## REPRESENTING EYE COLOR

## **EYE COLOR GUIDE FOR PROSTHETIC EYES**

THIS OBJECT FROM THE SMITHSONIAN'S NATIONAL MUSEUM OF AMERICAN HISTORY WAS MADE IN 1943 AT AN ARMY BASE CALLED CAMP CROWDER, LOCATED IN NEWTON COUNTY IN MISSOURI DURING WWII. IT WAS USED BY OCULARISTS (THOSE WHO DESIGN PROSTHETIC EYES), AND EYE DOCTORS AS A COLOR GUIDE TO MATCH A PROSTHETIC EYE WHEN A SOLDIER OR PATIENT LOST AN EYE. WHEN A PROSTHETIC EYE WAS CREATED THIS TOOL WAS USED AS A WAY TO MATCH THE EYE COLOR. EACH OF THE 25 IRISES ON THE TOOL WOULD BE LOOKED AT AS A POTENTAL MATCH WHEN COMPARING IT TO THE REMAINING EYE OF THE PATIENT.

THIS GRAPHIC WAS CREATED BY REVERSE ENGINEERING THE COLOR VALUES OF EACH OF THE 25 IRISES IN THE COLOR GUIDE OBJECT, AND COMPARING EACH TO WORLD EYE COLOR PERCENTAGES TO BETTER UNDERSTAND WHERE IT FALLS ON THE SPECTRUM FROM DARK BROWN TO LIGHT BLUE. THE GRADIENT BELOW WAS ALSO REVERSED ENGINEERED USING THE MARTIN-SCHULTZ SCALE, WHICH IS A TOOL USED IN PHYSICAL ANTHROPOLOGY TO MEASURE THE EYE COLOR OF INDIVIDUALS ACROSS DIFFERENT COUNTRIES.



OF THE 25 ARTIFICIAL IRISES
IN THE MUSEUM OBJECT AND
ITS COLOR VALUE.

96% OF THE COLOR VALUES OF EACH IRIS IN THE OBJECT FALL WITHIN 16% OF THE LIGHTER END OF THE SPECTRUM. ONLY ONE OUTLIER AT THE FAR LEFT OF THE PAGE



















79% Brown

5% AMBER 5% HAZEL GREEN S

**1**%

8% BLUE