSTAS-56195	1527	
Var. 2	HSTAS-56202	1528	

Literatur zur Handschrift: [Kat. Innsbruck 6](#), 34-35, Abb. 2 (Einband).

Weitere Literatur zur Handschrift (Anzahl: 1)

Bilder und Nachweise der Wasserzeichen s. WZMA. Wasserzeichenbefund: um 1525–1530. Lagen: (IV-1)⁷⁽⁸⁾ + 11.IV⁹⁴⁽⁹⁵⁾ + (II-1)⁹⁷⁽⁹⁸⁾. Das erste Blatt der ersten und das letzte Blatt der letzten Lage als Spiegel am VD bzw. HD aufgeklebt. Das zweite Blatt der ersten Lage (Bl. I) ungezählt, Beginn der Blattzählung mit dem dritten Blatt (= Bl. 1). Am Beginn jeder Lage Folierung der gesamten Handschrift und Kustoden in schwarzen arabischen Ziffern nach abendländischer Art, Bl. 94–6 am Lagenende Kustoden in Majuskeln A bis M in umgekehrter, auf die orientalische Art bezogener Abfolge.

Schrift:

Schriftraum: 160 x 80 *Zeilenzahl*: 25-30

Im Schriftraum aschkenasische Quadratschrift (für die hebräischen Lemmata und die deutschen Übersetzungen), am Seitenrand lateinischer Text in Antiquakursive 16. Jh., jeweils von einer Hand. Schreiber: Antonius Margalit für seinen Lehrer Rabbi Jacob ben Hajiri. Zum Schreiber (Antonius Margalita, Margarita, geb. 1490, 1522 zum Katholizismus konvertiert) s. Encyclopedia Judaica XI (1971) 958–959.

Schreiber: Antonius Margalita ([12430575X](#))

Ausstattung: rubriziert

Bernstein portal: Atlas

<input checked="" type="checkbox"/> BRIQ	654	23.6%
<input checked="" type="checkbox"/> LIKHACHEV	74	2.7%
<input checked="" type="checkbox"/> NIKI	14	0.5%
<input checked="" type="checkbox"/> FILIGRANA	1	0%
<input checked="" type="checkbox"/> IVC+R	13	0.5%
<input checked="" type="checkbox"/> PFES	1	0%
<input checked="" type="checkbox"/> GRAVELL	82	3%
<input checked="" type="checkbox"/> SZ	6	0.2%
<input checked="" type="checkbox"/> SFH	3	0.1%
<input checked="" type="checkbox"/> EEP	0	0%
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<input checked="" type="checkbox"/> RISM_D	0	0%
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<input checked="" type="checkbox"/> WZLUI	0	0%
<input checked="" type="checkbox"/> SHM	6	0.2%
<input type="checkbox"/> PO		
<input checked="" type="checkbox"/> Выбрать все		
ИТОГО	2775	100%

Использовать словарь

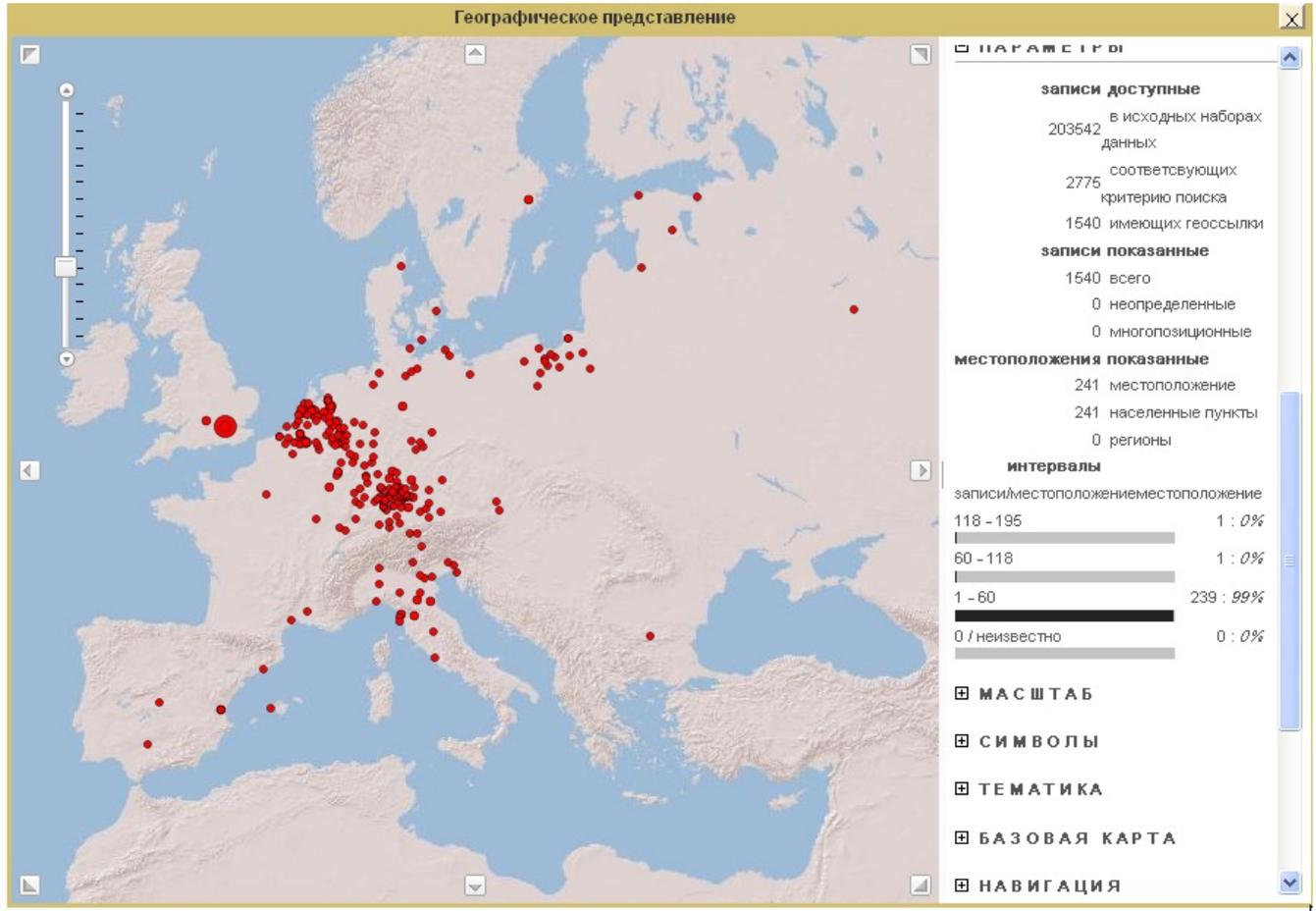
Сортировать результаты по

Затем сортировать по

Сортировку

Ограничение записей

Записей на страницу



Bernstein - La memoria de papel - Mozilla Firefox

[Datei](#) [Bearbeiten](#) [Ansicht](#) [Chronik](#) [Lesezeichen](#) [Extras](#) [Hilfe](#)

[http://www.memoryofpaper.eu:8080/BernsteinPortal/appl_start_disp](#)

Luego ordenarlos por:
 Limitación de aciertos:
 Resultados por página:
 Encontrar:

Lista Estadísticas Mapa

Strasbourg locality

France > Est > Alsace > Bas-Rhin : FR421, 48.58 lat, 7.75 lon

Placename variants: [CERL](#) | [Geonames](#)

20 records

[Bibliography](#) | [Encyclopedia](#)

MAP CONTENT

Places of paper use from a selection in the Memory of Paper databases

QUANTITIES

records

119930 total data:

194 sea

match

166 gec

? unc

? mu

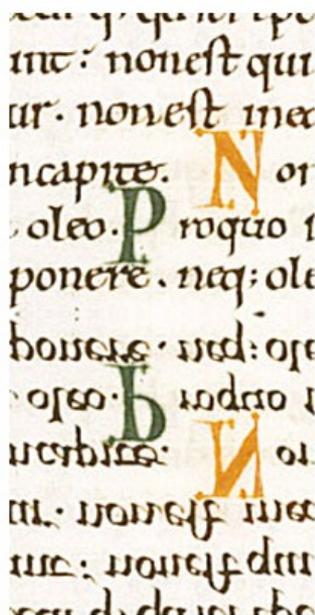
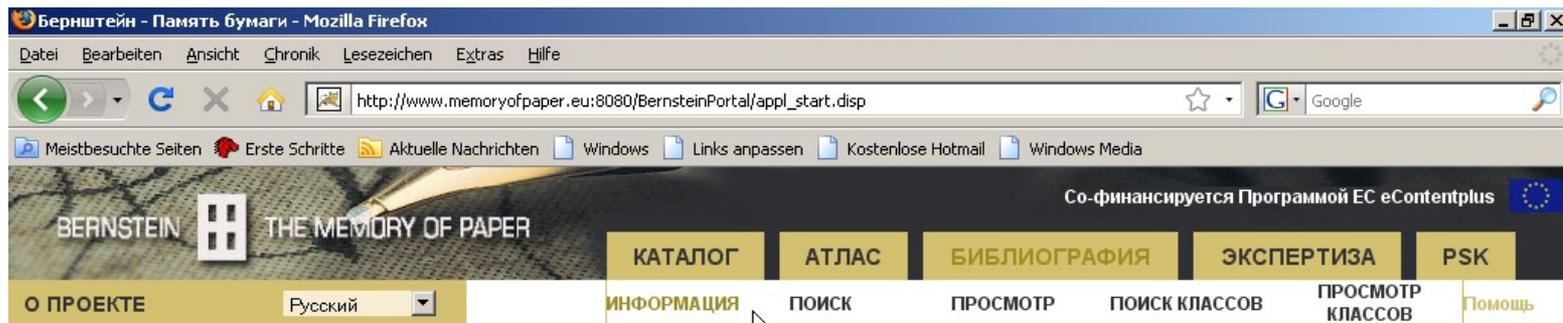
places

54 loca

54 loca

0 reg

javascript:expand("MapContentSection");

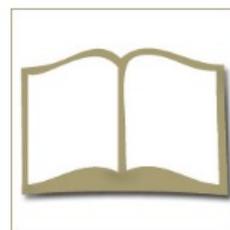


Библиография содержит более 31 000 библиографических записей об исторических, технологических, социальных, экономических и других аспектах бумаги, опубликованных вплоть до 2009 года. Объединенная с использованием картографических средств, библиография позволяет расширить глубину Вашего исследования за счет раскрытия библиографических ресурсов, связанных с Вашим поиском.



ПОИСК

Здесь вы можете осуществлять библиографический поиск простым способом: просто введите ключевое слово!



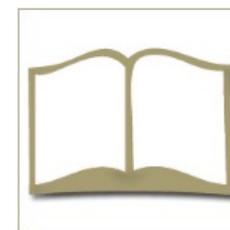
ПРОСМОТР

Просто пролистайте библиографический каталог!



ПОИСК КЛАССОВ

Здесь вы можете осуществить поиск отдельных элементов классификации!



ПРОСМОТР КЛАССОВ

Здесь вы можете осуществить просмотр библиографической классификации!

Why connect with Bernstein?

Bernstein is a portal and NOT a database . It is a service for data providers (collections of watermarks) and the searchers (users).

- Simultaneous search in 29 databases with more than 225.000 entries (both numbers are increasing)
- Search across fields (art history, musicology, codicology,)
- High visibility (Bernstein is well established in the watermark community)
- Multilingual search (with automatic translation)
- Maps and statistic summaries
- Part of a community with meetings and information exchange
- No costs and changes required (only necessary data field is the motif of the wm)

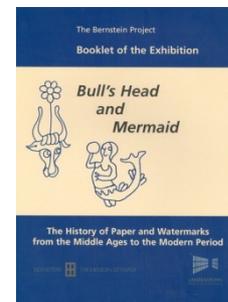
How to connect?

- MySQL on-line database (WZIS, WZMA, WILC, EEP, NIKI, SFH, ...)
 - Read access for the Bernstein with a fix IP is necessary.
 - Connection is implemented by a gateway.
 - Declaration of the correspondence between the data fields in Bernstein and the database.
- Excel or Spreadsheet files with the data of the watermarks and additional image files (WIES,WIGB, FILIGRANA, IVC+R, BRIQ, ...)
 - Import of the spreadsheet files into a MySQL database running on the Bernstein server.
 - Customization of the pages for the detailed view of a watermark (php program).

<https://filigranes.inria.fr>

Catalogues/Books

1. First German catalogue: Ochsenkopf und Meerjungfrau: Wasserzeichen des Mittelalters (2006, 72p)
2. Italian catalogue: Testa di bue e sirena: La memoria della carta e delle filigrane dal medioevo al seicento (2007, 96p)
3. Second German catalogue: Ochsenkopf und Meerjungfrau: Papiergeschichte und Wasserzeichen vom Mittelalter bis zur Neuzeit (2009, 128p)
4. English catalogue: Bull's Head and Mermaid: The History of Paper and Watermarks from the Middle Ages to the Modern Period (2009, 128p)
5. Catálogo español: Cabeza de Buey y Sirena: La Historia del Papel y las Filigranas desde el Medievo hasta la Modernidad (2011, 165 p)



Thank you

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