

The Study and Conservation of Woven Cigarette Inserts

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담배 사은품 실크 인서트(Silk Inserts)에 관한 연구와 보존처리

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Abstract

The purpose of this study is to document and preserve an unidentified textile purchased at a flea market. This study object is important because it is one of the very rare silk insert series from 1930s which were created for commercial use(as inclusion in cigarette packages). The investigation was conducted by researching the limited publications that discuss silk inserts, visiting many sites on the internet that offer such inserts for sale or catering to the collectors of these silk inserts, and especially visiting the collection of silk inserts, named the J.R. Burdick Collection, at the Metropolitan Museum of Art, New York. Several pieces matched the patches used in the study piece. But Buidick's description on time frame(1912-1915) did not indicate the full range of production of silk inserts. After the identification of object, the conservation treatment was carefully done using adhesives. The results of this study can be summarized as follows;

1. The silk inserts of the study object were included as promotions by some company owned by the American Tobacco Company, probably at some time between 1934 and 1939.

2. The initial stage in the conservation treatment was mechanical surface cleaning using a vacuum cleaner. After vacuuming, humidification was conducted to reduce creases in the top of the object. The damaged areas were backed with stabiltax coated with a solution of Elvace 45675 since the fiber of this object was too deteriorated.

3. Adhesive treatments using Elvace showed satisfactory results: flexibility, strength, no damaging effects on the study object, removability without damaging the object.

Key words: Silk inserts, Crazy quilt, Adhesive coating, Conservation treatment, Cigarette card; 실크 인서트, 크레이지 퀼트, 접착제 코팅, 직물 보존처리, 담배 카드

I. Introduction

Today, we take for granted that a product manufacturer has figured out marketing strategies to entice the public to buy their product - to attract new customers or to keep long time users interested. One of the earliest ways that this enticement was put into practice was through the use of an inclusion of a "gift" or "give-away" bundled to the product. Alth-

ough tradesmen's cards are found as early as the eighteenth and nineteenth century, the earliest example of this type of "inclusion" advertising shows up in 1853 in the form of beautiful little printed cards given away by Ariside Boucicaut the founder of the Bon Marche store(Bagnall, 1965).

This form of marketing became immediately popular. It is not surprising then to find the tobacco industry entering this form of advertising. In the 1885-1892 period most of cigarette companies made cards as well as many other very creative and inter-

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esting types of inserts as sales promotions. Within the world of collectible cigarette cards, there exists a smaller segment of related collectibles that were also included in cigarette packs. These are the series, started around 1910 or earlier, that were either printed or woven on various types of cloth, though they are now commonly referred to as "silk inserts." It is suggested that the reason this type of insert was invented had to do with shortages of paper materials during World War I, but it may have been that they wanted to attract more women to smoke or to increase their already existing habit. The amount of variety among these novelty types of fabric inserts is quite interesting. There was a series call "Canvas Masterpieces" that had old master paintings printed on a textured canvas cloth, old masters printed directly only smooth silk, printed silks mounted onto cardboard backs, flags stitched to netting, long satin ribbons with varied series of images woven into silk (this is the category of the study piece for this paper), among other variations (Fig. 1).

The kinds of objects that have been created out of the assembled silk inserts are obviously women's work: framed pictures, pillowcases, clothing, and quilts, to name a few of the common creations. And of course, the most obvious example is our study piece (Fig. 2), which is an assembly of 60 of these rectangles into a crazy-quilt format.

This study will focus on the smaller variety of woven (true) silk rectangle, commonly included in packages of cigarettes. According to Burdick (1939), these are identified in the checklist by the word "wove". These fabric inserts were used in various ways by their collectors, as fabric was ultimately more versatile a material than printed card. Silks are probably more beautiful than cards in that the silky sheen of the fabric accentuates the bright printing inks. They were intended to be of special interest to women as well as men, and sample designs were distributed showing how they might be sewn into attractive pillow covers and table spreads (Burdick, 1939).

The study object is a stitched together assembly of 60 smaller rectangular black silk woven pieces. Each of the woven rectangles contains an image of the emblem or coat-of-arms of a specific country or



Fig. 1. Cigarette companies silk inserts.
Reprinted from Bagnall (1965)

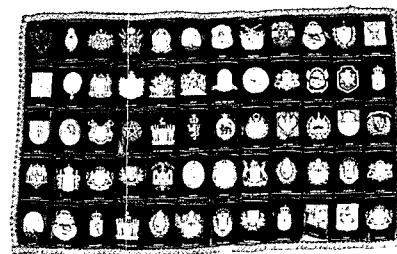


Fig. 2. Study object: uncatalogued quilt.
Photograph by the author

place. This textile has the emblems of specific geographical areas as its focus for the series, and as can be seen from what was collected for the creation of the object, there were at least 48 different images in that series. With this in mind, the author researched the limited publications that discuss this subject, visited many sites on the internet that offer such silk inserts for sale or cater to the collectors of these silk inserts, and especially visited the collection of silk inserts, named the J.R. Burdick Collection, at the Metropolitan Museum of Art, New York, hoping to find a suitable match.

II. Documentation Methodology for Identification and Conservation Treatment of the Object

1. Study Object

The object is an assembly of small woven rectangular black silk pieces arranged in a quilt format. Each piece has a central woven image of the coat of arms or emblem of a specific country or city. This

quilt consists of the top(pieced assembly), backing and interior lining(both red cotton), and edge-trimming(elaborate braided trim).

1) Dimensions

The overall measurements are 24" wide and 14.5" high. It is made up of sixty silk insert rectangles, each measuring 1.75" wide and 2.75" high. There are twelve columns across and five rows down of rectangles.

2) Method of Manufacture and Structure of Patch

Each of the 60 individual silk insert patches was jacquard woven into a narrow ribbon-like fabric. A specific emblem motif was repeated down the length of each ribbon. Two sets of double lines with a small space between them were woven in between each occurrence of the emblem, creating a natural divider or frame for each image. Each patch was then cut with pinking shears between the lines, leaving a pinked edged on each rectangle at the top and bottom. Because it was woven as a narrow ribbon, the side edges(selvedges) were finished. The pinking was done at the top and bottom to prevent excessive unraveling(Wilmshurst, 2002).

The black silk fabric used for the background on each patch has a plain weave structure. The motif was created using a Jacquard loom. The motif on each patch has its image created by the use of supplementary weft, some that travel from selvedge to selvedge, and other areas use only brocade. The thread count of the black plain weave is 51 warps per centimeter and 40 wefts per centimeter. The warp thread is s-twist and the weft thread is combined without twist. The color used in the supplementary weft threads to create the individual motifs in the sixty patches are pink, salmon pink, red, green, blue, gold, and white. These threads are combined untwisted rayon. The image is created by using variously sized weft floats.

3) Lining and Backing

The same red cotton fabric is used for the lining and backing of the object. It is a 4/1 uneven twill weave. The thread count is 40 warps per centimeter. and 35 wefts per centimeter. The warp thread is z-

twist, single ply yarn and the weft is the same thread. It is mercerized cotton.

2. Fiber Identification

1) Microscopic Test

To identify the fibers in each part of the textile, identification was performed using a polarizing light microscope(Olympus B-60). This is always an important first step when designing treatments, as the results will indicate which treatments are appropriate for each fiber type present.

2) Burning Test

This Test was conducted as a further test to separate the possibility of silk and rayon for the fiber used in the herringbone stitches and chain stitches.

3. Color Fastness Test

Some parts of the textile were analyzed to determine the cleaning method. Three representative spots were chosen to be tested; black silk background, red rayon supplementary threads of one of the motifs, and the red cotton backing fabric. Blotter paper was placed underneath each test area and a droplet of warm distilled water was wet out the area. After some time for absorption, the wet areas were then pressed from the top with another blotting paper.

4. Adhesives Test

In order to figure out which adhesive will be appropriate for our textile, the following tests were performed using the four most commonly used adhesives for textile conservation(Down et al., 1996) as found in the literature: Elvace 45675(vinyl acetate copolymer resin emulsion), Jade No. 403(polyvinyl acetate emulsion), Lascaux Restauro 498HV(thermoplastic copolymer butyl-methacrylate dispersion), and methyl cellulose. The first three adhesives were tested by coating them onto stabiltex(Test A), and the methyl cellulose was tested as a method to secure fraying fibers and adhering silk to silk and fragments of silk fabric(Test B).

5. Treatment

1) *vacuum*

The object was so fragile that a piece of screen (Vuori, 2001) was laid over the textile to prevent any loss of fiber and further damage. The vacuum cleaner was Preservation Equipment Ltd.(model: Museum Vac PEL).

2) *Humidification*

To reduce creases and folds in the top of the quilt, several paper blotters damped with distilled water were placed over the areas to be flattened. Then, glass rectangles were placed over the moist blotter to transfer the moisture and flatten the wrinkled areas, and bag weights were placed on top to give enough pressure to create a smooth surface.

III. Result

1. Possible Producer and Date of Study Object

The most direct way of dating silk inserts is by finding printed or woven information right on the insert itself(Fig. 3, 4). As mentioned previously, some companies, especially American ones, would print the brand name, city name, or distribution area information right onto the insert. Unfortunately, our study piece does not contain any of that information. So, the next method of approach was to try and match the type of image series to a known and previ-

ously identified group of inserts. A “series” denotes a group of related images, put out by a cigarette company.

In the Metropolitan Museum of Art, Department of Print Study, the Burdick Collection consists of a total of 306,353 items and is housed in 394 numbered albums and boxes. In this collection, the silk inserts(numbering 4,146 items) are carefully numbered and mounted in albums numbered 274 through 281. Several matches were found for the patches used in the study piece. A note of warning should be added here. While searching the collection for information on dates or producers, it became clear that the time periods and manufacturers named and described by Burdick, may not indicate the full range of production of silk inserts. For example, Burdick(1939) dates almost everything in his silks collection as being produced between 1912-1915. Clearly, from what has been published elsewhere, the time frame is much larger and care should be taken in using his dates without question.

Earlier series dating to 1905 have been discussed in this paper, and there are quite a few from the 1920’s, such as a series on sports. Also, an important flower series that is critical to the evolution of the study piece is dated to 1927 and is produced by the Turkish-Macedonian Tobacco Company(TURMAC)(Fig. 5-a).

Even later, very popular series have been securely dated to as late as the mid-1930s. “Kensitas” is the name of a brand of cigarettes, which, in 1927 was sold to the American Tobacco Company. In 1933 and 34 they created a silk insert<Fig. 5-b> which copied the earlier TURMAC Dutch flower series just discussed.

In Burdick’s “Silk Insert Album No.280,” there are 60 different emblems present. Thirty-four of them are exact matches to those found in the study object. The remaining 26 in the Burdick Collection were of other countries represented in the series. The remaining fourteen that are in the study object but not in the Burdick Collection would mean that at the least there were seventy-four unique emblem images in the original series. <Fig. 5-c> and <Fig. 5-d> shows the direct matches of some of the inserts found in the Burdick Collection to those in the study object. Bur-

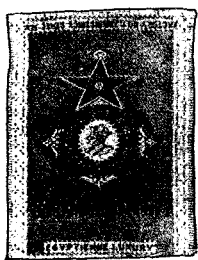


Fig. 3



Fig. 4

Fig. 3. 'Egyptienne Luxury' cigarette silk insert.
c.1910 Photograph by the author

Fig. 4. 'Nebo' cigarette silk insert.
c.1910 Photograph by the author



Fig. 5-a



Fig. 5-b

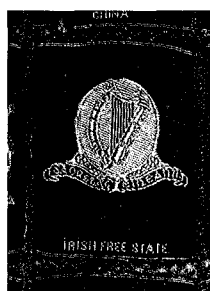


Fig. 5-c



Fig. 5-d

- Fig. 5-a. 'The Turkish-Macedonian Tobacco Company' silk inserts. c.1927 Reprinted from Wilmshurst(2002)
 5-b. 'Kensitas Flowers' silk insert. This one was given away with kensitas Reprinted from Wilmshurst(2002)
 5-c. One patch of the study object. This fabric shows same motif and construction method with the silk insert in <Fig. 5-d>. Photograph by the author
 5-d. Cigarette silk insert. Manufactured by American Tobacco Company c.1912-1915, Metropolitan Museum of Art, Department of Print Study, Burdick Collection, silk album No.280. Photograph by the author

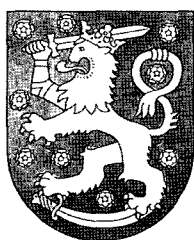


Fig. 6-a



Fig. 6-b

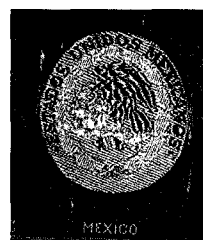


Fig. 6-c

- Fig. 6-a. The coat of arms of finland. This coat of arms was readopted as official pattern after independence in 1917. Reprinted from Briggs(1974)
 6-b. One patch of the study object. These two figures are showing exact match
 6-c. One patch of the study object. The image in this patch shows clear match for the 1934-1968 version. Photograph by the author

dick(1960) identifies those objects in his collection as "S39" in Album 280(S is for "silk" in his cataloging system).

The attribution to the American Tobacco Company seems possible. As was discussed above, there is a strong similarity between the study pieces and the 1927 TURMAC style of their flower series. This style was copied by the Kensitas Company in the mid-1930s. The Kensitas Company was owned by the American Tobacco Company at that time, and so it is a possibility that other brands also owned by the ATC would produce silk inserts of a similar format. Any further information does not seem to be available and so it must be left at an agreement with Bur-

dick that these study inserts could have been produced by the ATC.

In his catalogue, Burdick(1963) does not attempt to date every item in his collection separately, but simply states at the beginning of the silk insert portion, that "most" inserts were produced in the 1912-1915 time period. From the information already discussed above, I was already skeptical about such a broad statement. This worry was validated when an attempt was made to date the silks inserts by matching them to know images of the country emblems.

<Fig. 6-a, 6-b> show how precisely some of the textile images match to the country emblem of a certain period(Briggs, 1974). By continuing to find

matches, and therefore dates of use, it was possible to form at least some beginning and terminal dates for the use of some of the emblems used in our study piece.

The country emblems with key dates of usage which allow for a more precise range of dates compared to Burdick's "1912-1915" are Mexico and Ireland. Several national arms and country's name were definitely used after Burdick's proposed period. One example is "The Irish Free State" which took the harp as its emblem upon the signing of the Anglo-Irish Treaty in 1922(Fig. 5-c). This name was used from 1922 to 1937(Cohen, 1983).

The image used in the coat of arms of Mexico that is seen on the insert of the study object was adopted in 1934. <Fig. 6-c> shows the silk patch of the study object matched with the 1934-68 image, thus pushing the date to not before 1934(Villascan, 2001).

This date would add further credence to the suggestion made earlier in this paper that the style and size were similar to the Kensitas inserts of 1933-34. Now we can add some dating backup. One other additional supporting fact for thinking that there was a small rebirth of these silk inserts in the 1930s was that there was also a rebirth(Colby, 1982) of the quilting craze. The two seemed to go together in the early part of the century when crazy quilts were the rage, and now again in the 30s when quilting was back in fashion. I think we can certainly date these additional inserts later than 1912-1915, and probably date them to the same time period as the study piece - around 1934.

2. Condition of Object

The overall condition is poor. The object is faded, wrinkled, distorted, and torn, particularly in the black silk plain weave background of each patch. However, the motifs in the center of each individual patch that are created by the supplementary weft weave are in good condition. The black background area of each patch has suffered from fraying, abrasion, and brittleness(Fig. 7). Tears in the black silk areas occur mainly along the vertical direction of each patch. This type of damage is typically caused

by weak weft threads. In the case of the study piece, we find the weft thread is made from combined without twist filaments. This combined filaments without twist is weaker than the warp thread, which is combined and twist together in s-direction(Fig. 8). Most of the tears are the result of abrasion. The loss and weakening of the wefts thus exposed the warps, which then became broken and frayed. In these areas, even though the warp threads are still connected, the lost and powdering wefts have allowed the red backing fabric to show through. The upper and lower pinked edges of some patches have been unraveled and are no longer connected to the herringbone stitches that were originally connecting them to the red fabric foundation. The decorative pre-braided trim around all edges, although intact, is faded and stained.



Fig. 7. Detail of damage

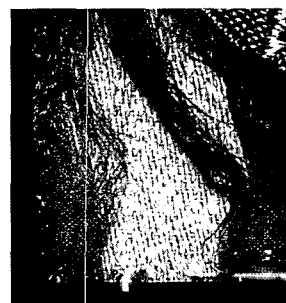


Fig. 8. Detail of damage

3. Pre-treatment Testing

1) Fiber Identification -The results are in <Table 1> and <Table 2>.

Table 1. Material Information: Top, Interior lining and backing fabric

Fabric		Media/Fiber	Elements Twist/ply	Count per unit/cm	Color
Top	Warp	Silk	Combined and s-twist together	51/cm	Black
	Weft	Silk	Combined without twist	40/cm	Black
	Supplementary elements	Rayon	Combined without twist		Pink, Salmon pink, Red, Green, Gold, White
Interior lining	Warp	Mercerized cotton	z-twist, single ply yarn	40/cm	Red
	Weft	Mercerized cotton	z-twist, single ply yarn	35/cm	Red
Backing	Warp	Mercerized cotton	z-twist, single ply yarn	40/cm	Red
	Weft	Mercerized cotton	z-twist, single ply yarn	35/cm	Red

Table 2. Material Information: Embroidery thread and Edge-Trimming

		Fiber	Twist/ply	Color
Black embroidery thread used in herringbone, chain stitch		Rayon	s-Z, 2-ply	Black
Trimming	Braiding	Rayon	Combined without twist	Yellow, Pink, Blue
	Black metal-wrapped thread	Cotton	z-S, 5-ply yarn	Black
		Metal	S direction around the core	Copper color
	Thick pink thread	Rayon, cotton (inside of rayon)	Combined, Combined	Pink(rayon), Natural color(cotton)
	Thread used in holding three components of trimming	Rayon	Combined	Pink
Thread used in holding three component		Cotton	z-S, 2-ply	
Thread used in machine stitch to attach the trimming to the quilt		Cotton	s-Z, 3-ply yarn	Cotton

2) Color Fastness Test

Red dye of the backing fabric, however, moved onto the blotter paper, thus preventing further wet cleaning possibilities. There was no color movement when the black silk background and red cotton supplementary threads of the motifs were tested. All surface dyes were stable with the exception of the red dye of the red backing fabric (This testing, also, revealed little movement of the stained areas.). If it was absolutely necessary to wet clean the patches, one could have taken apart the object. But due to the fragile nature (Windsor, 1995) of each of the patches, this is not recommended.

3) Adhesives Tests

As was previously mentioned in the condition report chapter, this textile is too fragile to stitch into

for repairs. This eliminates both stitching directly into the damaged areas, and it also eliminates the possibility of repairs done using the standard overlay method in which a sheer piece of stabiltex or crepe-line is stitched down over the damaged areas to prevent further unraveling.

Result of Adhesive Test A

In the making of adhesive coated lining fabric, Jade 403 and Lascaux Acrylic 498HV formed tacky films. Especially the Lascaux Acrylic 498HV made very shiny film over Stabiltex. Elvace coated Stabiltex was more satisfactory to use as a coating for support fabrics. It is transparent and flexible. When comparing the adhesion, Lascaux 498HV revealed the most strong bond among them. But this adhesive became stiff after application.

According to the requirements for an adhesive

used for textiles, Rice(1969) lists the following as important characteristics: flexibility, strength, resistance to oxidation or degradation, no damaging effects on the object, removability without damaging the object. Elvace showed satisfactory results, so it will be used to repair the study object.

Result of Adhesive Test B

The result was not satisfactory. Even though the bond between silk and silk was very flexible, the adhesion was very weak. It will not be used in conservation treatment.

4. Treatment

1) Vacuum

The technique used was to gently move the brush attachment back and forth slowly over the surface. This vacuuming made a significant difference in the look and cleanliness of the textile.

2) Humidification

Humidification improved the appearance of the textile; the folds were removed and wrinkles and creases were relaxed. This method could be chosen because the top fabrics were color fast. There is a small amount of moisture that is transferred from the blotter paper to the silk surface. If the dyes in the surface fabrics were not color fast then this method could not be used.

3) Consolidation and Stabilization

The main conservation method for this textile was

consolidation with adhesives. The fragile condition of the silk patches used in the top layer required adhesives(Brook et al., 1995).

Additionally, the construction method of the textile definitely needed careful handling without any deconstruction during the conservation treatment.

As stated in the pre-treatment test, Elvace-coated stabiltex(Verdu et al., 1984) was proven to be the best system to be used in the consolidation and stabilization of this object. Preparing the lining fabric and repairing as follows:

- Stabiltex was carefully laid over the silicone release Mylar and the edges were taped to keep all warps and weft threads aligned.
- Two different coated fabrics were created for use -- (20% and 35%) - each was applied onto a piece of stabiltex using a foam brush.
- After the adhesive dried, the tape around the edges was removed.

There were three different arrangements of the adhesive/stabiltex procedure.

- The first method involved a simple piece of coated stabiltex alone slipped into an area where the break was clean and there was no need for any opaque black fill.
- The second method involved a piece of thin black silk(chosen to match the original in color, weight and weave structure) covered with the coated stabiltex, and inserted in behind a larger break with open lost areas
- The third method involved a more complicated

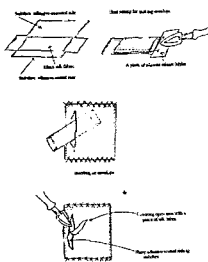


Fig. 9-a



Fig. 9-b

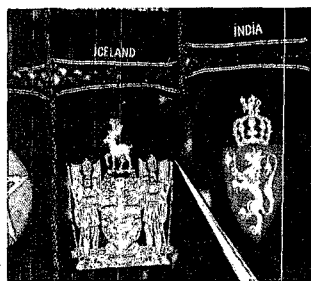


Fig. 9-c

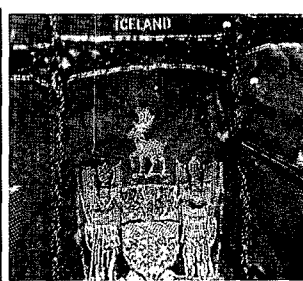


Fig. 9-d

Fig. 9-a. Arrangement of the adhesive stabiltex- method 3

9-b. Procedure of method 3

9-c. Procedure of method 3: The envelope is being inserted into an area too close to the edge

9-d. Pinning a piece of silk fabric to close up a hole

“envelope” in which a piece of the black silk was sandwiched between two layers of the coated stabiltex (with the edges cleanly folded to prevent fraying) and inserted behind a large loss that was very close to the edge of the patch. In this case, method 2 would not be useful because, although it would have adhered to the black of the top, it would not have held firmly enough to the red lining to stay secure. <Figs. 9-a> shows the creation of one of those “envelopes” with the silk in the center. Notice the shiny outer-sides of the envelope that will adhere to both the silk top and the red liner (Fig. 9-b). It is being inserted into an area too close to the edge to hole any other way.

5. Assessment of Treatment Method

The net effect of this adhesive treatment seems to be both stable and flexible - both important characteristics of an adhesive treatment on textiles. <Fig. 9-c> and <Fig. 9-d> show the preliminary placement

of some of the inserted coated envelope pieces, used to close up a hole. The pieces are pinned into place to secure them while the spatula begins to soften the adhesive and set them into place. <Fig. 10-a> shows the final heat placement and <Fig. 10-b> shows that even with a raking light, there is an evenness to the surface and a match with the grain and weave structure of the replacement silk.

One of the most severely damaged patches on the textile was that of Poland <Fig. 11-a> in the bottom row (towards the lower right corner). This was completely lifted from the surface, creased, and no longer attached across the bottom edge. <Fig. 11-a> shows the before photo of the patch and <Fig. 11-b> shows it after treatment. Again, much more stable and attached to the liner. Another few examples will illustrate the success of this treatment. <Fig. 11-c> and <Fig. 11-d> show the before and after shots of the center row (4th patch in from the left). Again, very clean, flexible and hardly noticeable. And finally, probably the most impressive before and after shot, is



Fig. 10-a. The final heat setting

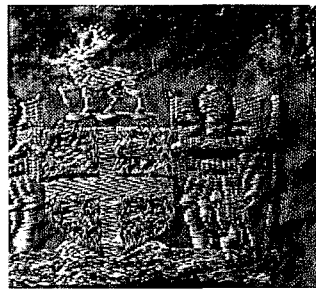


Fig. 10-b. After treatment:
The treated area is even and clean



Fig. 11-a

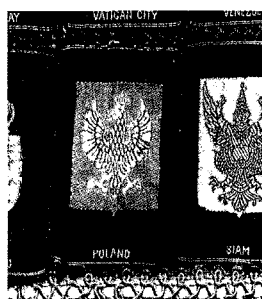


Fig. 11-b

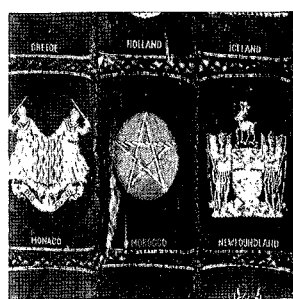


Fig. 11-c



Fig. 11-d

Fig. 11-a. Before treatment. 11-b. After treatment: This area was repaired with method 3. 11-c. Before treatment 11-d. After treatment

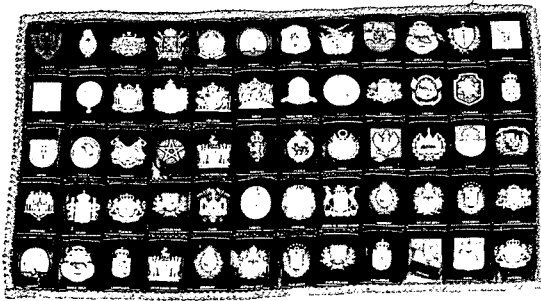


Fig. 12-a. Before treatment

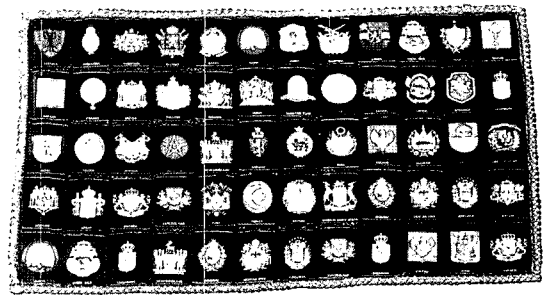


Fig. 12-b. After treatment

of the Morocco patch from the center row.

IV. Conclusion

The process of the identification was mostly done with the history of silk inserts and the period of coats of arms used in the silk inserts. The silk inserts of the study object are very rare types and the object was made during the 1930s when there was a great revival of quilt making in America. This fact suggests the historical importance of this textile and the necessity of conservation treatment.

The conservation treatments of the study object were vacuuming, humidification, consolidation and stabilization. Mechanical surface cleaning was carried out through a protective screen using a vacuum cleaner. It revealed more details in the image areas of the patches. After vacuuming, the textile was gently humidified, using dampened blotter paper held in place under glass sheets with small weights. This added more flexibility to the patch allowing it to be gently put back into shape.

Most of the damaged area was repaired with Elvace-coated stabiltex inserted between the black silk patch and the interior red lining. With this consolidation with adhesives, loose, fraying threads were tacked down back into place, holes were backed, and splits along the warp were closed.

Adhesive is the best recommendation for the consolidation of silks which is not possible to stitch. Among the adhesives tested, Elvace revealed satisfactory results. It was transparent and flexible. This study will contribute to an increased understanding

of adhesive use, through the detailed conservation analysis of this object.

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요 약

본 연구의 목적은 뉴욕의 폴리마켓에서 구입한 매우 흥미로운 퀼트 텍스타일을 관찰함으로써 시작되었다. 흔하지 않은 스타일의 실크 인서트(Silk inserts)들로 구성된 이 퀼트를 본 연구자로 하여금 그 역사적 가치를 조명하고 문서기록을 남기며 보존처리하여 텍스타일 역사의 발전에 도움을 주는 것에 의의를 두고 있다. 본 연구의 방법으로는 관련된 문헌고찰과 뉴욕의 메트로 폴리탄 박물관 J. R. Burdick 컬렉션을 방문하여 퀼트의 패치들이 silk insert라는 분석을 내렸고 Burdick의 연구(제작연대 1910~1912)에 의문을 갖고 연구자가 조사를 진행하여 이 연구과제에 사용된 silk inserts의 제작연대가 1934년경부터 1939년 경이라는 결론을 내렸다. 다음 단계로는 이 직물의 상태를 분석하였는데, 실크 섬유와 마닐라를 견디지 못하는 상태로 판단해 보존처리 방법으로는 접착제 Elvace 46575(vinyl acetate copolymer resin emulsion)를 Stabiltax에 코팅처리하여 직물을 강화처리하였다. 본 연구는 문서처리 되지 않은 미확인 직물의 역사적 의미 발견과 보존처리를 통해 후대의 텍스타일 연구자들에게 정보를 제공한다는 측면에서 가치가 있다고 사료된다.