## Conservation of the Old Hat

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#### I. Introduction

The goal of this paper is to conservate the old hat and restore its shape and place it on a supportive form in a stable protective container.

The hat is a composite construction of cotton fabrics, cotton lace being the predominant element of this ladies hat. In the young miss section of the 1908 Sears catalog, page 1041, a similar hat in both shape, and materials is described as a "duck hat, made in a mushroom shape, with tamcrown." Also, due to it's small size, it is my belief that the hat was made as a spring cap for a teenage schoolgirl circa 1907-09.

The hat is a homemade construction, utilizing three different machine made laces, and two cotton net fabrics. These fabrics have all been hand stitched onto a cotton buckram foundation, which defines the hat's shape. The brim's shape was defined and supported through the use of a paper-wrapped wire around the circumference. A similar wire supports the circumference around the crown's base, supporting that area where the hat rested on the wearers head. There is a light blue velvet ribbon which circles the crown base, being the lone additional decorative element.

## II. Method and Result

## 1. Condition

The general condition of the hat is good. The white lace has faded in color. The exterior, particularly the top crown piece, as well as the lace along the brim's edge has been generally soiled and discolored. Inside the crown, the cotton net has broken threads, and thread loss in several areas. The paper covering the two wires is very weak, and has discolored the lace in the areas of contact. The plastic buckles of the velvet ribbon have also discolored the areas where there is contact.

The lace which hangs over the wire support on the brim's edge, has become misshapen

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because it has been folded under the hats shape due to improper storage.

#### 2 Conservation Treatment

The goal of the treatment was to first stabilize the degradation of the fabrics comprising the hat, restore its shape, and place it on a supportive form in a stable, protective container.

To stabilize the fabrics, a bleaching/washing bath procedure was performed. The bath contained sodium hydroxide, sodium bicarbonate, sodium metasilicate, and hydrogen peroxide. Since the stitching around the crown piece had been broken in several spots, was generally loose and ineffective, it was removed and the piece was given a separate bath treatment.

The silk velvet ribbon because of the oval beads and raised velvet surface was removed before washing. It was steamed, blocked, and reattached later.

It was decided the two paper coated wires had to be left on the piece during the wash treatment. Immediate drying, utilizing a hair dryer was performed after the wash procedure, and stabilization of both the paper and wire was successfully achieved.

After the washing, drying and blocking was performed. Two blocking forms were made utilizing cotton gauze covered, circular shaped ethyfoam blocks, one for the crown and one for the lat. Polyester batting was placed on top of the hat's form and under the gauze cover for cushioning. Two nylon tubes filled with batting were sewn into circular shapes, one to cushion the hat's brim, the other to fill the circumference of the crown during drying.

Once dried, the crown was gathered around the edge using a running stitch. It was then attached to the hat with white cotton thread, employing a double back stitch. The ribbon was reattached in the back utilizing two stab stitches and placed back on the hat.

The mount was constructed using the ethyfoam blocking form made for the hat. Polyester batting was placed on top of the block, and the form covered with a cotton gauze fabric. Thee nylon donut used for the hat blocking was covered with felted cotton and used to support the brim in the storage container. The container was constructed of acid free board and measured 8.5 inches in height, 19 inches in width and 13.5 inches in depth. The dount was secured to a separate acid free board using cotton twill tape. The mount was placed into the dount and secured from movement by the snug fit.

#### 3 Results

The wash/bleach bath procedure was very effective. Virtually all of the light brown surface discoloration stains were removed. The darker brown spots, particularly concentrated around the two paper covered wires and assumed to be rust, were 90 % removed by the treatment. The brown spots apparently were due to the degradation of the paper covering, and not caused by the wire itself. The buckram foundation lost about 50 % of its stiffness, but this was not a major concern due to the fact that this hat should remain it its mount, which has been designed to serve for both storage and exhibition purposes.

### III. Conclusion

The initial three problem areas considered when first examining the duck hat were:

- 1) Understanding it's compositional make up in order to make informed decisions as to appropriate treatment.
- 2) Debating whether the removal of the two covered wires was warranted, in terms of maintaining structural integrity, and considering the time limitations relative to this procedure.
- 3) Would exposure to water in a bath treatment remove the starch in the buckram foundation to a significant degree? If so would the buckram retain enough stiffness and be able to retain it's shape?

Happily, the decision to leave the wires in place worked out extremely well, due to immediate hand-drying followed by placement on the blocking mount. The buckram lost stiffness, but not enough to significantly effect it's shape. I feel confident that this piece has been stabilized, and it's new conservationally correct storage environment will allow it to endure for many years to come.

#### References

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