April 2025

Virtual Museum of Celluloid House Yokohama

Celluloid House Yokohama Collection Introduction Series 2

Iwai Button Collection (1/3)

Masahiro Yokokawa (Celluloid House Yokohama)

1. Background and characteristics of the establishment of the Iwai Button Collection:

From its opening in March 2005 until its closure in March 2024, the Celluloid House Yokohama Museum has exhibited a variety of celluloid collection (all related to the celluloid such as products, molds, literature, books, magazines, etc). Many of the celluloid goods on display were collected as part of the activities of the Celluloid Industrial Culture Research Group (established in 2000) in which **the collection of buttons** was also included.

As the industrial production and the materials of celluloid goods have ended before 2000, our collection of celluloid buttons, started in the early 2000, could not be procured directly from manufacturers, but was purchased or donated through antique exhibitions, antique dealers, persons involved in arts and crafts trade, button dealers, overseas antique markets (at the time of Iwai's overseas trip).

Since our button collection was initiated by a celluloid collector not by a fashion enthusiast, the collection contains not only buttons with decorations (so called as antique buttons), but also many buttons only for practical purposes without decorative element (it is noteworthy that the latter still holds its unique shape and color).

Although the purpose was to collect celluloid buttons, about 40% of the buttons ware other than celluloid such as acetyloid (acetate resin) , acrylic resin (PMMA) , nylon (PA) , and others (glass, etc.).
It is presumed that, in pursuit of the celluloid buttons without a way to identify the material, it had no choice but to purchase buttons containing characteristics similar to celluloid.

2. How to categorize and introduce our button collection:

Our button collection has been classified from the viewpoint of **"material, components, buttonhole position, and shape"**.

Classification criteria:

① Material Classification (All Buttons) :

Using **a plastic material identification device** (Note 1), the material was identified by near-infrared spectroscopy.
The function of the material identification system is determined as follows:

① Irradiate near-infrared rays the object, ② Measure the waveform of the light reflected by the object, ③ Compare the waveform with the registered one.

(Note 1: Yamamoto Manufacturing Co., Ltd.'s Plastic Material Identification System **"Placil"**)

An example of Material Identification by Placil: Please refer to **the attached Photo** (Page6)

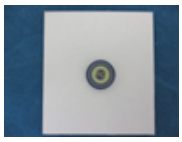
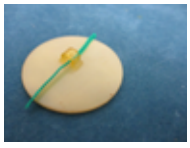
As a result of the material classification, the entire Iwai button collection is as follows.

Quantity: (In the case of combination buttons, if they are individually, they are counted as one outer and one inside, that is, two, and if they are combined, they are counted as one.) Total number: 1,919 pieces

Celluloid button	1,165 (60.7%)	39 Trays + 1 Box
Acetyloid button	193 (10.1%)	3 Trays + 1 Panel
Acrylic Resin (PMMA) Buttons	323 (16.8%)	4 Trays
Nylon (PA) button	152 (7.9%)	1 Tray + 1 Pack
glass, metal, PP button	16 (0.8%)	1 Tray
Others (natural wood buttons, non-judgmental buttons), etc.	70 (3.6%)	1 pack (6 packs included)

② Classification of the celluloid button by component:
- Buttons that consist only of celluloid
- Celluloid and metal composite: the outside is made of celluloid with back metal shaping the buttonhole.
- Metal Buttons with celluloid decoration
- Buttons made of celluloid and other materials (including natural materials)

③ Buttonhole Position: **Front Hole** or **Back/Foot Hole**:
- **Front Hole** Button (Photo No.1): A button with button hole perforated through the thickness and usually they have 2 or 4 holes. We have not distinguished the buttons by the number of holes, but we specify here that one 3-holes button exists in Tray 26.
- **Back(Foot)Hole** button(Photo No.2): The buttonhole is made parallel to the button face on the back side (instead of the thickness direction). We have not distinguished the buttons by the Back(Foot)Hole types such as Tunnel type(the hole drilled inside of the button), Protrusion type, etc.

Photo No.1			Photo No.2		
Front Hole Button (2holes)	Front Hole (4 holes)	Front Hole (3 holes)	Celluloid Back Side/ Protrusion Celluloid	Back Metal/ Protrusion Metal	Back side of button/ Tunnel type
					

④ Classification by shape and pattern:
-Buttons that consist only of celluloid: surface shape (flat or curved), surface pattern
-Celluloid and metal composite Buttons: presence or absence of bulges (hollow Bubble Top), Shape of surface.
- All other buttons: Shape and Type of pattern.

Presentation Method:
The button collection is usually displayed on a mount (so called a tray) among buttons collectors.
We have consolidated all buttons (mostly roses) into 48 Tray + 1 panel + 1 box (string-threaded) + 2 packs.

3. Introduction to Iwai Button Collection:

Currently, the Celluloid House Yokohama does not have a permanent exhibition of its collection, but the Button Collection can be viewed as an exception.
In addition, we welcome the exchange of information and joint research with button professionals, clothing professionals, related collectors, and the others who are interested in this theme, and we invite you to contact us by e-mail at the following address: celluloidhouse@aol.com

In this article, we will introduce some of our buttons paying attention to the characteristics of the button material.

A) Celluloid button

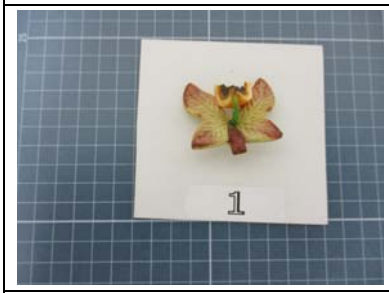
Features of Celluloid Button:
Celluloid was the world's first semi-synthetic resin developed as an alternative to ivory, and was easy to color (dye, paint) and to process (stamp, press, extrude). Due to these features, it was used as a number of imitation materials (buffalo horns, tortoiseshell, wood, minerals, coral, etc.) for the manufacture of inexpensive buttons. From the late 19th century to the mid-20th century, it was manufactured and used in large quantities around the world, but after the year of 2000 the production ceased due to concerns about its flammability and to competition from other newly developed synthetic resins.
The unique shape and color of celluloid buttons must have been created in harmony with the design and color of the clothing in which the buttons are used.

A-1. Buttons that consist only of celluloid (decorated button)
A certain thickness is required to maintain the strength of the button. On the other hand, due to the high workability of celluloid (the shape of the undercut can also be molded), the shape of the button is varied, and the color tone that looks exactly like various natural materials is created due to the high dyeability.

<table>
<tr><td colspan="2">Cubic Button(Tray 1): Imitation of natural materials (buffalo horn)、Free Shape (Horn, Square prism, Spinning top, Spherical, Shell, Dome) 13 pieces - Tray 1、2</td></tr>
<tr><td rowspan="4">  </td><td>Toggle Button for duffel coat</td></tr>
<tr><td>  </td></tr>
<tr><td>Spinning top button</td></tr>
<tr><td>  </td></tr>
</table>

Back(Foot)Hole button-Shape-mimicking buttons(flowers, shells) - 14pieces Tray3

Flower



Shell

Back(Foot)Hole button - Hors d' Œuvre Button 32pieces - Tray4,5

Back(Foot)Hole button- Spaghetti/Twisted pattern 67pieces - Tray6,7,8,9

Back(Foot)Hole button-Ultra Fine patter Tray6,7,8,9

The attached Photo: An example of Material Identification by Placil:

(to be continued to the series No.2/3)