

Family Activity

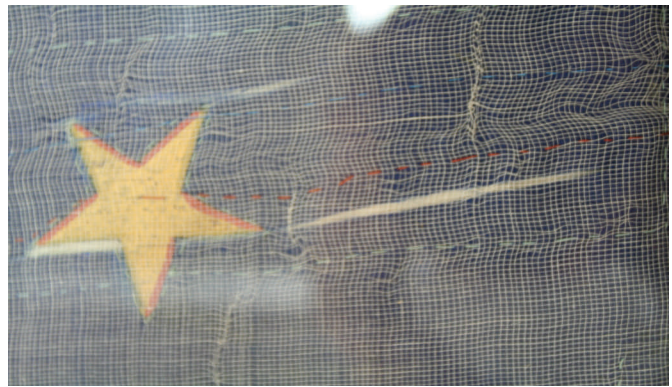
Conservation Journey

Step 1: Visual examination

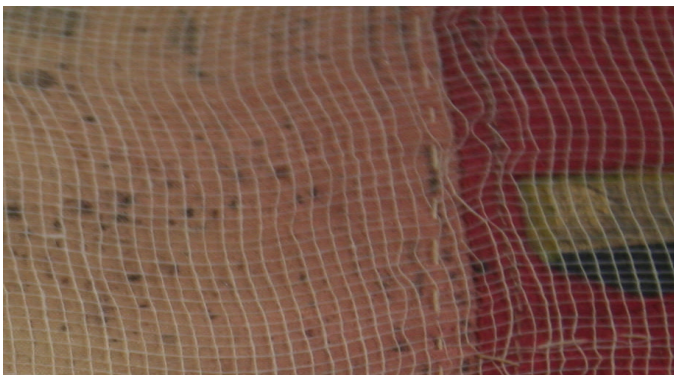
Examinations often reveal environmental damage to textiles. Circle in the images below where you see the listed type of damage.



Mold and Mildew Stains



Previous Conservation Stitches



Dye Bleed



Vertical Tears

Family Activity

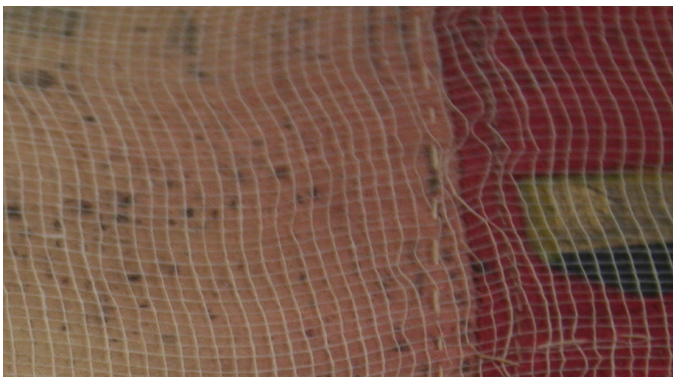
Conservation Journey

Step 2: Analysis of the Examination

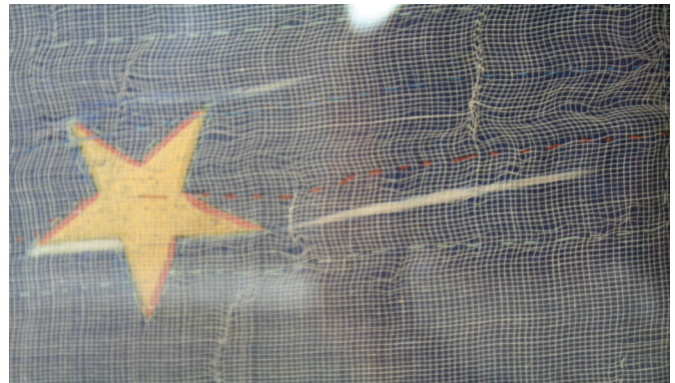
What did the examination tell us? At this point we must become detectives and analyze the clues.



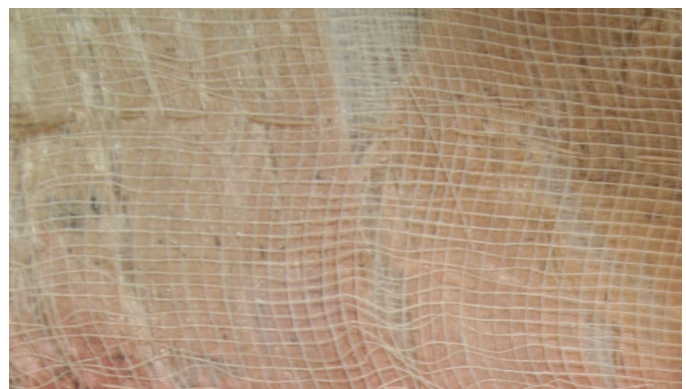
Mold and Mildew spots are signs of previous damp storage conditions. In 1904 there was a fire in the Capitol. This flag was stored damp in the Armory after the fire.



Dye bleed occurs when an unstable dye transfers from the fiber in the presence of water. During manufacturing of the red silk the dye or the dyeing process may have been defective. Or the dye might be weakened from exposure to high light levels over a long period such as 100 plus years of display in the Capitol



Previous conservation stitches were done by sewing into the field of the flag including painted areas. This causes a line of holes across the field of the flag similar to a perforation line. In 1898 the Governor's wife and Ladies of Iowa sewed gauze onto the flags as a way to save them from deterioration.



Vertical tears result from weakened fibers that have been exposed to long periods of light or have been under stress such as flapping in the wind.