

# A Study of Drop Handles Design<sup>1</sup>

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## ABSTRACT

The drop handle in the Chosun-Dynasty played a role lifting up the cabinet and box which was attached to and besides this had the decoration function. The scope of this study should include the drop handles from the 18<sup>th</sup> century up to now by investigating and analyzing their definition & function and furthermore the types of their designs. The object of the study was the drop handle having 2 golden fixing parts which are definitive difference from ring or loop, and the design typology of drop handle was concentrated on the handle part, and it can be classified in two types. The one is the figuration of bow, bat, bamboo, fish and bird and so on from the motive of nature on the handle part, and the other one is the drop handle of the simple □-shape, the temple-symbol shape or geometrical forms. According to the analysis of relics & literature from the past it was found that there were more quantitative nature-motive figurations than the geometrical forms. The nature-motive figurations were again classified in box-, bat-, cloud- bamboo-, fish- and bird-type, and the geometrical forms in □-shape, the temple-symbol shape and others. The cases applied to furniture are roughly divided into the front-attached type and the side-attached type.

In comparison of the drop handle in the Chosun-Dynasty with that of modern times, □-shape and bow-type keep the long tradition of the drop handles despite of the constructive change partly. Ring-type is similar to the just ring or loop of the part and drop handle with one golden fixing part, while the knob-type shows almost same forms in the past as well as in the modern times. Which type among handles in the modern times has little connection with the past is the reclaimed type, and it was showed in the Chosun-Dynasty and also is showed up to now identically that the man-made hole on the front side of the drawer for the function as handle.

**Keywords :** Drop Handle, Design, Furniture

## 1. Introduction

### 1-1 Purpose of Study

A drop handle are defined as the semicircular-shaped handle made of metallic decoration attached to the drawer or door part of furniture to lift up and pull furniture, since long time. Its primary function is to play a role as handle to lift up the big furniture like the cabinets and boxes,

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and the secondary is decorative function. The handles for the furniture in the modern times can be classified in different groups, but the object of this study should be the so-called drop handle, namely “⊃-shaped” handle. Drop handle nowadays are manufactured mostly under the name ‘handle’ by the fitting- and accessory makers for the architecture and furniture. Due to the primary function to life up the furniture they are usually made by metal and sold in the hardware store, but the source of them are not clear because the Western patterns and designs were mixed up. This resulted from the tendency to imitate the incoming patterns from foreign countries thoughtlessly, without considering the development of the tradition. Therefore, it can be hardly harmonized with the furniture of which root is from the Korean tradition and has Korean identity accordingly. But still, it is not simple for the furniture designers to be able to manufacture the hardware according to their personal needs & tastes in consideration of cost, and so they just chooses the nearest one among the sell goods of the drop handles in the market. That is the alternative standard for furniture designers to select the drop handles in these days.

From this reason the study of drop handle originating from Korean tradition would be highly needed and such theoretical basis plays a meaningful role to develop the drop handle design corresponding to Korean furniture and furthermore to define Korean identity. The aim of the present study is to investigate and analyze the definition and sorts of the drop handle used for Korean furniture, but which has been disappearing or modifying, for the research of design of the drop handles. The comparison between drop handle and handle in modern time should be presented at the same time and this intends to firm an academic basis of the drop handle for its reinterpretation according to the present day.

## **1-2 Scope and Method of Study**

Scope of the study includes the drop handles used from the 18<sup>th</sup> century until today and investigate their definition, function and design typologies. Drop handle can be classified in 2 sectors according to one or two golden fixing parts, but the drop handle with one golden fixing part is in this study exception due to it’s difficult differentiation from the ring (loop) and only the “⊃-shaped” type with two metallic fixing parts is here the object of the study. Also the support part for the drop handles which was using at assembling into the furniture is excluded in this investigation, because there are excessive studies already regarding it’s patterns & sorts.

Methods of study should be investigated of the definition and audiovisual materials with the help of the technical literatures and reference papers. The National Museum and the other museums where there are the related relics has been explored for the data collection, and Eulji-street and Nonhyun-street too, because the furniture- and hardware shops are closely located there and they can definitely contribute to the research of the different drop handle designs. On the basis of these data searching the typology of the drop handle design was analyzed in 2 groups, the nature-motivated figuration and the geometrical figuration.

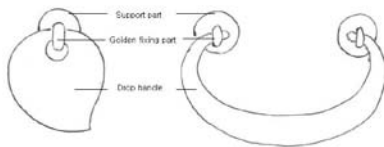
## **2. Study of Drop Handle Designs**

### **2-1 Consideration of Drop Handle**

The first handle in the human history ever is assumed as the round-typed wooden button (Big, 1996), and this is matched with the fact that the wood had been often used for the furniture in the ancient era. (Lee & Cho, 2003). In Korea the drawer of furniture and the handle of door had been

called as “drop handle” or “ring/loop”, and there is no exact information when the drop handle had been made of metal material for the first time ever, but the oldest relic is the drop handle attached to “Najungukhwa Munkyungham” made in the 12<sup>th</sup> century of the Goryeo-Dynasty (Table 5). The relics of the drop handles made of metal are mostly from the latter part of the Chosun-Dynasty and this is said from the reason that the craft by the nobility in the Goryeo-Dynasty was replaced by the master craftsman in the Chosun-Dynasty in full swing.



Drop handle which was attached to the cabinets or boxes and played a role as a important handle to lift up it’s main body was assumed that what had one golden fixing part was older than what had two golden fixing part, in consideration of the existing relics (Bae, 1993). The golden fixing part means a ring or loop made for the purpose to lock door handle as the round-typed bent latch shown in the Fig. 1. The drop handle with one golden fixing part is not enough to lift up the main body and it is mostly attached to the little door like the stationary chest or writing table. In this context, the ring/loop that works for the function to open & close the door and drawer has to be mentioned regarding it’s difficult differentiation from the drop handle with one golden fixing part, because it is attached to the one golden fixing part. This study therefore concentrates on the drop handle with 2 golden fixing parts which is clearly differentiated from the other one, and this is usually attached to the side & front of the furniture to life up the main body, and it’s decorative function has been recently focused while it has been modified into door knob gradually.




**Fig. 1 Part name of drop handle (Jung, 1994)**

According to the paper ‘Study of the drop handle in the Chosun-Dynasty’, the 35 % shows the one golden fixing part and the 65 % two golden fixing parts (Choi, 1983) among the furniture in the Chosun-Dynasty being the object of this study, and the drop handle including tow golden fixing parts is expected as the main utilization thanks to the functionality. The table 1 below offers the comparative analysis regarding the dimension and material in the aspects of the function and characteristic of the ring/loop and drop handle. Logically the dimension of the drop handle with one golden fixing part is smaller than that with two, and tin and nickel were used for furniture for the noble class while the cast iron and tin for the ordinary furniture. For the ring/loop and drop handle all these three materials had been used.

**Table 1. Comparison between ring/loop and drop handle**

	Part Name	Image	Function & Characteristic	Dimension	Material
1	Ring / Loop		-open & close function -one fixing part connected with chain -Korean wooden furniture, P. 294	-Width; 15~20m -Length; 15~22	Thin, Nickel, Cast Iron Common Use
2	Drop Hand One Fixing Part		-Attached to small furniture like Stationary chest or writing table -Woodcraft, P. 277		

	Two Fixing Part		-Attached to the side & front panel to lift up the main furniture. -Woodcraft, P. 286	-Width; 55~120mm -Length; 25~55mm
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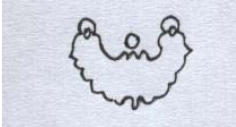
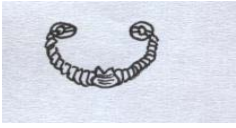
## 2-2 Analysis of Typology of Drop Handel



The designs of drop handles are analyzed according to the handle part and classified in 2 groups roughly. The one is the figuration from nature motive like bow, bat, bamboo, fish and bird on the handle part, and the other is the simple  $\sqsubset$ -shape, the temple-symbol shape and the geometrical figuration. The relics and literatures which were handed down show the majority of the nature-motive figuration than the geometrical forms.

### 2-2-1 Figuration from the Nature Motive

To this group the figuration of the bow, bat, cloud, bamboo, fish and bird-typed drop handle can belong. Bat was well known of the strong propagation power and a long life. Among others it was the symbol of the “productive males” and used for the furniture placed in the main room, and also it symbolized Five Blessings (longevity, wealth, health, love of virtue, peaceful death). Cloud is also one of the ten traditional symbols of longevity and bamboo has a right-hearted principle and was used often for the reception room of a house. Fish symbolizes the fecundity and carps especially mean success in life. Crucial carps are said that they sleep with the opened eyes and was used therefore as guardian for the furniture (Choi, 1983). The oriental phoenix was a bird in the imaginary world and means the power and authority, and expresses female while dragon means male.

Table 2. Drop Handle from Nature Motive

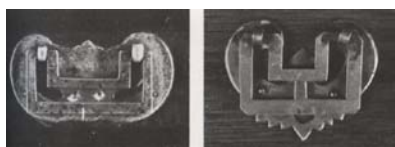
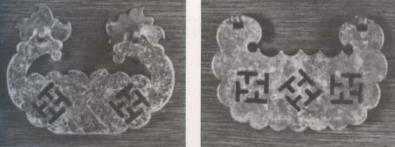

Type	Image	Explanation	Source
Bow		Bent type like bow/simple/the most type among drop handles. Handle part is thick & soft / comfortable to lift up the main furniture body.	Korean Wooden Furniture, P. 295
Bat		Bat body lies in the middle of the drop handle and the end of both wings is connected with the rings. Practical to lift up the main body, but there are the over expressed handles in wing parts.	Korean Wooden Furniture , P. 298
Cloud		Cloud-typed / decorative characteristic was stressed than function.	Beauty of Ijo Wooden Furniture, P.112
Bamboo		Functional drop handle reminding of joint of bamboo and bamboo shoot.	Beauty of Ijo Wooden Furniture, P.112

Fish		Crucial carp and carp typed drop handles / Decorative function / not comfortable to lift up the main body in practice.	Korean Wooden Furniture, P. 301
Bird		Bird or Phoenix typed drop handles / more decoration than function itself, like the fish-typed.	Korean Wooden Furniture, P. 301

### 2-2-2 Geometrical Figuration

Under geometrical figuration it is said the “ㄷ-shaped”, the temple cross shaped and the others. The “ㄷ-shaped” is linear type unlike the bow-typed and can be not comfortable in practice. It is 2 lines typed with the opened middle part and why it was named according to the consonant “ㄷ” of Korean language is unknown. It was only assumed as a developed type from the basic form of the simple bow-type. The temple cross type which was originated from Buddhism had been mostly used in the Chosun-Dynasty, and it symbolized the sun. The other type is the handle applied to the lighting furniture and looks like the “ㄷ-shaped”.

Table 3. Drop handles from geometrical motive

Type	Image	Explanation	Source
“ ㄷ-sh aped ”		Motivated from “ㄷ” consonant of Hangul/the left one looks practical, but the right seems to be not comfortable to grip an shows decoration.	Korean Wooden Furniture, P. 301
Temple type		Temple-pattern inlayed on the handle part / more decoration than function shown.	Korean Wooden Furniture, P. 299
Others		Attached to the lighting furniture like lamp and hand-lantern / function to lift up the lightings.	Woodcraft, P. 151 / Korean wooden furniture, P. 247







### 2-3 Case Study of Placement of Drop Handles on Furniture

Application can be roughly classified in 2 cases, drop handle attached to the front and to the both sides of the furniture.

### 2-3-1 Case study for the Front Attached Drop Handles

Drop handle attached to the front of the furniture does not play a role to lift up the main body, but as function to open & close the drawer and door. The good examples hereupon are dressing table with small mirror, closet, writing table, stationary chest and cabinet etc. and the attachment both to the front and to sides have been found case by case.




Table 4. Drop handle attached to the front of furniture

	Name	Image	Explanation	Source
1	Dressing Mirror		Dressing table with small mirror being folded in the 19 <sup>th</sup> century of Chosun-Dynasty / the “ $\sqsubset$ -shaped” drop handle was attached to the front side.	Wood Painting Craft, P.144
2	Closet		ChungCheong-Do Closet: 4 drawers designed in the upper part of the closet and the bow-typed drop handles are attached to them respectively.	Closet of Chosun-Dynasty, P. 87
3	Writing Table		Writing table in the 19 <sup>th</sup> century / Function : to place the books on the table or keep personal article in the drawer / the bat-typed drop handle was attached to the front .	Korean Wooden Furniture, P.53
4	Stationary Chest		Stationary chest in the 19 <sup>th</sup> century / Function : to keep documents and writings supplies / the bow-typed drop handle was attached to the whole front of the drawers. Housed in The National Museum.	Korean Wooden Furniture. P.31
5	Cabinet		Cabinet with the dome opening door in the 18 <sup>th</sup> century / the bow-typed drop handle attached to the front & the ring-typed to both sides, too.	Wood Painting Craft, P. 252
6	Chest		Case for cigarette in the late Chosun-Dynasty / the “ $\sqsubset$ -shaped” drop handle on one side and the ten traditional longevity being silver-coated on the other side.	The National Museum

### 2-3-2 Case study for the Side-Attached Drop Handle

The drop handle attached to both sides of the furniture should play a role to lift up the main body of the furniture, so it was suitable for the big furniture like closet and cabinet, but also there was the small-sized furniture, like case.

Table 5. Drop handle attached to the sides of furniture

	Name	Image	Explanation	Source
1	Chest		“Najungukhwa Munkyungham” estimated in 12 <sup>th</sup> century of Goryeo Dynasty / keeping Buddhist Scripture	Wood Painting Craft, P. 105
2	Closet		Closet in the 19 <sup>th</sup> century of Chosun Dynasty / dimension of length 80.3 cm & width 40.2 cm & height 119 cm. Two-storied closet having the bow-typed drop handle made of metal attached to both sides	Wood Painting Craft P. 135
3	Cabinet		The 19 <sup>th</sup> century, Chosun Dynasty, Cabinet with the half-open-closing door / the bow-typed drop handle was attached to the side.	Wood Painting Craft, P. 255

### 2-3-3 Others

Lamp where was placed in the corner of the room has function to light up the entire space and the drop handle attached to the upper part makes it portable. Very similar to this, also the hand-lantern has the drop handle made of bamboo in the upper part for it’s portability.



Fig. 3. Lamp, Wood Painting Craft, P. 151

## 3. Conclusion

The function of the drop handles in the Chosun-Dynasty was primary as a handle to lift up the main body of furniture which they were attached to and secondary had decorative function. In this study the drop handle with 2 golden fixing parts which is clearly differentiated from the ring is the object, and it’s design types are classified in 2 groups according to the handle part which was gripped by hands. The one is the figuration of the nature-motivated on the handle part, e.g. like bow, bat, bamboo, fish and bird, and the other form is the geometrical figuration like the 匚-shape, the temple-symbol shape and others. After analyzing it was found there are more nature-motivated figurations in the relics and literatures than the geometrical forms. Under the nature-motivated

figuration it can be called the bow-, bat-, cloud-, bamboo-, fish- and bird-typed drop handles, while the “☐-shaped”, the temple-symbol shape and others belong to the geometrical figuration. The cases applied to furniture are roughly classified in 2 groups, namely the front attached and the side attached types. The drop handle attached to the front part of furniture plays a role as handle to open and close the drawer & door, rather than to lift up the furniture, the examples for this case are the dressing table with small mirror, closet, writing table, stationary chest and case and so on. The drop handles attached to the side of furniture on the other hand should have function to lift up the furniture and had used for the big furniture like high closet and cabinet, with exception of small case. For others the hand lamp can be said and it has function to light up the entire space where it is placed, and the drop handle was attached to it's upper part for the portability.

The comparison of drop handles between in the Chosun Dynasty and present days shows that the ☐-shaped and bow-typed keep the tradition handed down from the past, despite of their changes in construction partly. The ring type handle looks similar to the ring and drop handle with one fixing part, and in case of the knob handle the design is almost same in present days as well as in the Chosun Dynasty. Among the handles nowadays the only type which has no relation with the part is the reclaimed type, but the man-made hole in the front of drawer for the function as handle is shown not only on the past, also nowadays same.

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