

To be or not to be a watermark in a database

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Introduction

At the watermark conference in Vienna two years ago I presented the work so far on a Danish watermark database which was being established at the Centre for Art Technological Studies and Conservation (CATS). CATS is a research partnership between the Danish National Gallery and National Museum and the School of Conservation at the Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation.

At that time the National Gallery hosted the database, but due to administrative changes at the museum, it became clear that a connection to the Bernstein portal was impossible. Fortunately, I manage to persuade the IT department at my own institution to take over the hosting job and that really made a difference. By a lot of help and patience from Emanuel Wenger we finally manage to go online on the Bernstein portal in Spring this year (2019).



Watermarks in Danish Collections – CATS database

BERNSTEIN THE MEMORY OF PAPER

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OAW ISDS

CATALOGUE BIBLIOGRAPHY EXPERTISE KIT LINKS

ABOUT THE PROJECT English

Select/deselect all

Select by time line

Years: 1280 2019

Databases	Hits
<input checked="" type="checkbox"/> WZIS	138431 54.4%
<input checked="" type="checkbox"/> WILC	16064 6.3%
<input checked="" type="checkbox"/> WIES	5867 2.3%
<input checked="" type="checkbox"/> WIGB	1255 0.5%
<input checked="" type="checkbox"/> WZMA	18980 7.5%
<input checked="" type="checkbox"/> NIKI	2679 1.1%
<input checked="" type="checkbox"/> BITECA	769 0.3%
<input checked="" type="checkbox"/> BRIQUET	16110 6.3%
<input checked="" type="checkbox"/> BR-RELOADED	3 0%
<input checked="" type="checkbox"/> CATS	158 0.1%
<input checked="" type="checkbox"/> CCI	5362 2.1%
<input checked="" type="checkbox"/> CTMV	158 0.1%
<input checked="" type="checkbox"/> DGCPAAC-GENCAT	50 0%

You searched for:

Translated Keywords:

Search for term in selected databases and show number of hits

Search for: SEARCH RESET

Please enter your search terms in the field above.
Different terms (e.g. motifs and date) can be combined by separating them with a space.

At present our database consists of 158 watermarks from the Danish National Gallery



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A search for the beehive motif in the CATS database gives us 58 hits. It means that the beehive forms part of the motif in more than a third of the CATS watermarks from both Danish and foreign (mainly Dutch) paper.

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ABOUT SIMPLE SEARCH ADVANCED SEARCH BROWSE MOTIFS Help

You searched for: 'beehive'

Translated Keywords:

Search for term in selected databases and show number of hits

Search for: beehive SEARCH RESET

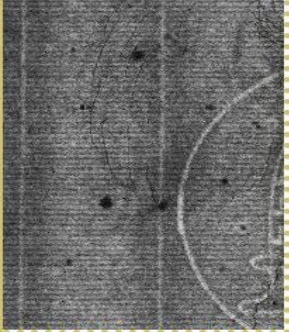
1 - 50 Hide thumbnails Export results Bookmarks (0) Previous Next

Bookmark Select/deselect all Deselect all

	Thumbnail	Database	Ref. number	Motif t	Place of use	Date	Height
#1		CATS	12	artefacts / beehive / in circle / bell	---	---	---
#2		CATS	13	artefacts / beehive / in circle / bell	---	---	---
#3		CATS	14	artefacts / beehive / in circle / bell	---	---	99

58 100%



Picture		Information
	Ref. number	14
	Motif	artefacts / beehive / in circle / bell
	Distance between chain lines	26
	Width	70
	Height	99
	Date	---
	Place of use	---
	Normalised place name	---
	Depository	Copenhagen, Statens Museum for Kunst (National Gallery of Denmark)
	Database	CATS
	Link	Go to Centre for Art Technological Studies and Conservation, Copenhagen, Denmark
	Detailed date info	---
	Creator	Nicolai Abildgaard
	Shelf mark	DK1000-KKS-gb3757
	Twin mark	---
	Briquet Nr.	---
	Laid line density	---
	Paper mill	Oerholm
	Mainclass IPH	---
	Paper maker	---

Presentation of the watermark metadata. Be aware that this illustration is a screen dump, which does not show the entire watermark.

The text marked in red is a link to the CATS database presentation page with more metadata.





Watermarks in Danish Collections



Watermark ID: 14

Ref. number: DK1000-KKS-gb3757

Depository: Copenhagen, Statens Museum for Kunst (National Gallery of Denmark)

Collection: Kobberstiksamlingen (The Royal Collection of Graphic Art)

Type: drawing

Author: Nicolai Abildgaard

Date:

Link: <http://collection.smk.dk/#/detail/KKSgb3757>

WM motif: artefacts / beehive / in circle / bell

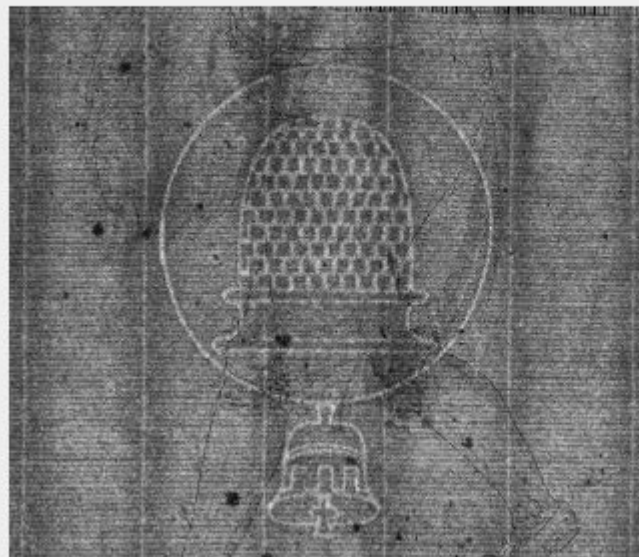
Paper mill: Oerholm

Country: DK

Chain line distance: 26

WM height: 99

WM width: 70



More information on the drawings from the Danish National Gallery can be found by following the link (marked in red) to the Danish National Gallery's own collection database. This database is also accessible from the museum website.



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Nicolei Abildgaard (Dansk, 11-09-1743 - 04-06-1809)

Karikatur, muligvis af professor Münster, gående mod venstre, med hænderne i en muffe

DATERING

1743-1809

TEKNIK

Blyant, pen, pensel og gråt blæk

DIMENSIONER

229 x 149 mm

INVENTAR NR.

KKSgb3757

Kan ses efter aftale

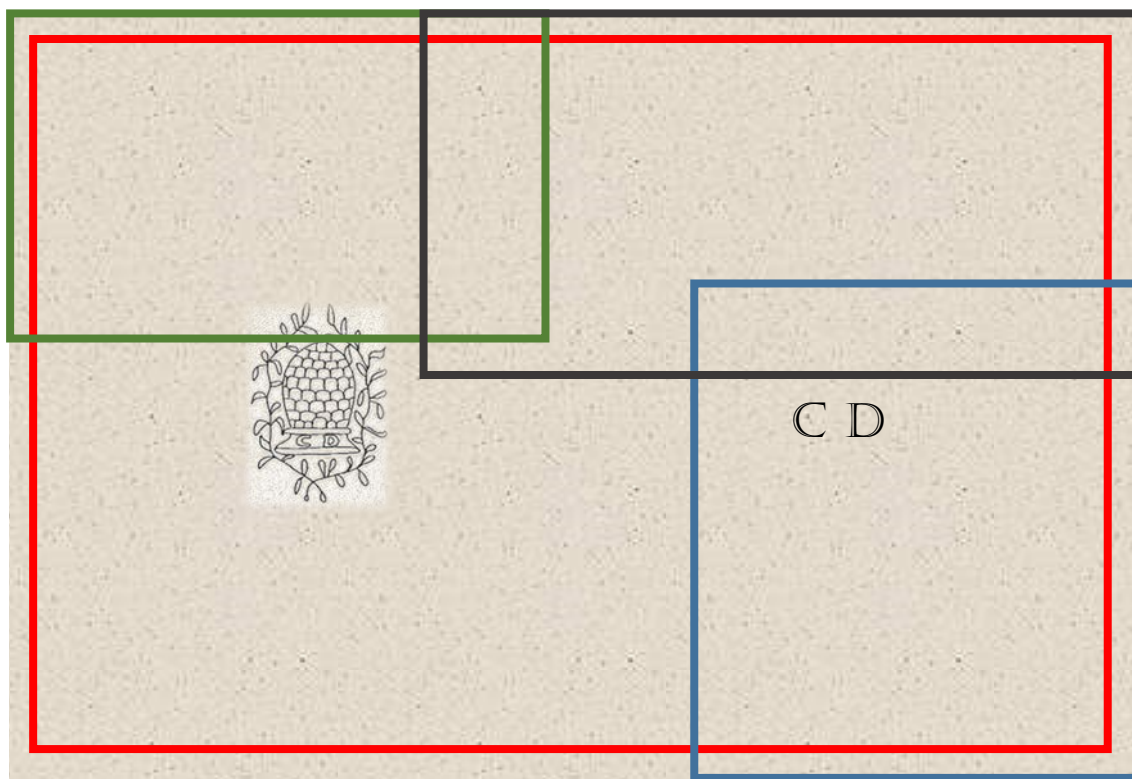


Se fuld størrelse

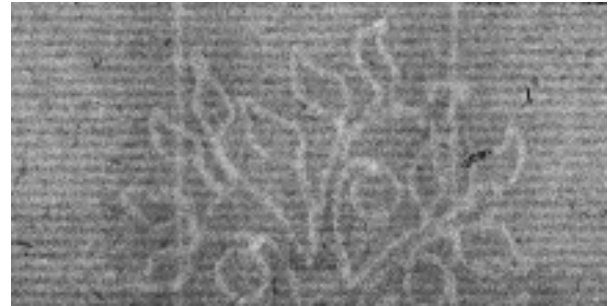
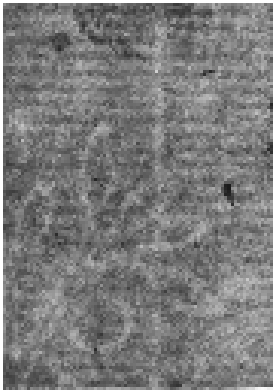
The drawing with watermark #14 is undated. The dates given in the Dating field is just the artist's year of birth and year of death. Since we know for certain that this paper came from the Danish paper mill at Ørholm, we can limit the year of production to a period of less than 15 years, because Ørholm paper mill did not produce paper before July 1794 and the artist died in 1809.

In the following section some issues are presented that have arisen during the work with the watermark database. One of the issues relates to watermark fragments and whether they should be uploaded to the database or not.

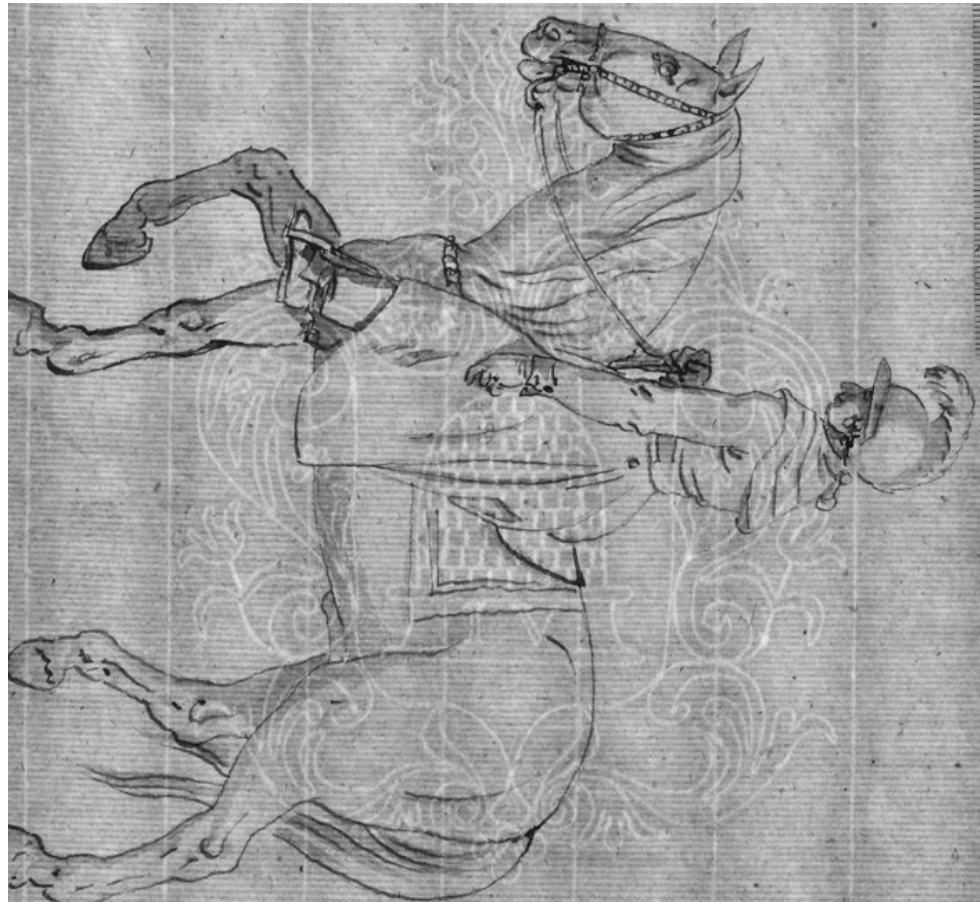
The chances of finding paper sheets with both a main watermark and a countermark – or at least a complete watermark - are much better in archival material than in drawings. It is only in large drawings we are likely to find both a main watermark and a countermark, but the situation is different when it comes to smaller drawings/sketches as shown below. Paper was a precious commodity and even smaller scraps were used.



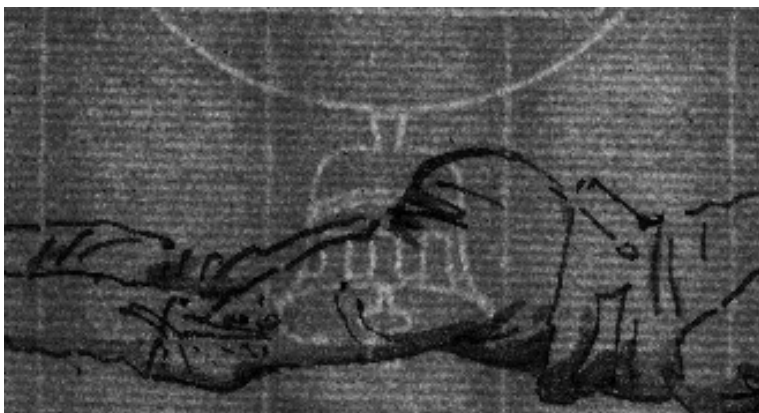
Apart from being some kind of leaves, it is difficult to identify the motifs on these three watermark fragments.



Fortunately our database contains several examples of complete or nearly complete watermarks of this type: coat of arm with a beehive and floral ornaments. There are some variations in the position and design of some of the flowers in the floral ornaments. Some examples have a name or initials on the base of the beehive, but the overall design is the same. All examples come from paper used by the same artist, so we are on safe ground with the classification of the leaves fragments



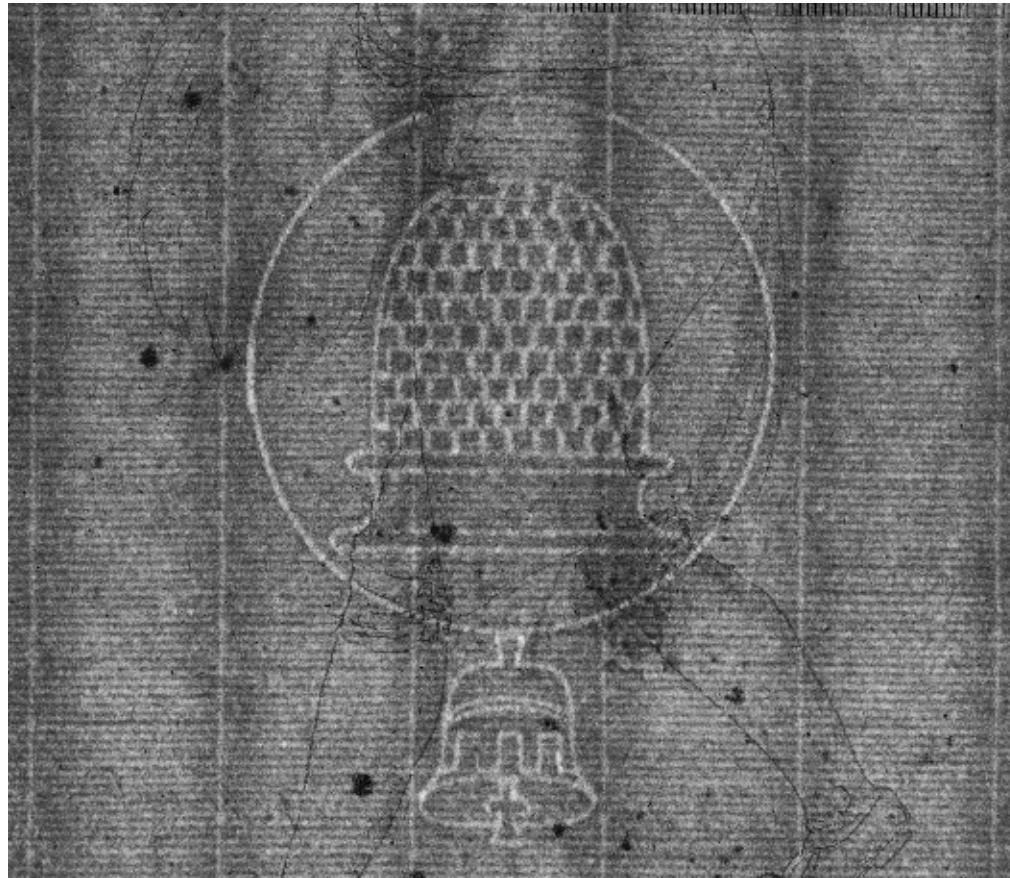
The next two examples of watermark fragments depict a bell and a part of a circle



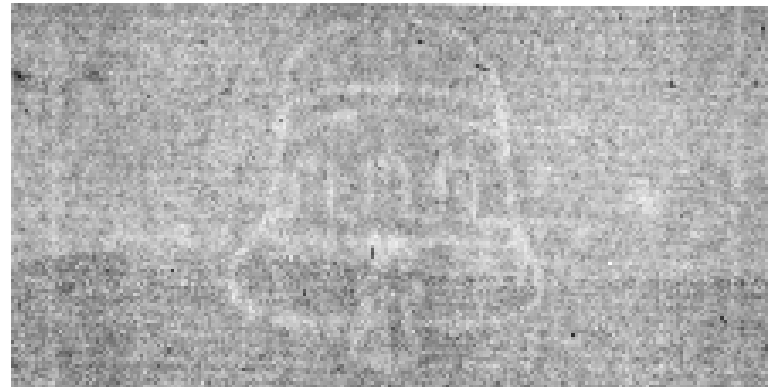
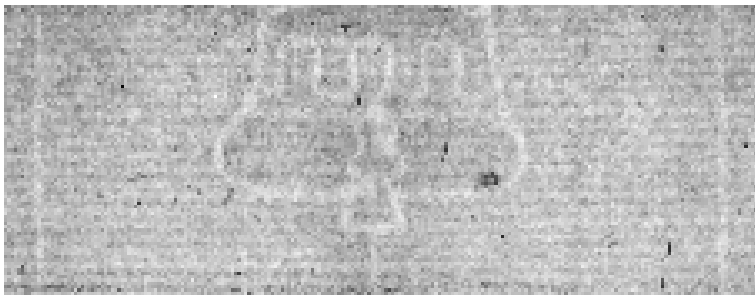
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In this case we have also complete examples of the watermark in our database.

This paper was produced at the Danish paper mill at Ørholm.

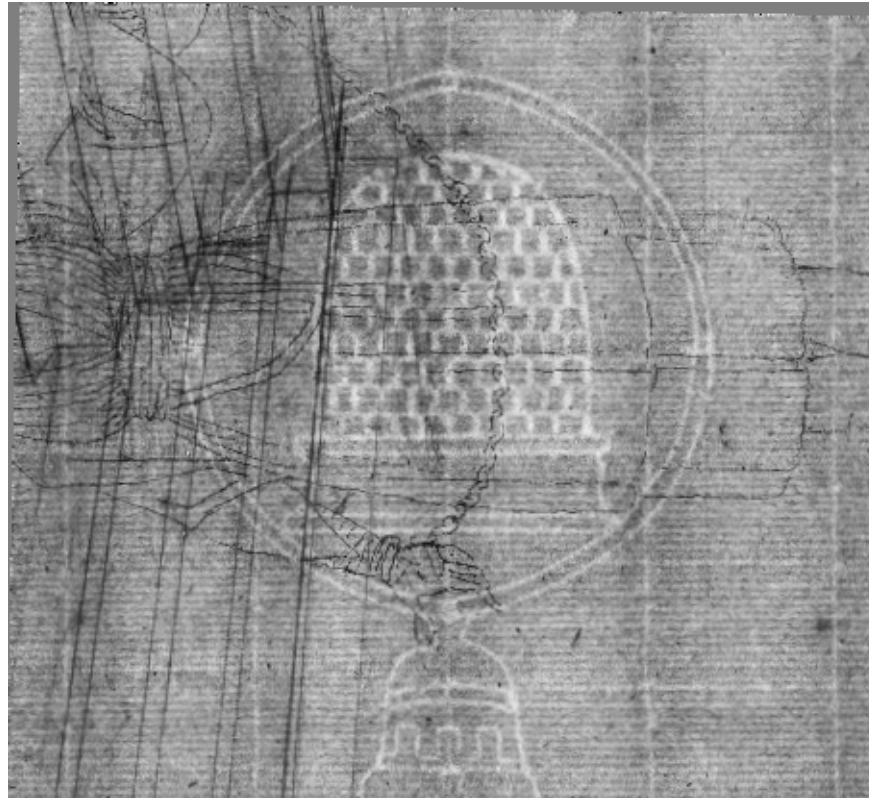


These two examples of watermark fragments depict a bell and part of a bell, but the bell shape differs from the previous examples.



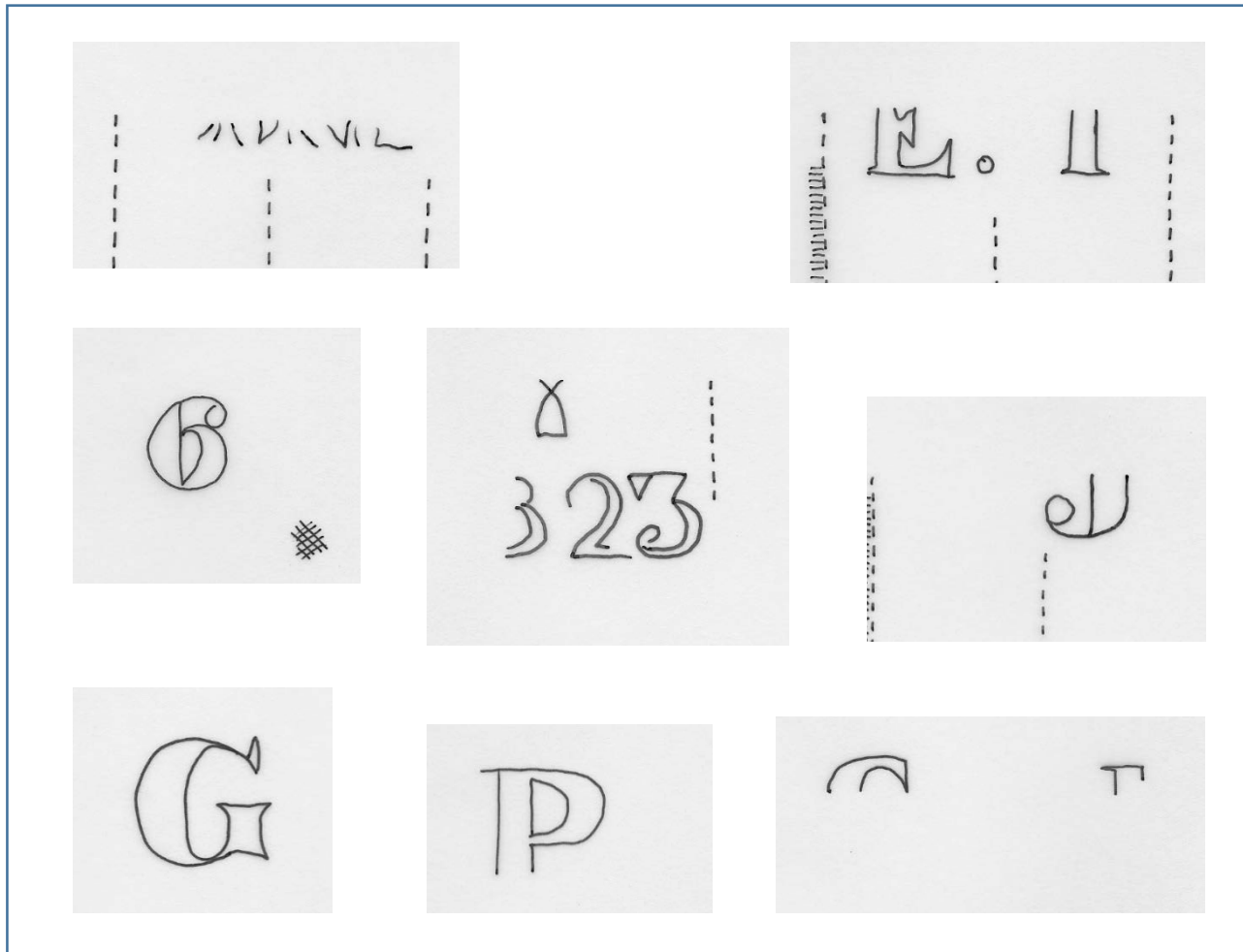
Once again we are able to classify the fragments because we have a complete example of the watermark in our database.

This paper was also produced at the Danish paper mill at Ørholm.



However, some fragments, like the ones shown below, are too small to be recognizable and any attempt to classify the watermark motif would be purely guesswork.

These fragments will not be uploaded to the database.



The publication *Danske Vandmærker & Papirmøller* (*Danish Watermarks and Paper Mills*) 1570-1695, vol. 1 & 2 by Birte Rottensteen and Ebba Waaben from 1986 and 1987 was the first result of a project that was initiated by the Danish School of Conservation in the 1980's.

It was based on a systematic search in the collections of the Danish National Archives for watermarks that could be attributed to one of the early Danish paper mills.

The watermarks were recorded as tracings with the relevant metadata written on pre-printed cards

RIGSARKIVETS VANDMÆRKEREGISTRERING

NO _____ Vm type _____

Mølle _____ Hovedmærke _____

Datering 14.10.1713

Dateringssted København Bimærke _____

Proveniens DK, koncept & indlæg af spec. tegner 1713
 Spec. kass. Nr. 589, indlæg

Helark ☒ Halvark ☐ Ubeskåret ☐ Beskåret ☒

Ark str. h. 31.5 x br. 38.8

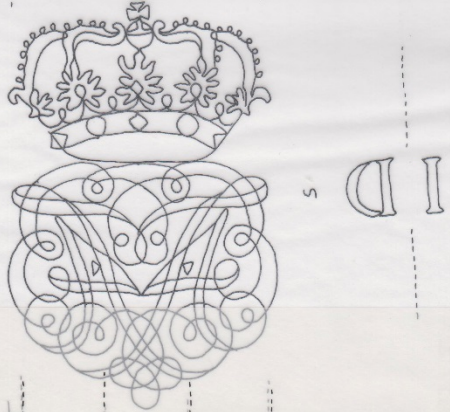
Vm mål h. _____ x br. _____ Vm placering fra kæde 2 til kæde 7

Antal netlinier per 2 cm 22

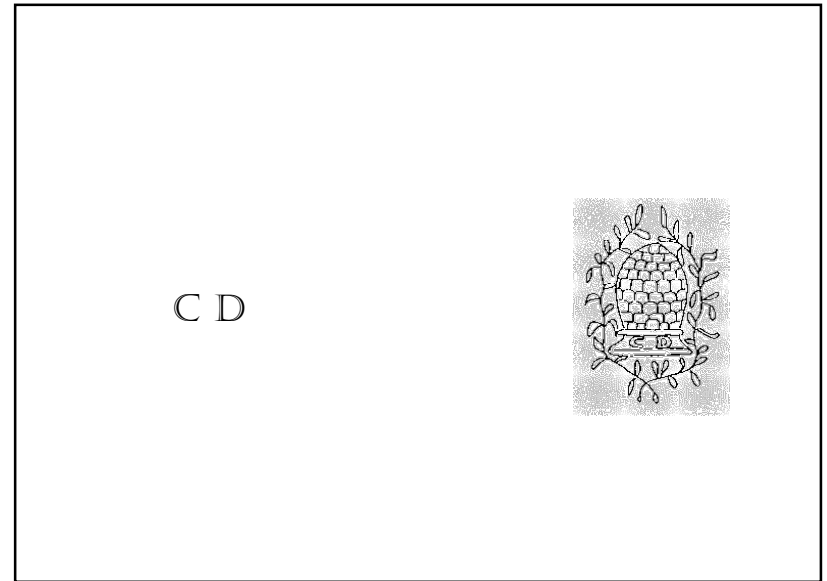
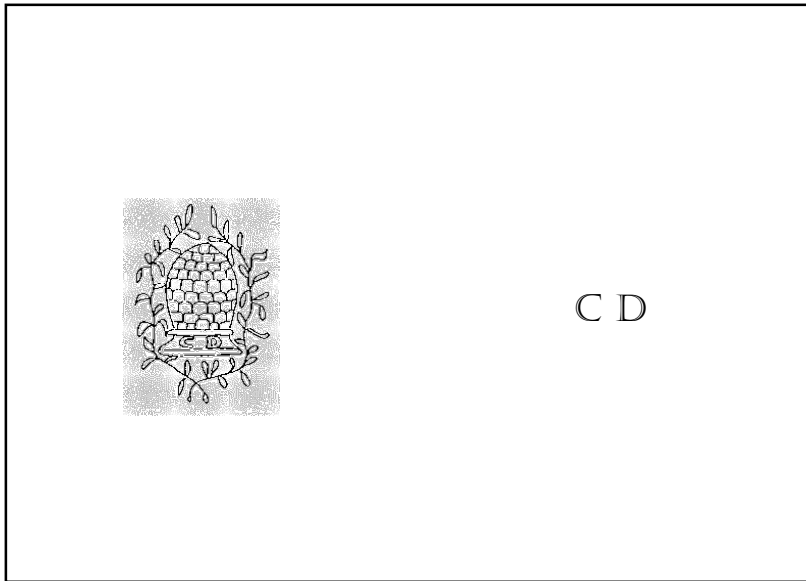
Kædeafstand 13,9/6 Undersøgt af: IN

Særl. bemærkninger

14/10 1713
 - 1/5 1718



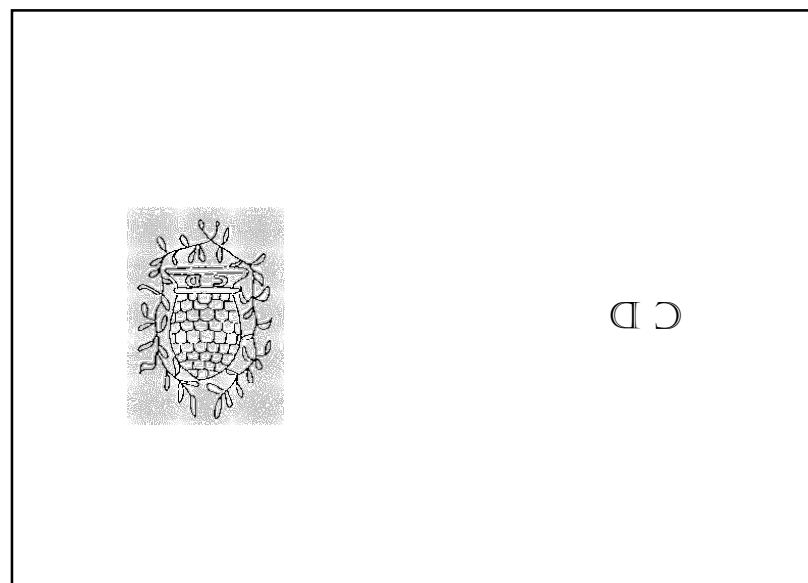
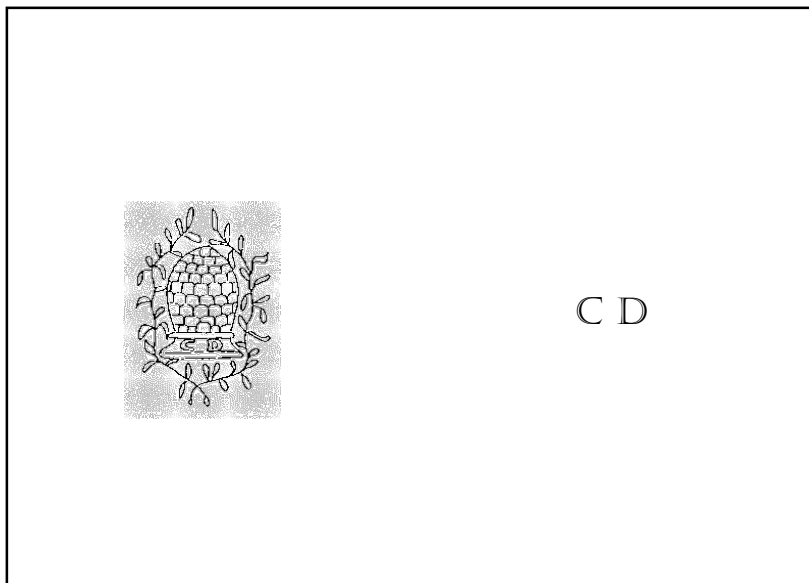

Paper moulds come in pairs. Although the watermark motif is usually the same on both moulds the position of the main watermark and the countermark may differ as shown in the following example:



When the tracings from the National Archives were made in the 1980's we followed two main principles:

1. The paper sheet should be placed with the depressions from the paper mould wire against the light table – i.e. as if the sheet was still placed on the mould.
2. The main watermark should always be in the left-hand side of the sheet when the tracing was carried out. It meant that some sheets had to be turned 180° and that the watermark was shown upside down on the tracing

An arrow on the tracing marks the upwards direction of the watermark during tracing.



The question is now: Do we upload the watermarks as they were recorded, i.e. some of them with the motif upside down, or do we upload all motifs with the right side up and make a note about the watermark position during tracing in the metadata. This issue still needs to be decided.



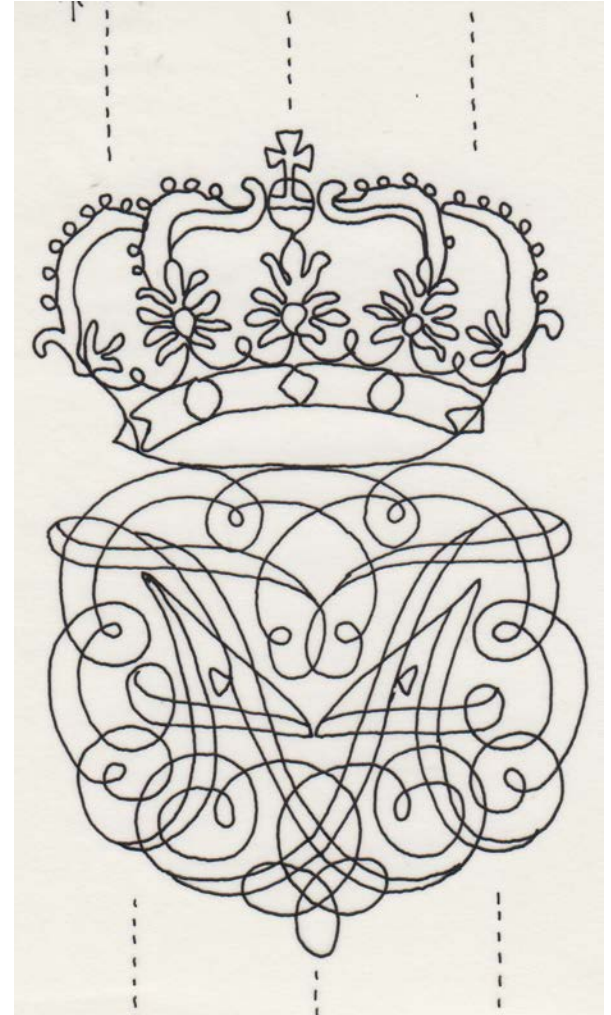
The box contains 346 watermark tracings which were intended for a third volume in the series on Danish watermarks and paper mills. This volume was never published because the main author sadly passed away shortly after the publication of the first two volumes. The plan is now to include the watermarks from the box and the printed publications in the database.

Many of the watermarks in the box show the royal monogram of King Frederik IV (1699-1730).

How do we proceed with this collection? Do we start the registration in the database from one end and carry on? There are most certainly a number of duplicates, which should be removed before registration. How can we get a better overview?

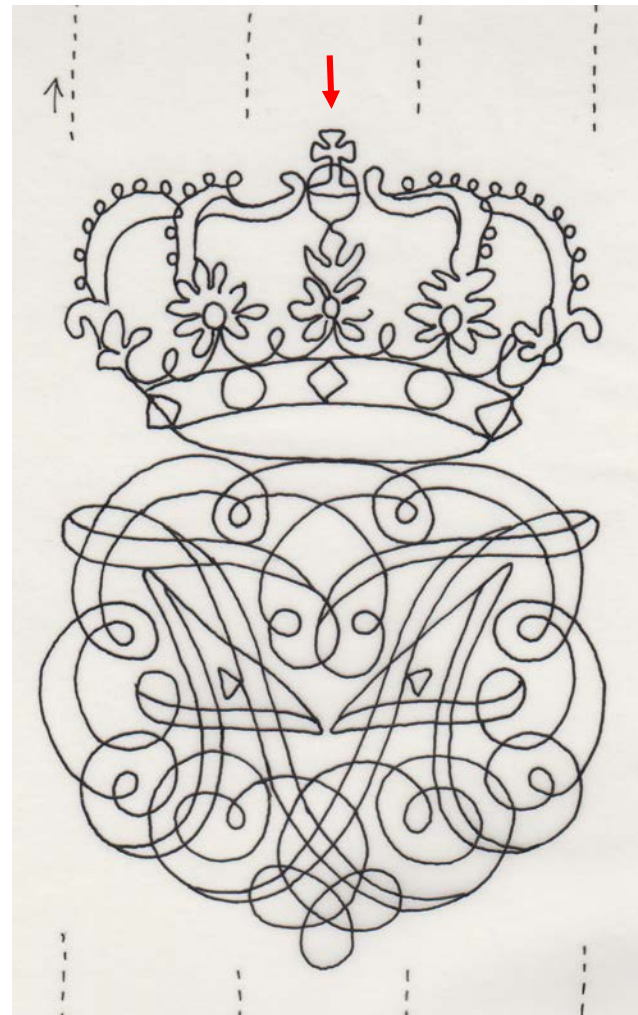


The first obvious sorting parameter is the watermark size (small, medium and large)



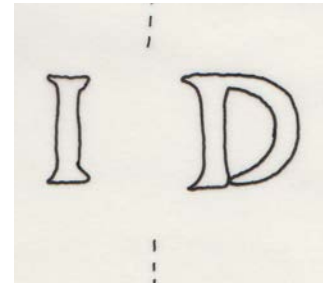
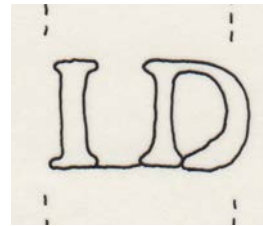
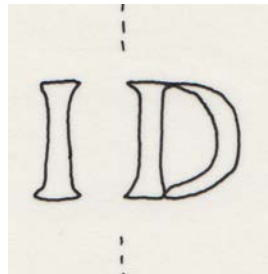
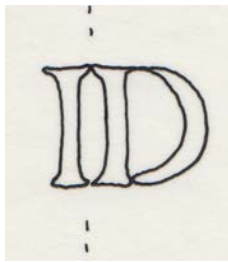
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Next sorting parameter is the watermark position on the mould, i.e. centred on or between the chain lines



Apart from differences in size and position of the main watermark, the countermark appears in four different versions as shown below.

The letters ID stands for Johan Drewsen who was the owner of the Danish paper mill Strandmøllen.



Additional sorting parameters could be variations in the crown and in the width of the watermark.

In the 1980's the older parts of the collections at the Danish National Archives were still stored in packages with a piece of cardboard on both sides and tied together by a cord. From a paper conservator's perspective not the best way of protection.

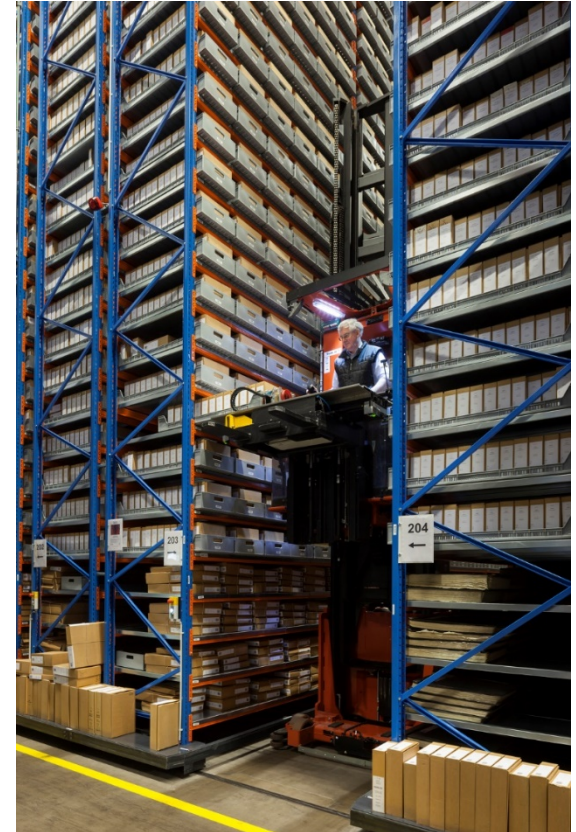


The collections were stored in a number of buildings in the Copenhagen area, but none of them provided good storage facilities. It was obvious that new state-of-the-art storage facilities were badly needed.

Before a location was decided on, a huge project was initiated including repacking the entire collections in cardboard boxes with printed labels and bar coding followed by registration of the boxes in a database.

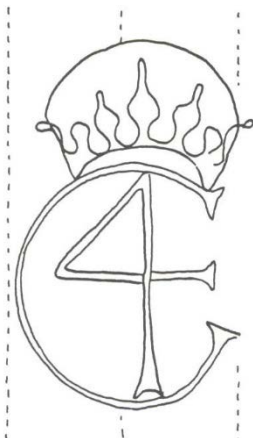


A new storage building was finally finished in 2009. It is situated close to the Central Station in Copenhagen.



In the printed publication on Danish watermarks and paper mills from 1986-87 the watermark metadata were presented in tables as shown below.

The column marked in red square contains the provenance information.

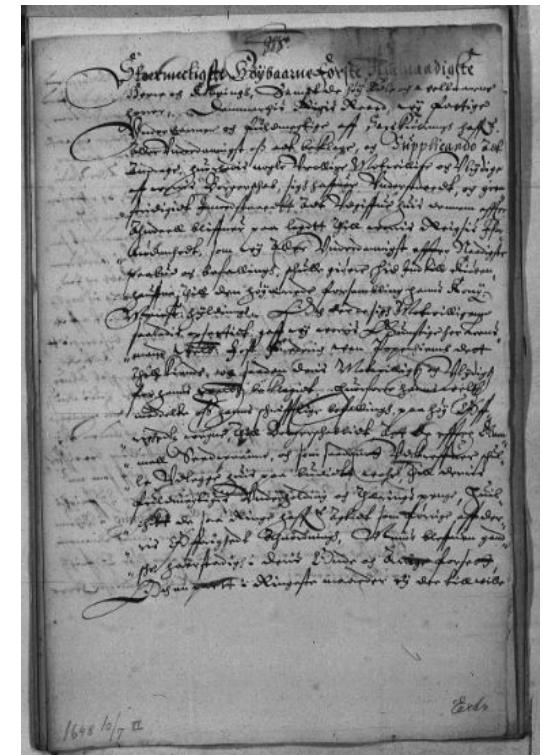


KGL. MONOGRAMMER, C 4								
Vm nr	Datering første og sidste	Ubeskåret beskåret helark 1/1 halvark 1/2	Ark str. h x b i cm	Kæde-afstand	Antal net-linier /2 cm	Vm placering fra kæde til kæde	Proveniens	Datering og dateringssted
53	27.3.1638	Ube 1/2	32,3 x 19,6	13,5/6	23	5-7	DK, B 58. Koncepter til sjællandske tegnelser Nr. 287	København 27.3.1638
54	18.4.1638 -10.7.1648	Ube 1/2	32,2 x 20	13,4/6	26	4-7	DK, B 160. Indlæg til registre og tegnelser	Horsens 10.7.1648
55	20.5.1638 -1639	Ube 2/3	22,5 x 19,3	13/6	26	4-7	LR, Kalø, a, 1639/1640 Pk. 19, læg 2, bilag 1	Kalø len 1639
56	1639	Ube 2/3	22,5 x 19,1	13/6	26	4-7	Do	Kalø len 1639
57	7.3.1643	Ube 1/4	19,5 x 19,6	13,3/6	26-28	5-8	LR, Kalø, a, 1642/1643 Pk. 21, læg 8, bilag 51	Horsens 7.3.1643
58	23.6.1643 -18.10.1645	Ube 1/2	31,6 x 19,6	13,3/6	24	4-6	DK, B 160. Indlæg til registre og tegnelser	Helsingør 2.3.1645

Today, reservations for the reading room at the Danish National Archives has to be booked through the online database Daisy. The example below shows the search result for the document with watermark #54 .

Many of the documents are now scanned and are no longer available for access in the reading room unless with a special permission. These documents have to be booked by e-mail.

Arkivserie:	Indlæg til registre og tegnelser samt henlagte sager (Skåne, Sjælland, Fyn, Smålandene og Jylland) (1572 - 1650)		
Arkivskaber:	Danske Kancelli (1572-1650)		
Arkivseriens navn:	Indlæg til registre og tegnelser samt henlagte sager (Skåne, Sjælland, Fyn, Smålandene og Jylland) (Officielt)		
Arkivseriens datering:	Dannelse: 1572 - 1650		
Reference:	VA. I., s. 31		
Bemærkninger:	Se 'Seddelregistratur 14-19', som er kronologisk ordnet og indeholder et udtog af indholdet i hvert brev.		
Pakkeindhold beskrives med:	Brevdato (År, Måned, Dag)		
B160-46	1647 1	1647 6	Læs arkivaliet
B160-47	1647 7	1648 2	Læs arkivaliet
B160-48	1648 3	1648 7	Læs arkivaliet
B160-49	1648 8	1649 4	Læs arkivaliet



Although the repacking project has improved the protection of the documents, it has also had an impact on the watermark metadata, since the provenance information which was collected in the 1980s is not always identical with the information in the Daisy database. This discrepancy makes it more difficult to retrieve the watermarks.

Some differences are due to the fact that several of the old packages were too big to fit into one single new box. As it is shown in the search example, it is now necessary to know the date of the document and not just the year in order to get the right box to the reading room. Some titles of the individual collections have also been slightly changed.

Before the watermarks from the box and the printed publication are uploaded to our watermark database, it will be necessary to find a way to store both old and new provenance information in the database. There is still some work to be done !

Thank you for your attention !



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