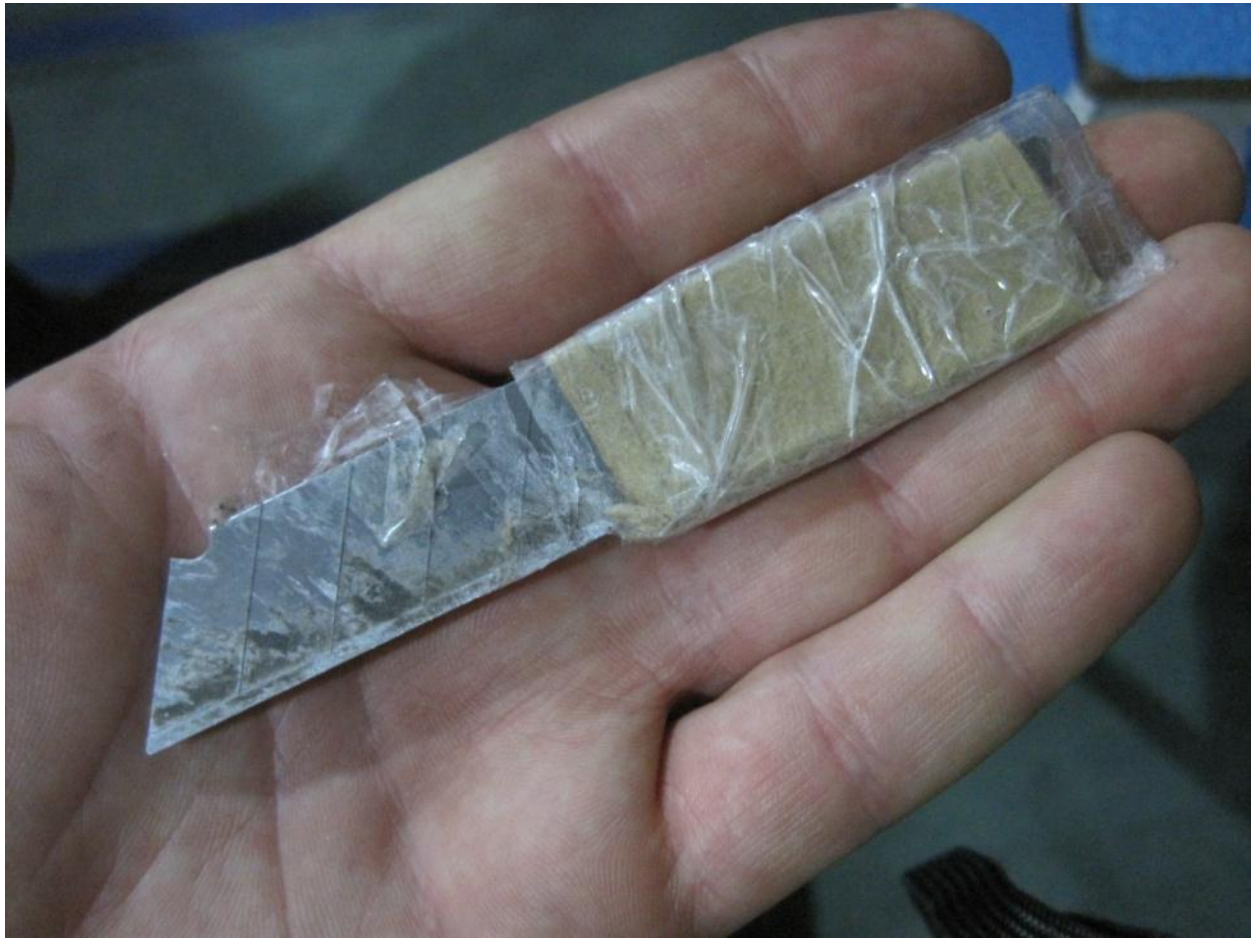
Tour of the Knife and sword museum
Hangzhou, about 3 hrs drive west of shanhai.
By Jove Lachman-Curl, summer 2014

On one of my work trips to China earlier this year I had luck to visit this Museum. The knife and sword Museum (also scissors) is next to a section of the grand canal, the longest canal in the world, during the 5-6th century it spanned unbroken 17000 miles of trading canals from Beijing to Ningbo. They invented the canal lock, the highest part of the system being ~140ft. I'd added info to the pics where I had some.

Many of the images are poor quality due to the lighting of the museum; also I've compressed them to make it emailable. If anyone wants a full size image to look at a detail, quote me the page number and I'll happily send it along. There is a run through the history of Chinese swords, then some knives and some swords from other parts of the world. I start with a few pics of general interest.

This first image is a knife I saw in a factory used for opening boxes and cutting threads. A reminder of how simple a knife can be. Blade + tape. Probably costs 10c.



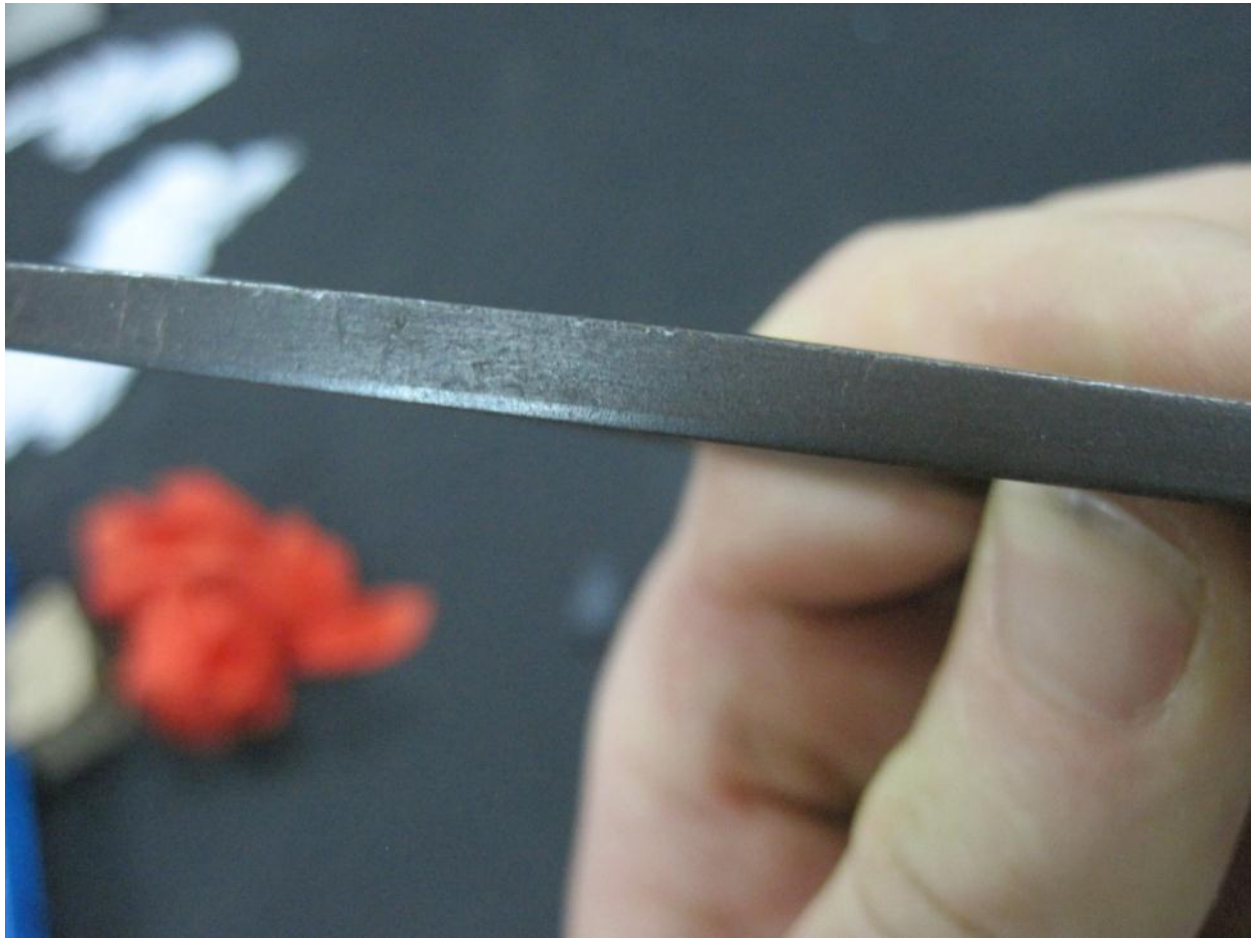
A leather punch, looks easy to make, someone may find this useful.

A knife in a store in china with alloy and hardness noted. First time I'd seen this.

Coal barge, up to and a little over capacity. See empty and full barges in distance.

Fatigue crack, stress concentration at edge of shoulder caused this fatigue crack. Initiated at top edge, grew and finally broke through the last crescent moon at the bottom. A reminder for those nice curves on stick tangs to reduce stress concentration.

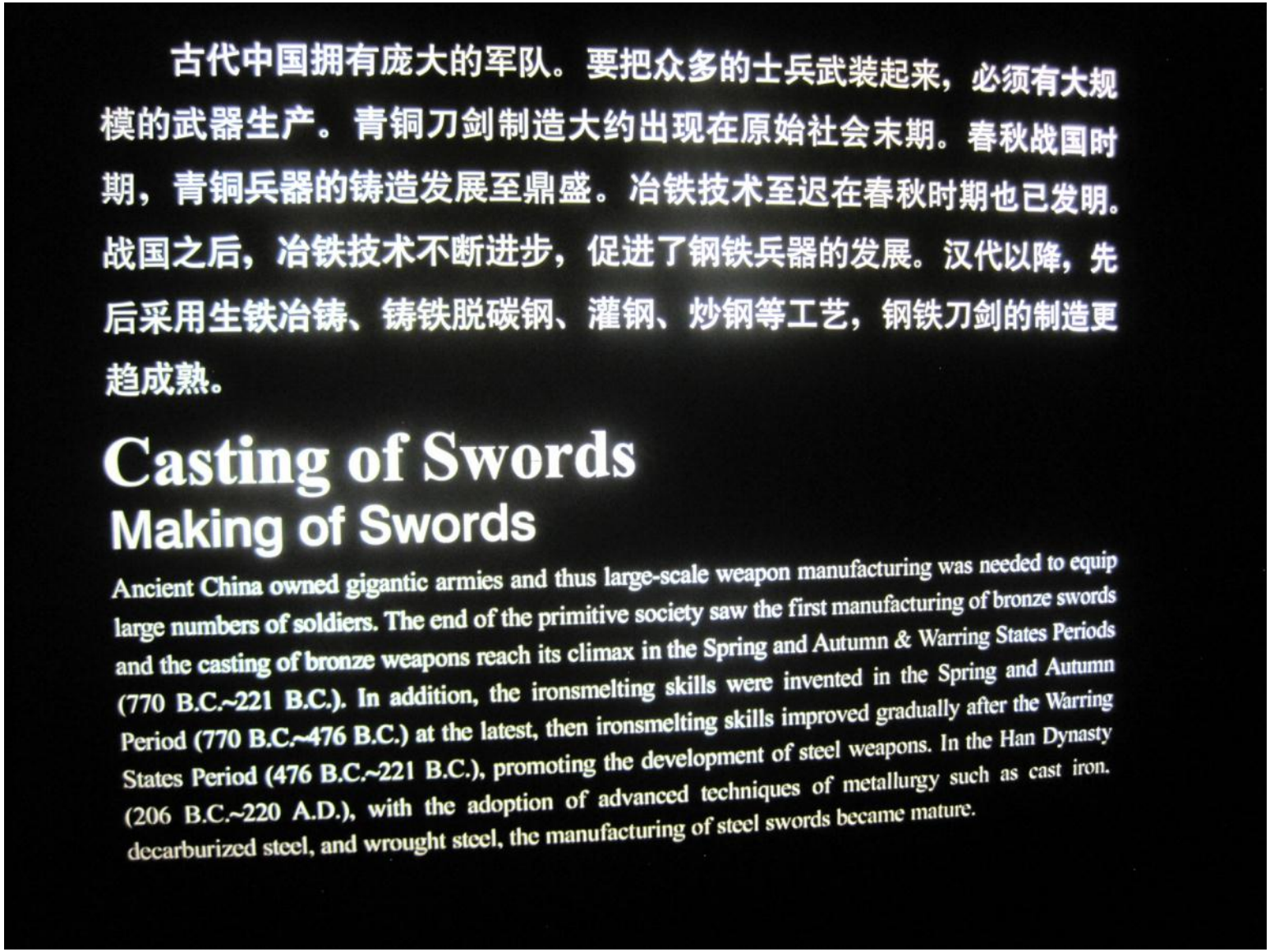
Old tailoring scissors, laminated blade faces.



High carbon cutting face does not rust in the same way as the rest of the scissors. Note the bright line 1/16th thick.

High carbon hard face cracks, body does not.

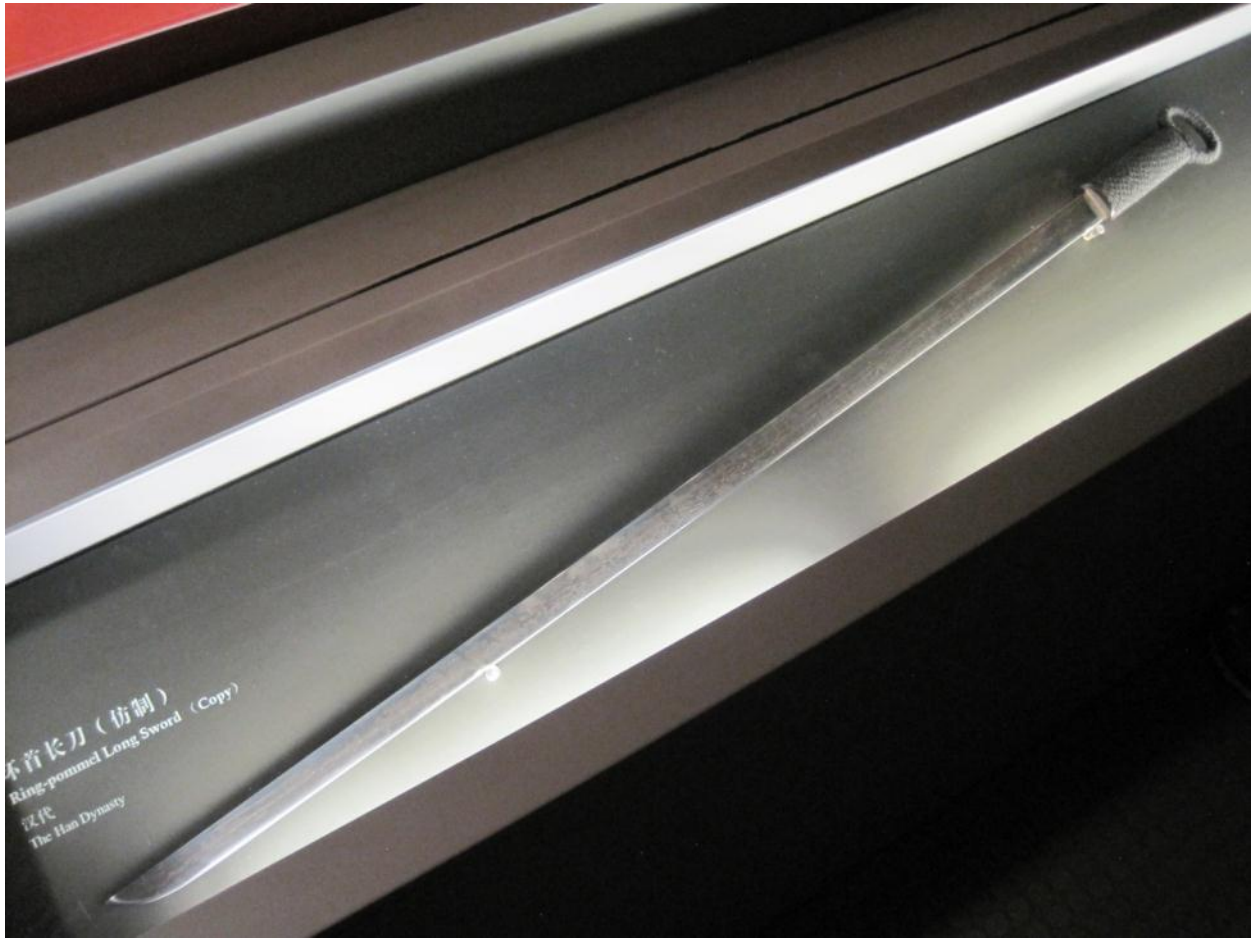
Welded up screwdriver, I love how they just get on with it.


古代中国拥有庞大的军队。要把众多的士兵武装起来，必须有大规模的武器生产。青铜刀剑制造大约出现在原始社会末期。春秋战国时期，青铜兵器的铸造发展至鼎盛。冶铁技术至迟在春秋时期也已发明。战国之后，冶铁技术不断进步，促进了钢铁兵器的发展。汉代以降，先后采用生铁冶铸、铸铁脱碳钢、灌钢、炒钢等工艺，钢铁刀剑的制造更趋成熟。
Casting of Swords
Making of Swords
Ancient China owned gigantic armies and thus large-scale weapon manufacturing was needed to equip large numbers of soldiers. The end of the primitive society saw the first manufacturing of bronze swords and the casting of bronze weapons reach its climax in the Spring and Autumn & Warring States Periods (770 B.C.~221 B.C.). In addition, the ironsmelting skills were invented in the Spring and Autumn Period (770 B.C.~476 B.C.) at the latest, then ironsmelting skills improved gradually after the Warring States Period (476 B.C.~221 B.C.), promoting the development of steel weapons. In the Han Dynasty (206 B.C.~220 A.D.), with the adoption of advanced techniques of metallurgy such as cast iron. decarburized steel, and wrought steel, the manufacturing of steel swords became mature.

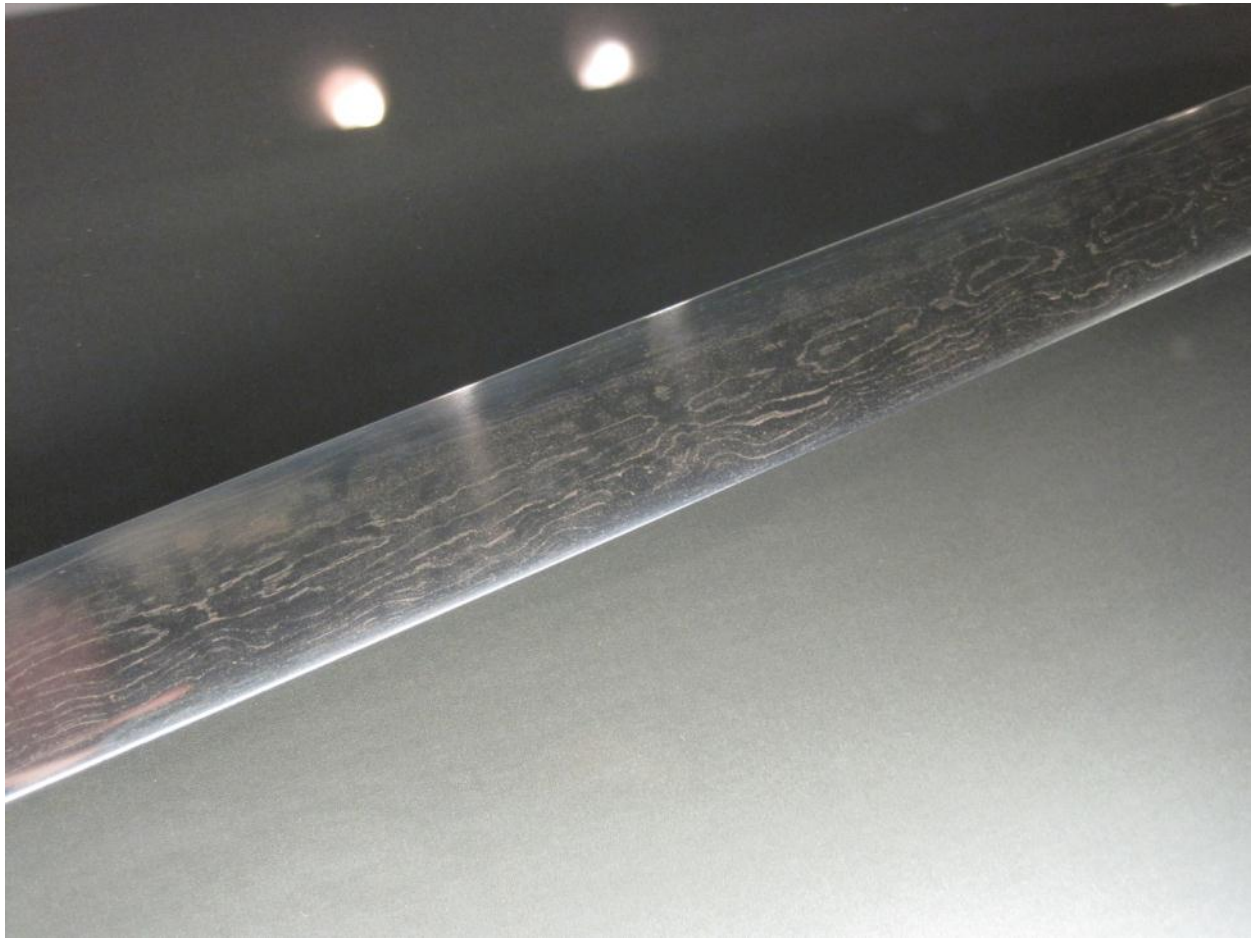

14


过程（二）
复制青铜剑的工艺过程（一）
铜剑及铜剑铸型

Bronze sword, interesting patina

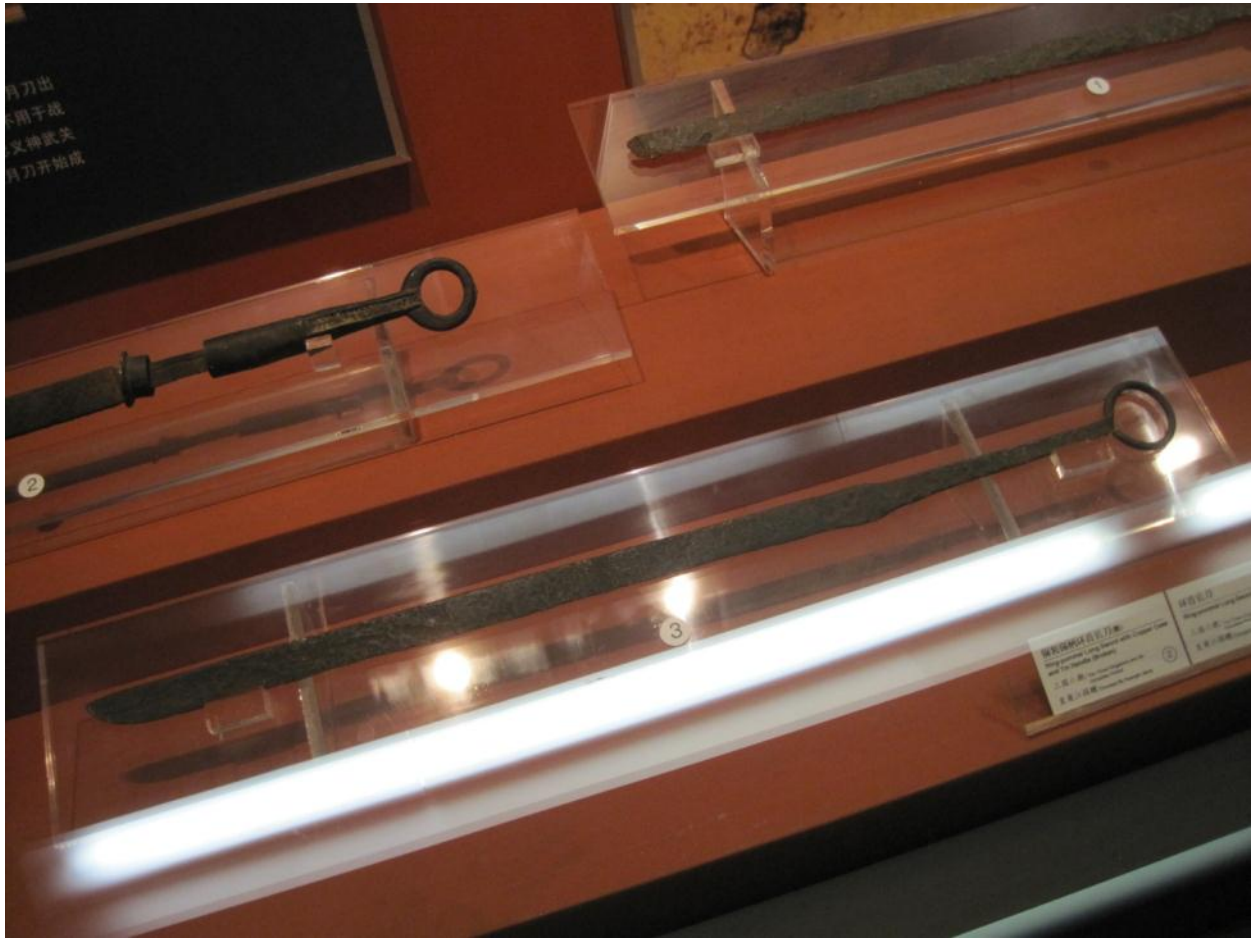


Han dynasty ~200 BC-200 AD. a reproduction.



Detail of sword above.

900-1200 AD. Ring pommel swords.



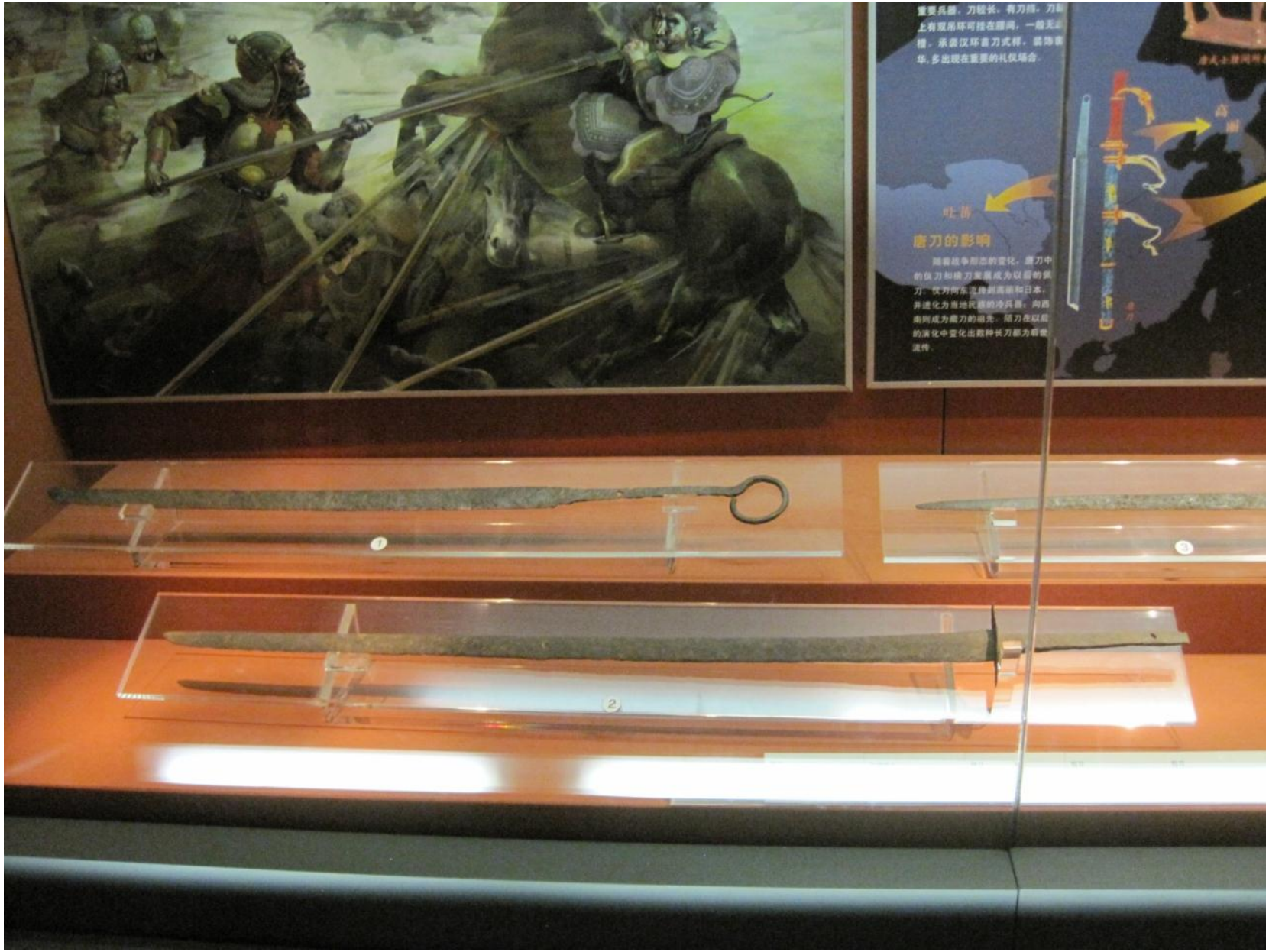
~1000 AD


青龙偃月刀
传说中关羽使用的青龙偃月刀出现于唐代，属重兵器，基本不用于战阵。清政府追封关羽为“忠义神武关圣大帝”，关羽配青龙偃月刀开始成为定制。
2

~1000 AD

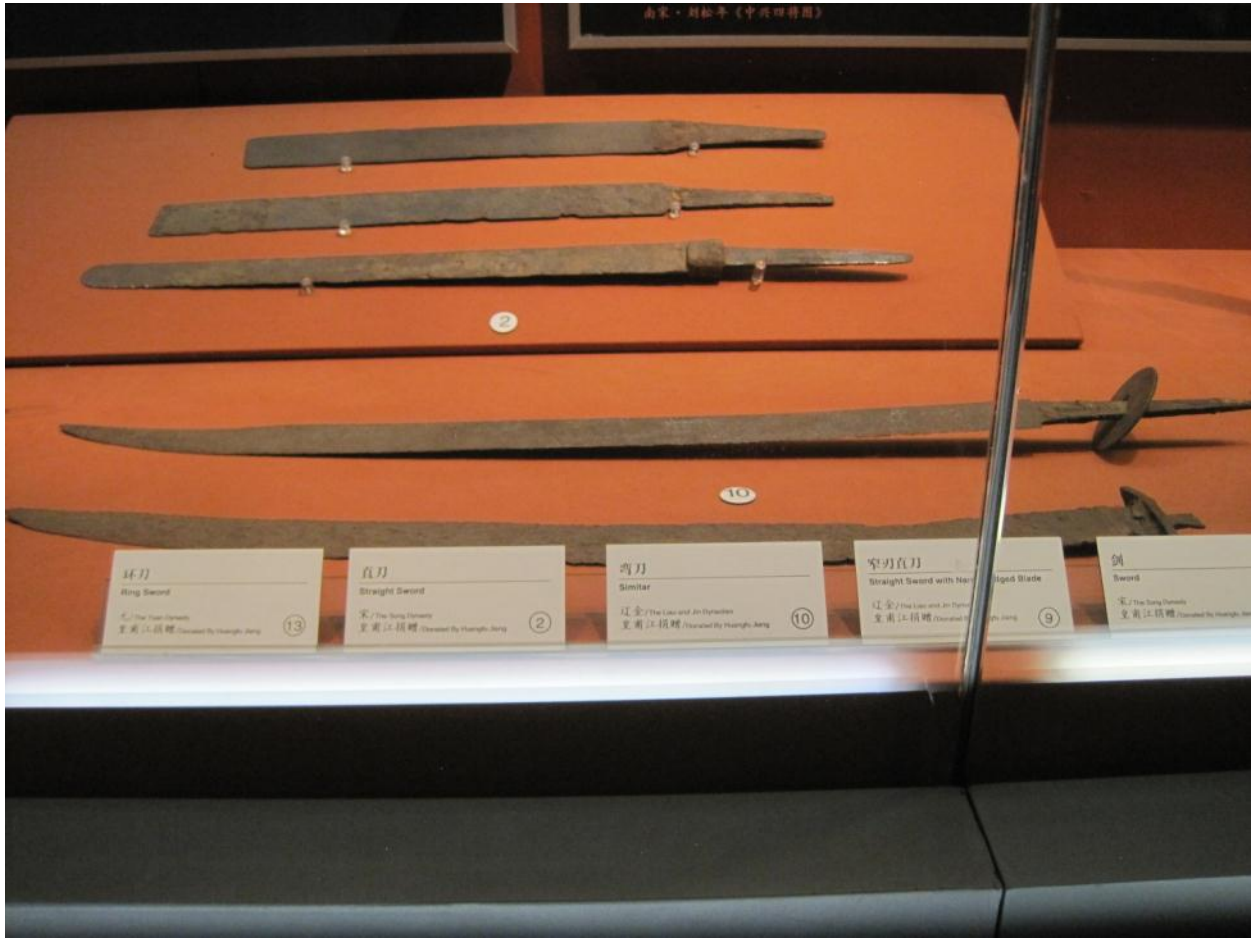
This and next: short swords of 900-1300 AD.


兴衰荣辱，也影响了整个亚洲的冷兵
器文化。
4
5
6


唐刀的影响


元弯刀（仿制）
Similar of the Yuan Dynasty （Copy）
当代
The Contemporary Age


宋元时期刀剑
SWORDS IN THE SONG
AND YUAN DYNASTIES
(960~1368)
宋代仍以冷兵器为主，刀是主要
的格斗兵器。宋元时期的刀已运用纯
熟的夹钢技术，并吸收西北少数民族
的风格，形状有所改变。长刀变化为
刀身微曲、刀头较宽、厚背薄刃，装
直的长条形方刀头也改成前锐后斜的
形状，并带有护手。从遗存的实物
宋代刀剑


环刀
Ring Sword
13
直刀
Straight Sword
2
弯刀
Similar
10
剑
Sword
2
10

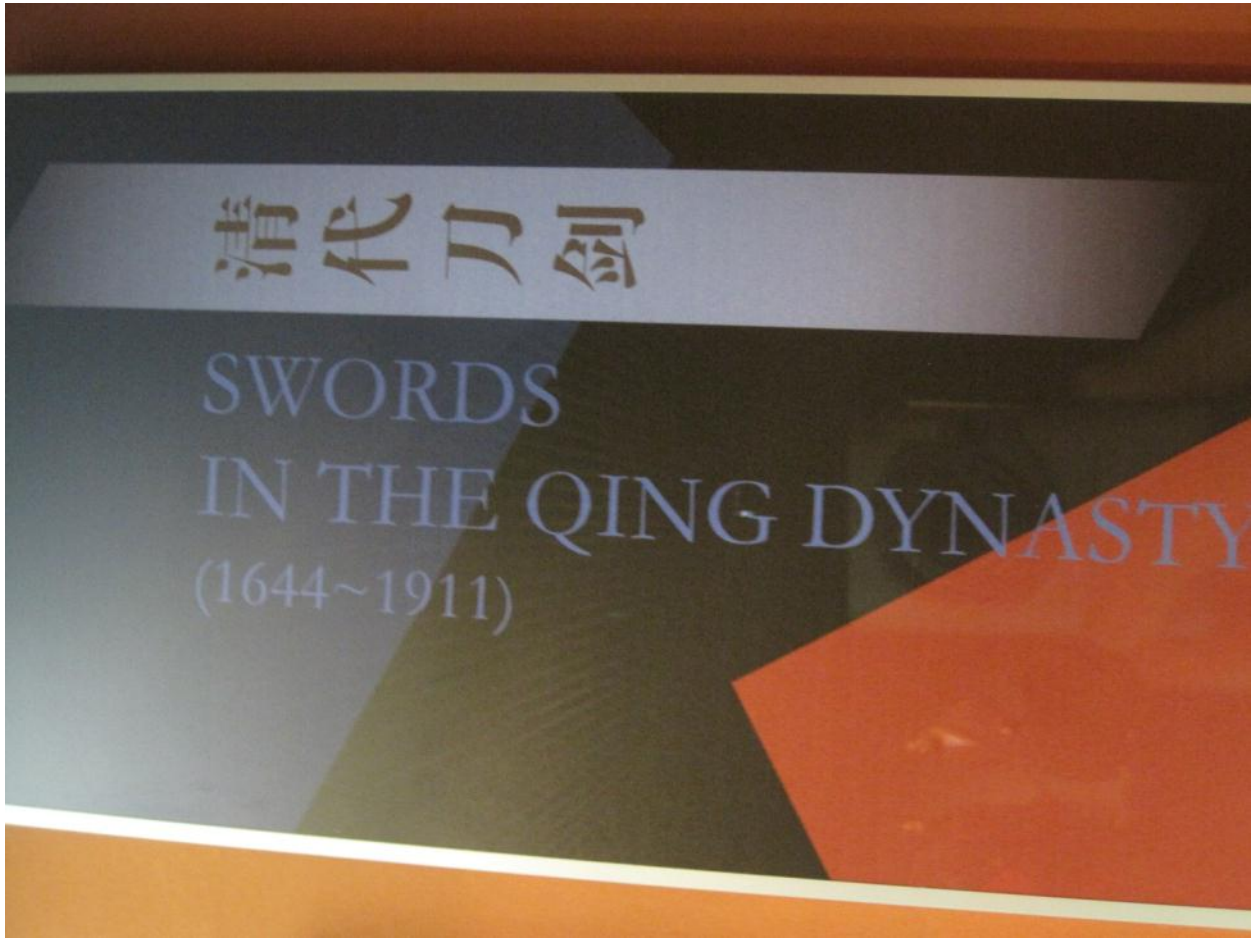

鬼谷下山（佩带无灵弯刀）
153


刀剑
se Swords
明代的刀
明代刀剑
SWORDS
IN THE MING DYNASTY
(1368~1644)
明代的火器虽渐成熟，但并未达到完全实用的程度，所以刀仍是步兵的基本装备，主要类型包括腰刀、长刀和短刀。明后期腰刀成为军队的制式武器，除传承宋元外，有一类是对日本刀的仿制。这种刀刀形狭长，具有优美的弯弧，护手与刀的相接处装

1360-1600 Ming dynasty, after over 1000 yrs of long thin swords they changed to much heavier ones, perhaps armor improved.


2
6


15
14
13
12
11



Next few images. Heavy swords prevail again.

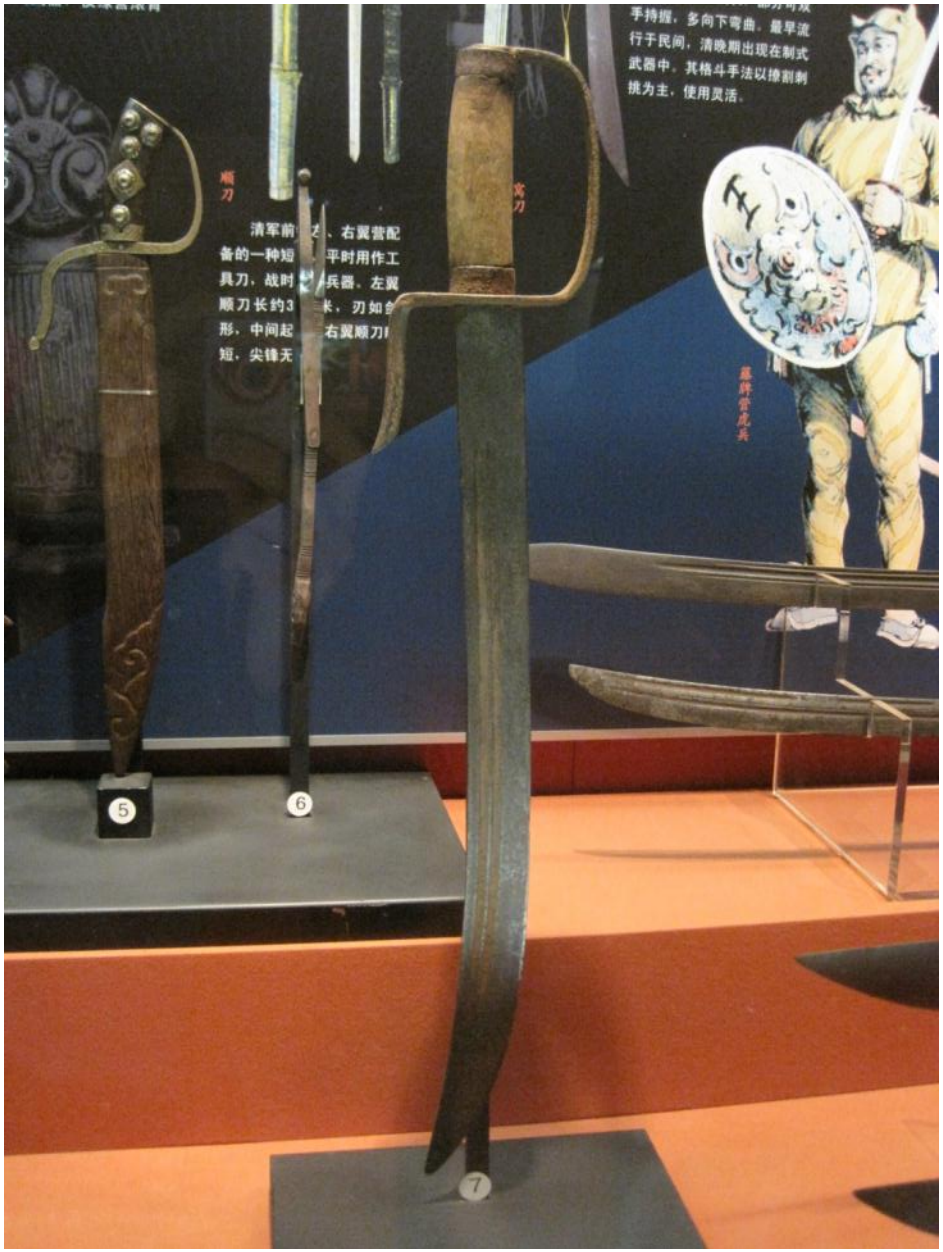
Reproduction period 1640-1910


看，清代刀剑数量最多、品种最齐、级
别最严格、功能也最完备。制式军刀包
括顺刀、窝刀、札刀、朴刀、斩马刀
等；皇帝与官员各有佩刀。民间刀型形
式多样，仅单刀就有腰刀、柳叶刀、雁
翎刀、厚背砍刀等。随着西方列强入
侵，中国冷兵器与旧式火器被西洋刀剑
国刀剑开始退
出战斗舞台。

1640-01910


3

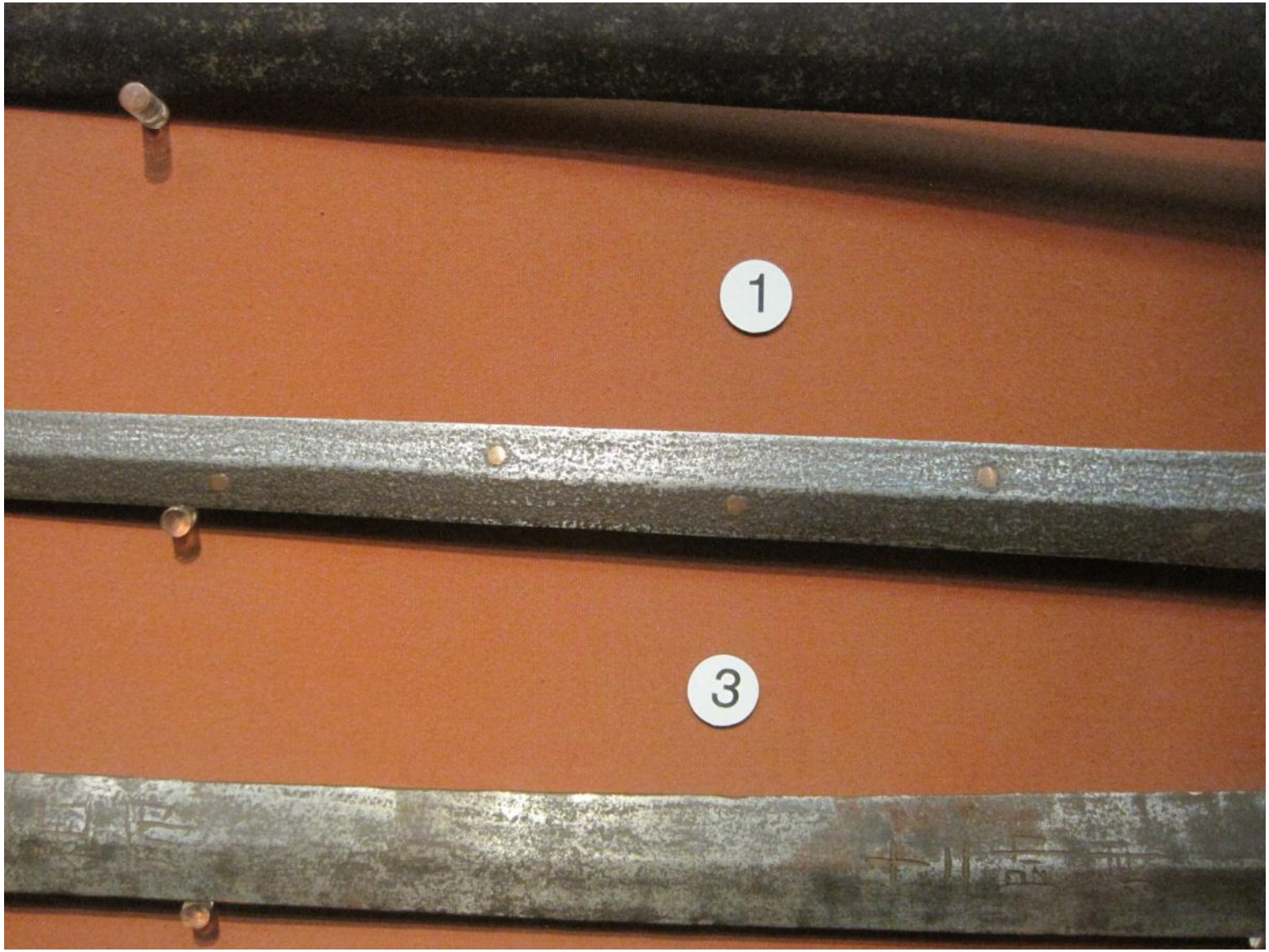

式多样，仅单刀就有腰刀、柳叶刀、雁
翎刀、厚背砍刀等。随着西方列强入
侵，中
兵器与旧式火器被西洋刀剑
开始退
出战争
1
2


手持握，多向下弯曲。最早流
行于民间，清晚期出现在制式
武器中。其格斗手法以撩剖刺
挑为主，使用灵活。
顺刀
藤牌营虎兵
5
6
7


这是清刀的一个新品种，开始流行于17世
纪。其形状与单刀基本相同，只是刀镡各有一
半，在双刀相对
刀。其种类
双刀一种。
双刀
清军步
一，刀身宽阔
大，背厚刃薄
强大的近身格
清军前锋左
备的一种短刀，
具刀，战时作
顺刀长约38厘
形，中间起脊，
短，尖锋无脊。
4
5
6

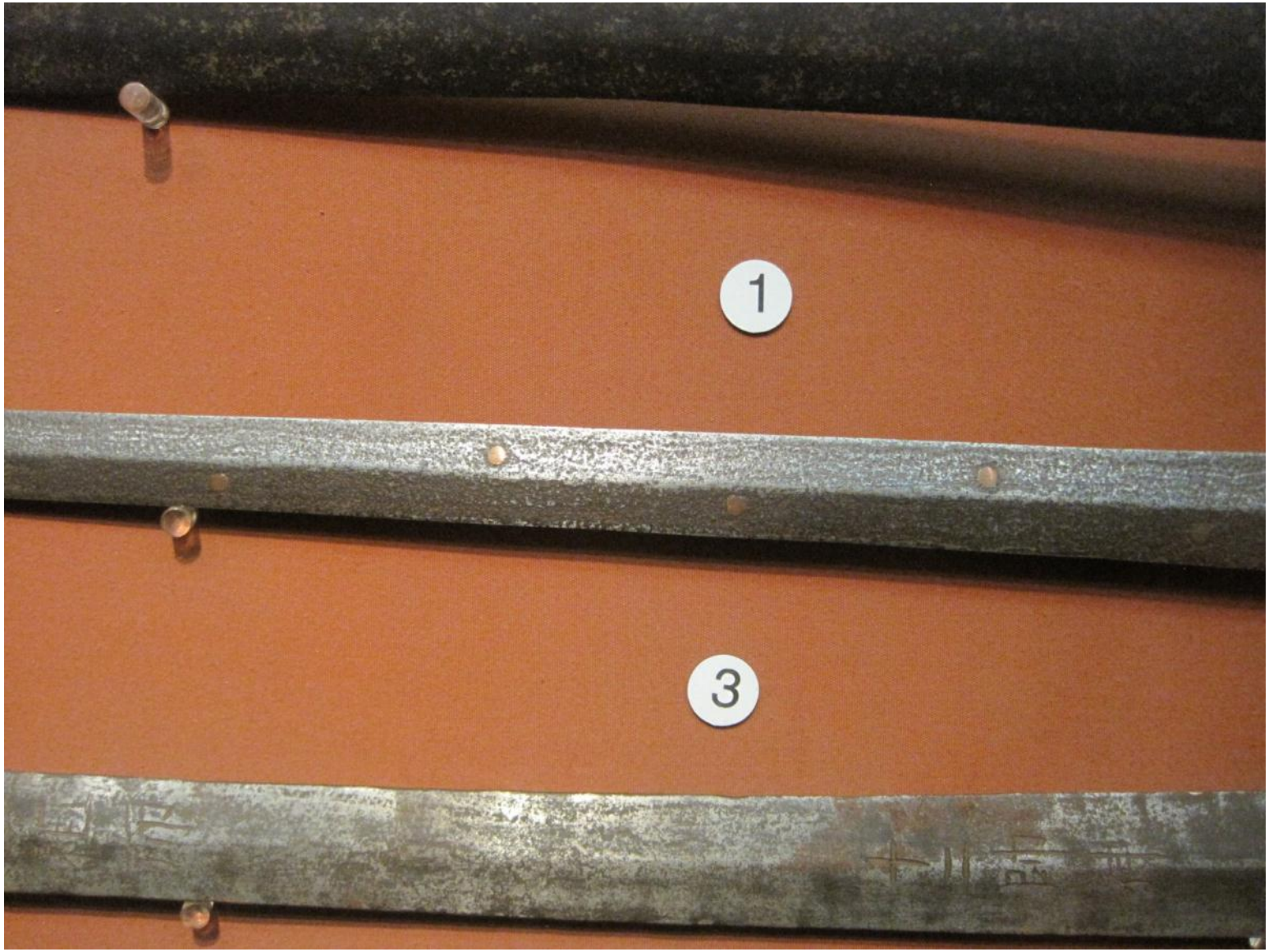

这是清刀的一个新品种，
纪。其形状与单刀基本相同，
半。在双刀相对的一侧无刀锋，
刀。其种类较多，
双刀一种。
腰刀
清军步卒主
一。刀身宽阔沉重
大，背厚刃薄，是
强大的近身格

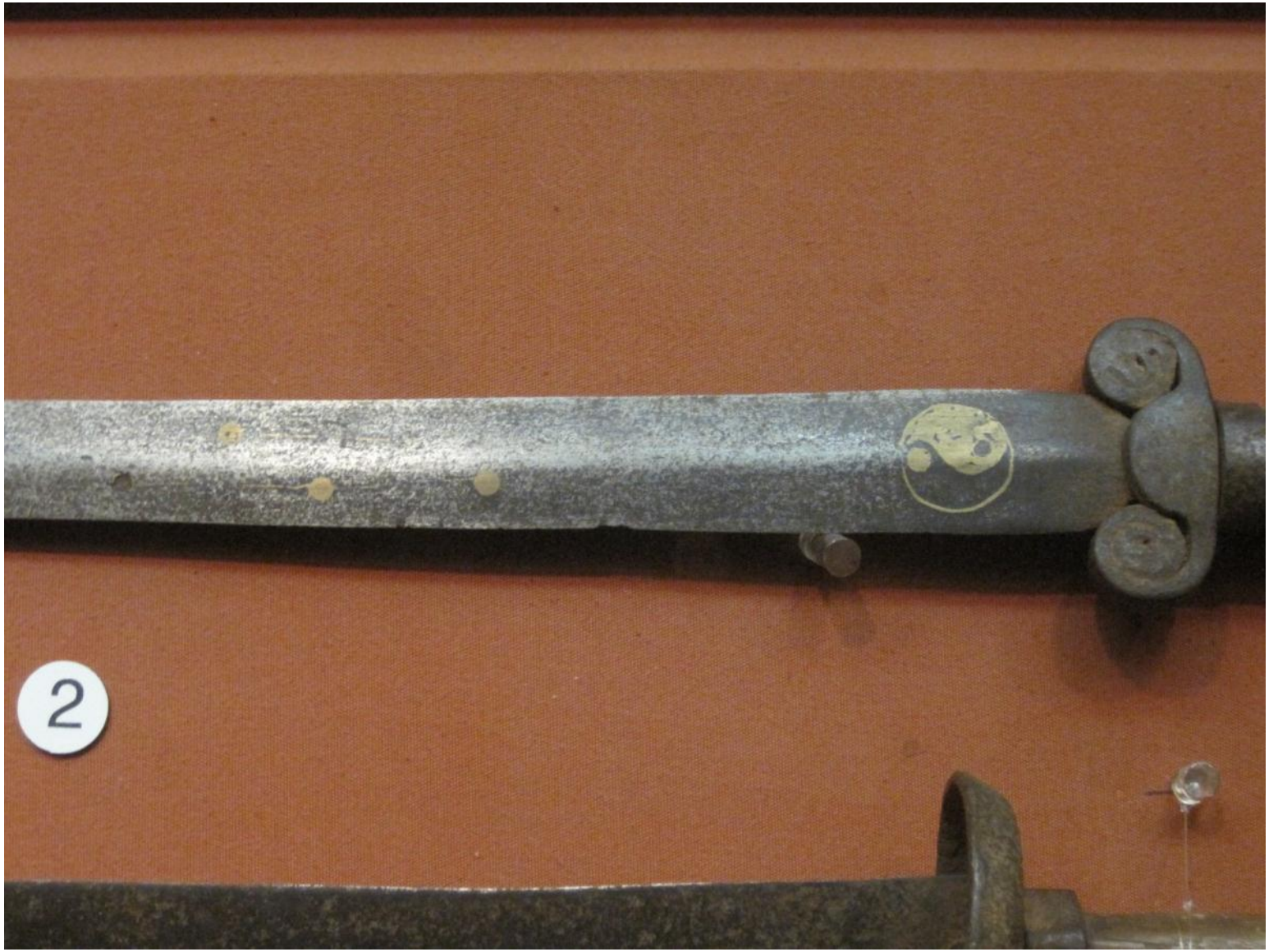
Detail of previous. Looks like brass rivets in blade for decoration.


1
3


灯，互相击中时，主裁判按优先裁判权原
则进行判决，若双方同时进攻，并同时击
中（或一方击中）无效部位，不作判决，比
赛继续。


皇室佩刀。
1
3
4
铁装兵丁佩刀
Soldier's Waist-sabre with Iron Fittings
④


1
3


2

All fineness went down the drain in the 20th century as you'll see.


传统的小型作坊发展为半机
械化工厂流水线生产，剑的
形制与外装也有很大变化。
剑
通常由刀体和刀柄两部分组成，可分
为分离式和折叠式，前者能从枪上取
下装入刀鞘，后者铰接于枪侧。
2
3

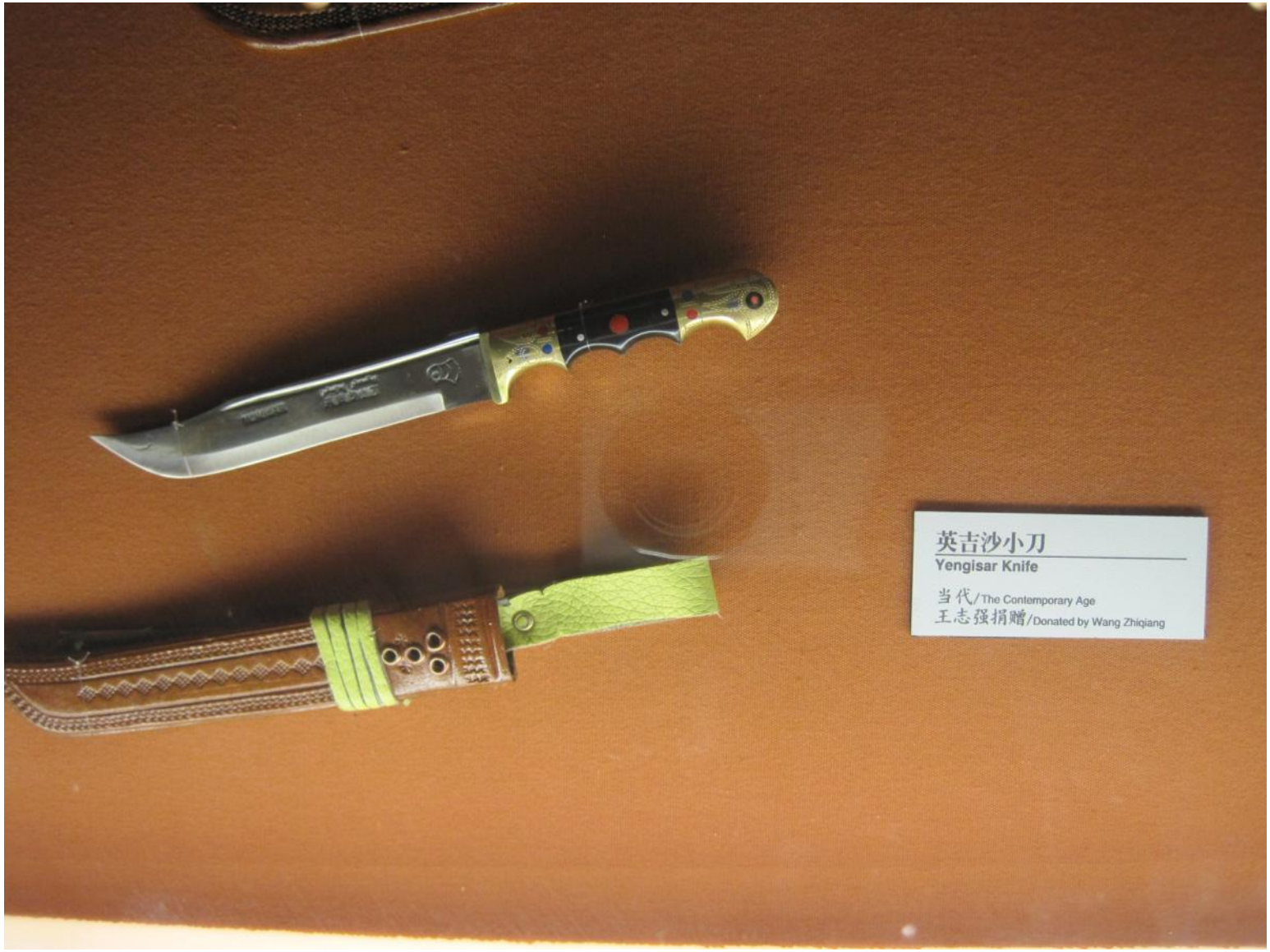

这一
传统的小
械化工厂
形制与外装
4

Now onto knives


金属工具
Metal Implement

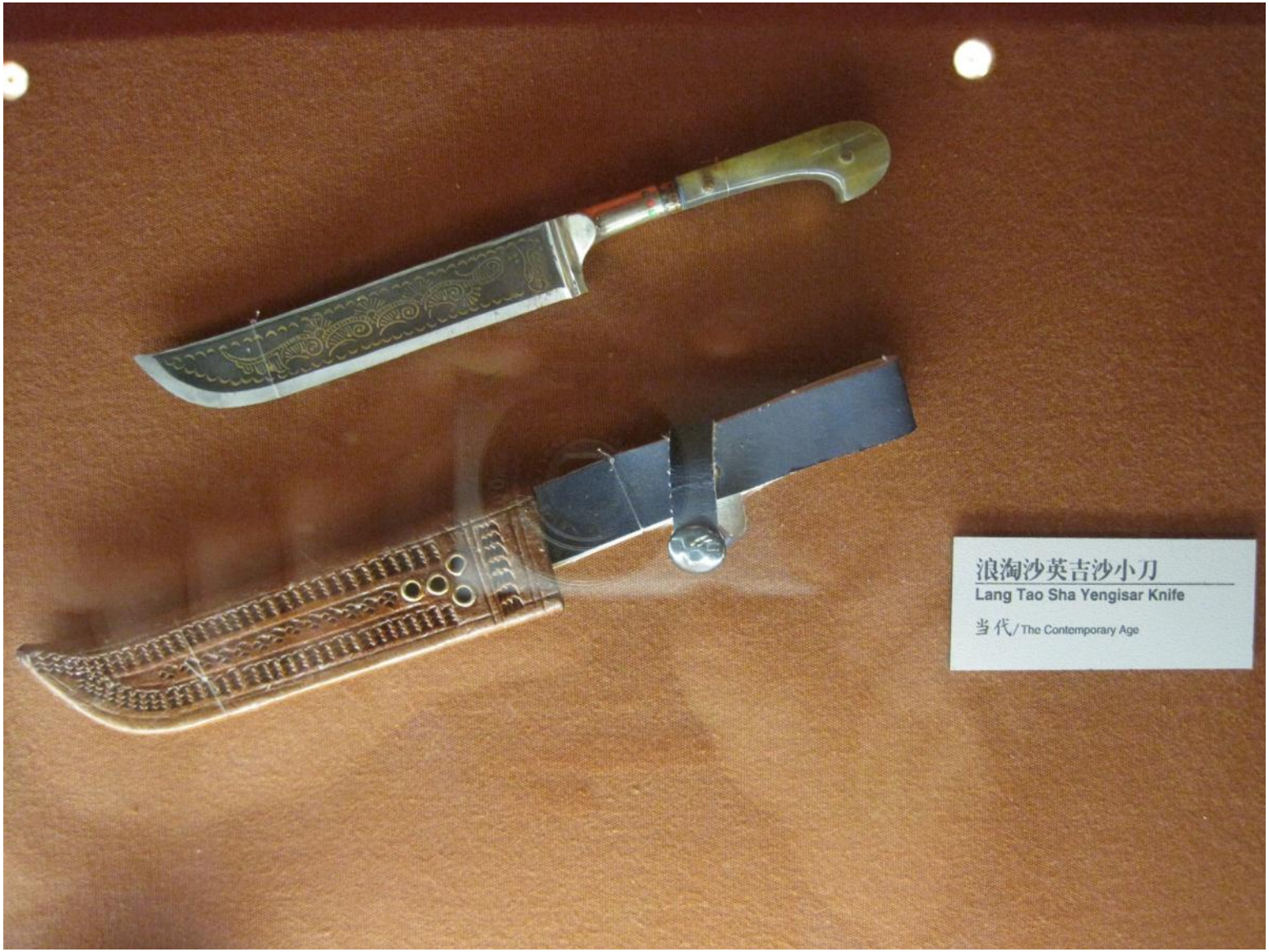

裁纸刀及刀鞘
Paper Knife and Scabbard
近现代 The Modern Age
铜双小龙凤剑及剑鞘
Small Copper Twin-sword with Dragon and Phoenix Designs and Scabbard
近现代 The Modern Age


丝绸之路英吉沙小刀
Silk Road Yengisar Knife
当代/The Contemporary Age


英吉沙小刀
Yengisar Knife
当代/The Contemporary Age
王志强捐赠/Donated by Wang Zhiqiang

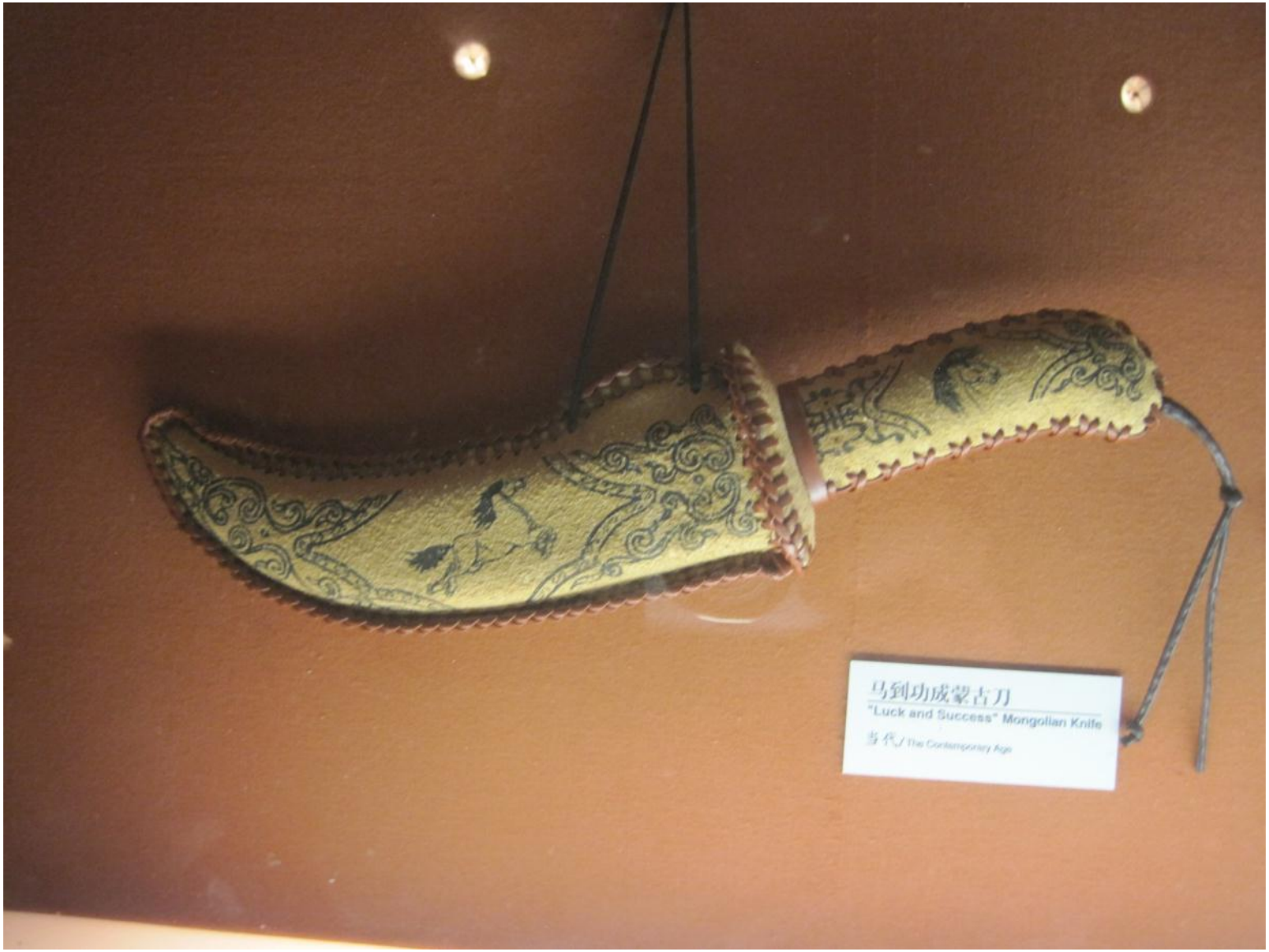

锐利英吉沙小刀
Sharp Yengisar Knife
当代/The Contemporary Age


锐利英吉沙小刀
Sharp Yengisar Knife
当代/The Contemporary Age

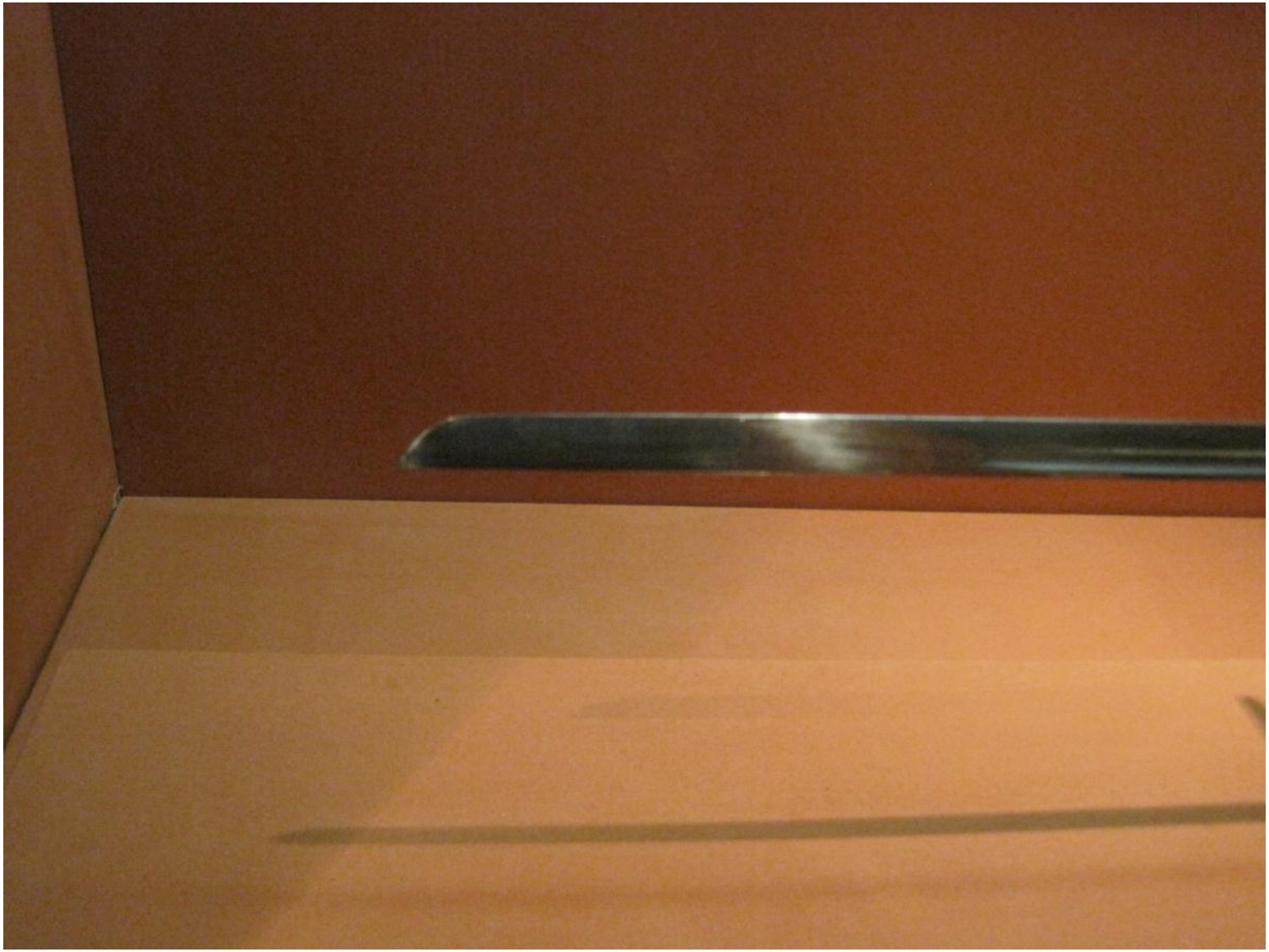

浪淘沙英吉沙小刀
Lang Tao Sha Yengisar Knife
当代/The Contemporary Age

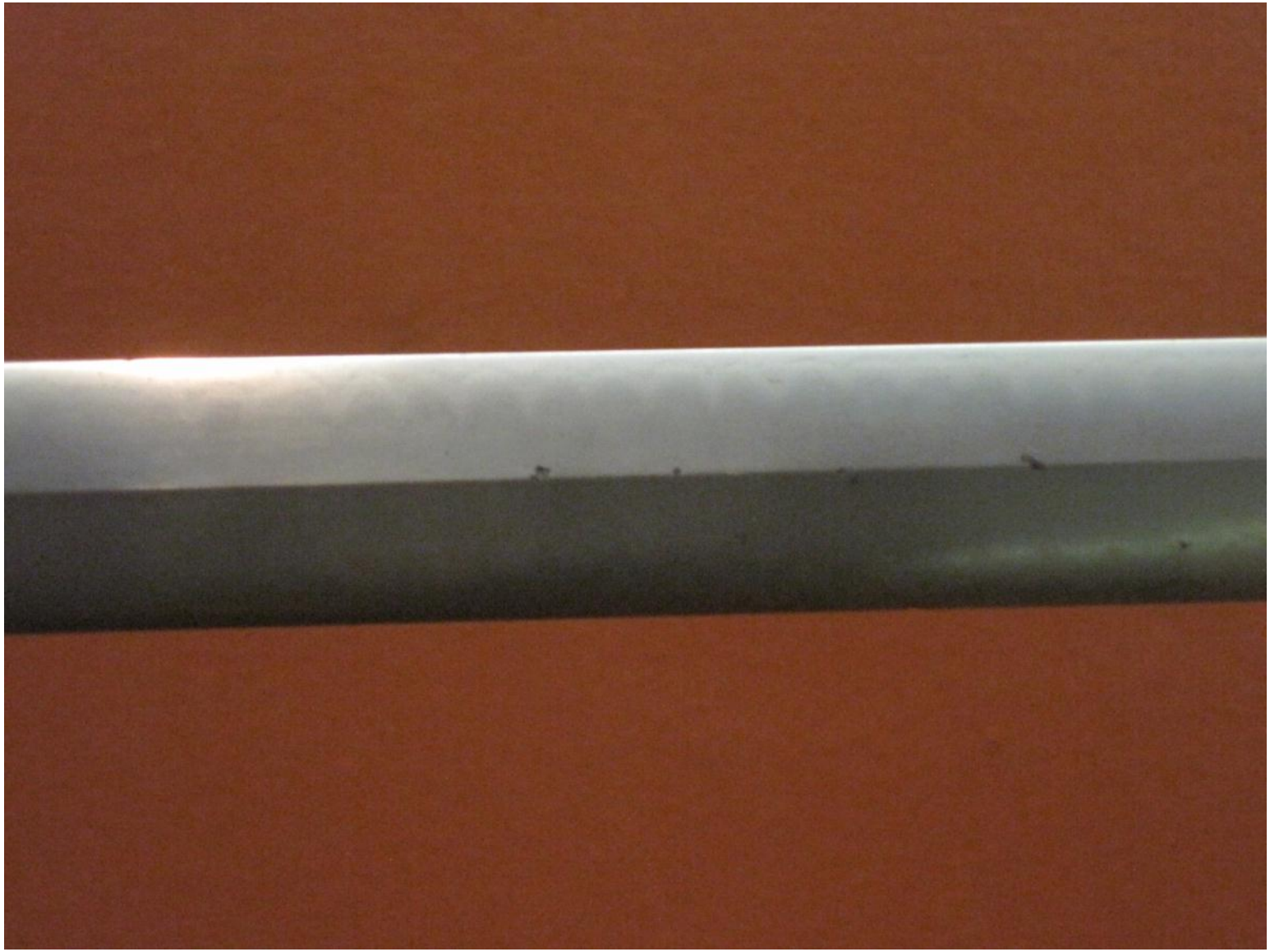

宝珠浮雕蒙古刀
"Relief Pearls" Mongolian Knife
当代/ The Contemporary Age


宝珠浮雕蒙古刀
"Relief Pearls" Mongolian Knife
当代/The Contemporary Age
洋龙弓箭蒙古刀
"Auspicious Dragon, Bow and Arrow" Mongolian Knife
当代/The Contemporary Age

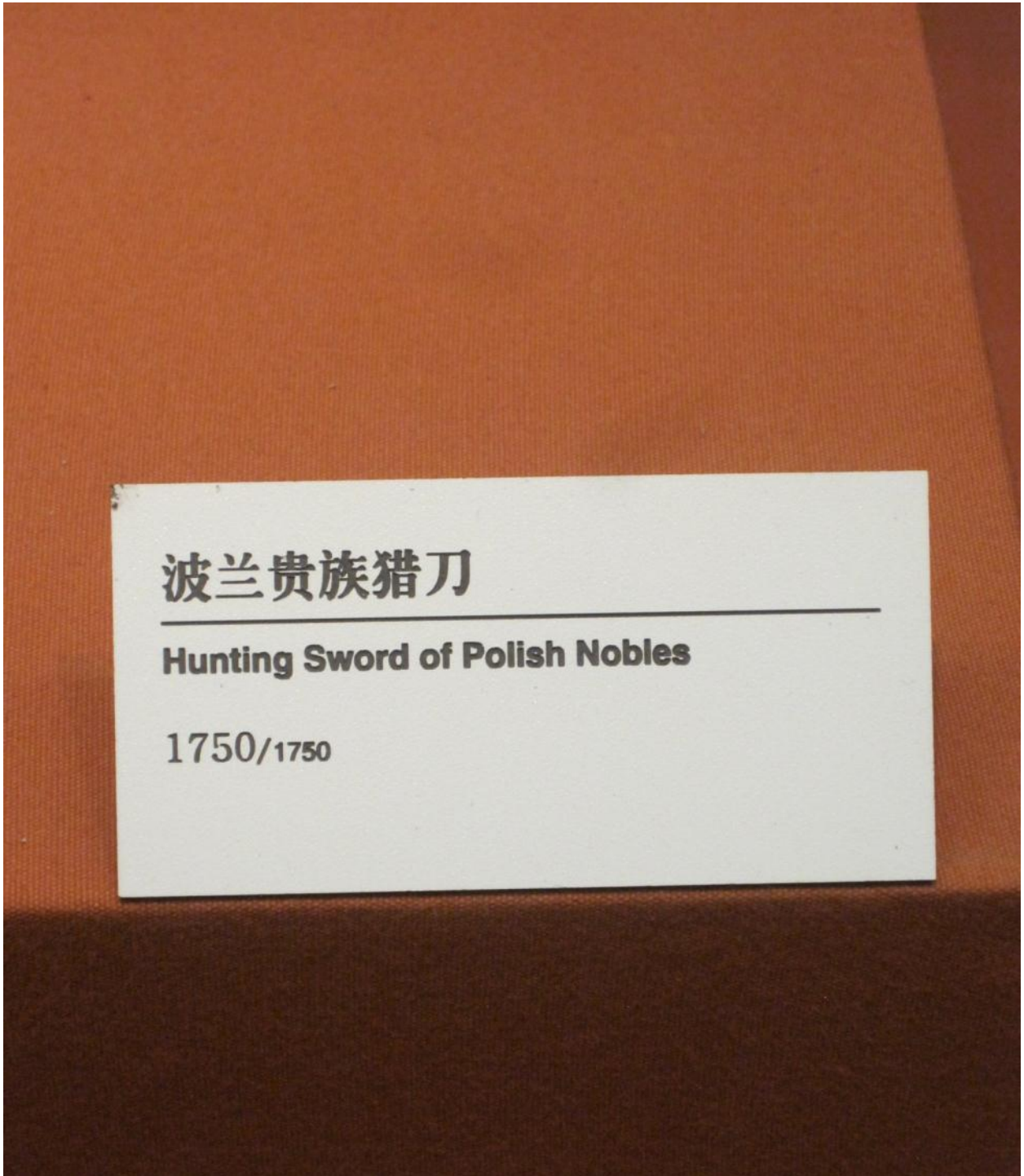

马到功成蒙古刀
"Luck and Success" Mongolian Knife
当代 / The Contemporary Age

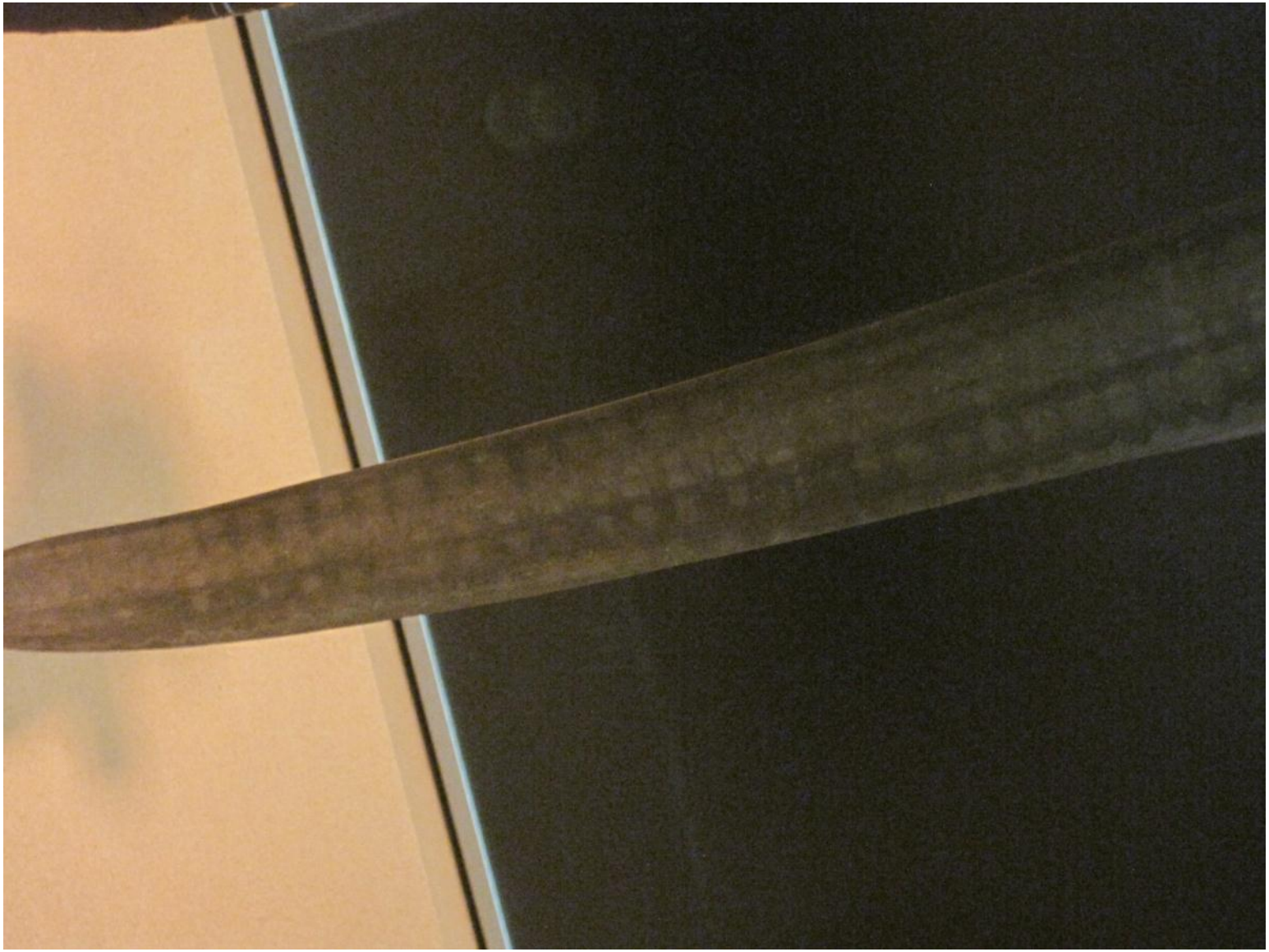

藏刀
Tibetan Sword
清 / The Qing Dynasty
皇甫江捐赠 / Donated by Huangfu Jiang
15

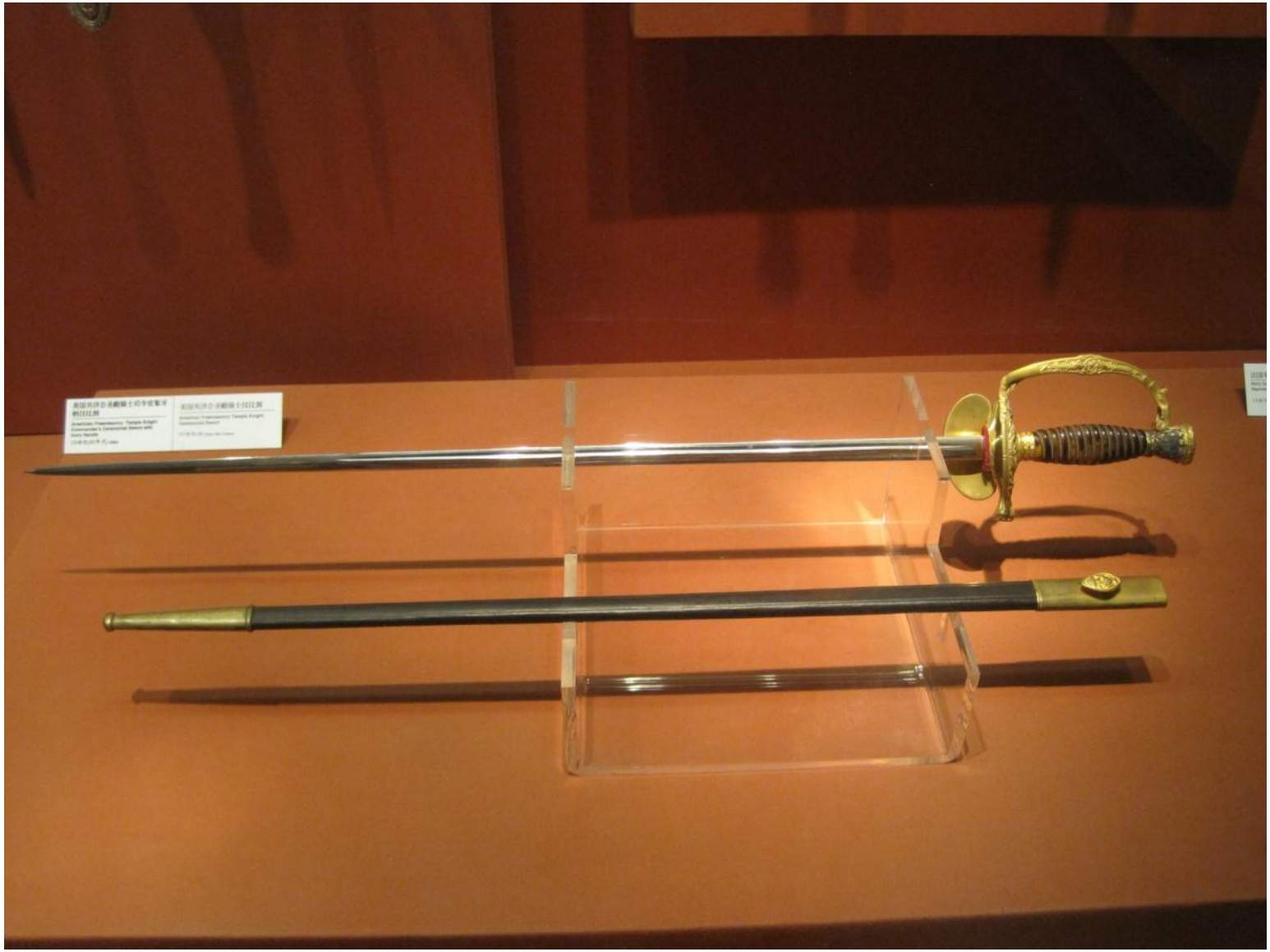


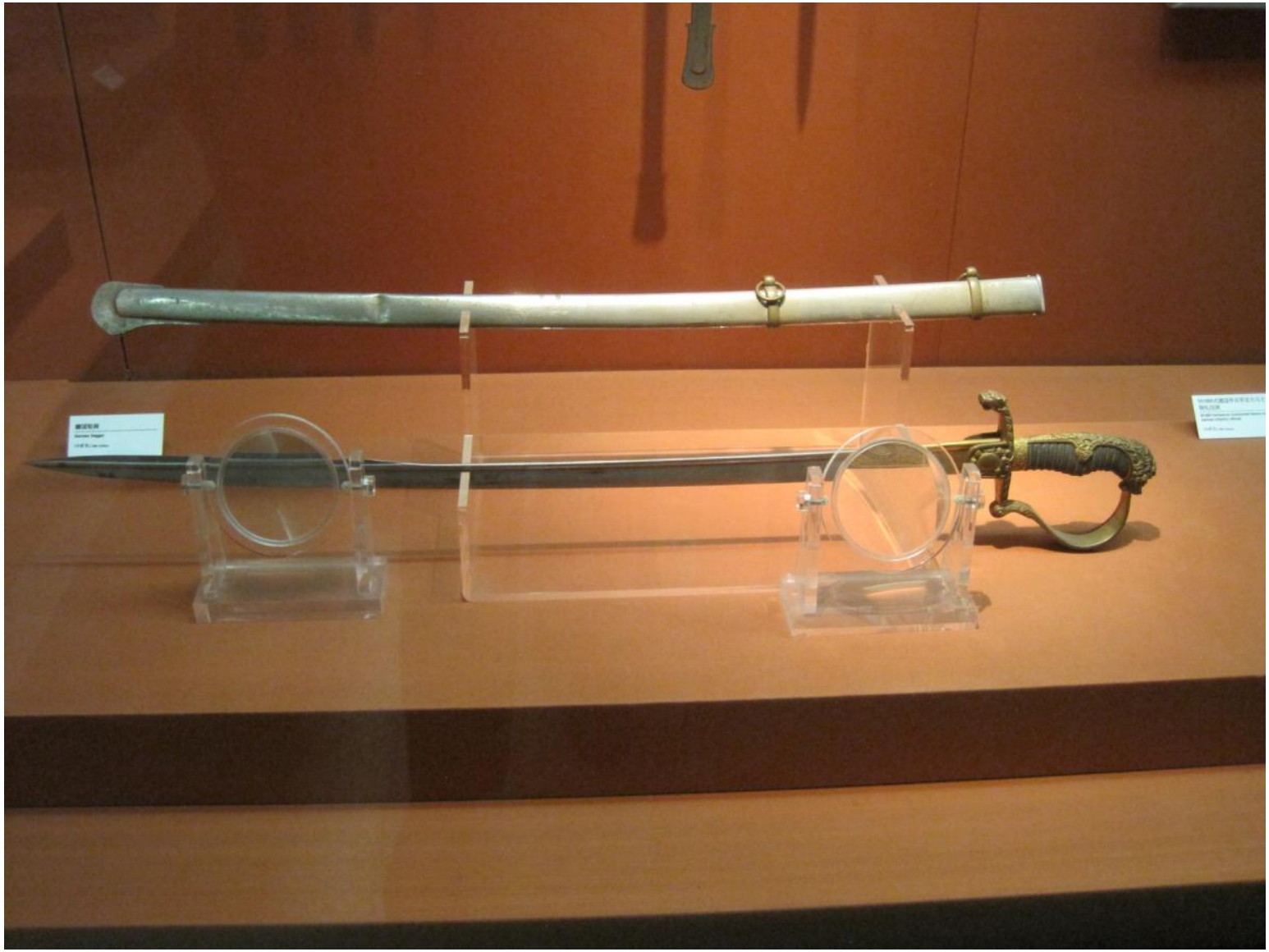



鞋面陨铁焊接花纹刃
马来克力士剑是一种鞋面陨铁焊接花纹
刃，兴盛于13世纪的满者伯夷王国。当时，所
有发现的陨铁全部上交国有，由国王交给制刃
师锻制刀具。这种剑制造极为精细，反复锤锻
入火达500次左右，刃上的
多。马来克力士
水浸泡，或用加了
几个小时，使刃纹
菲律宾马来达诺族短刀

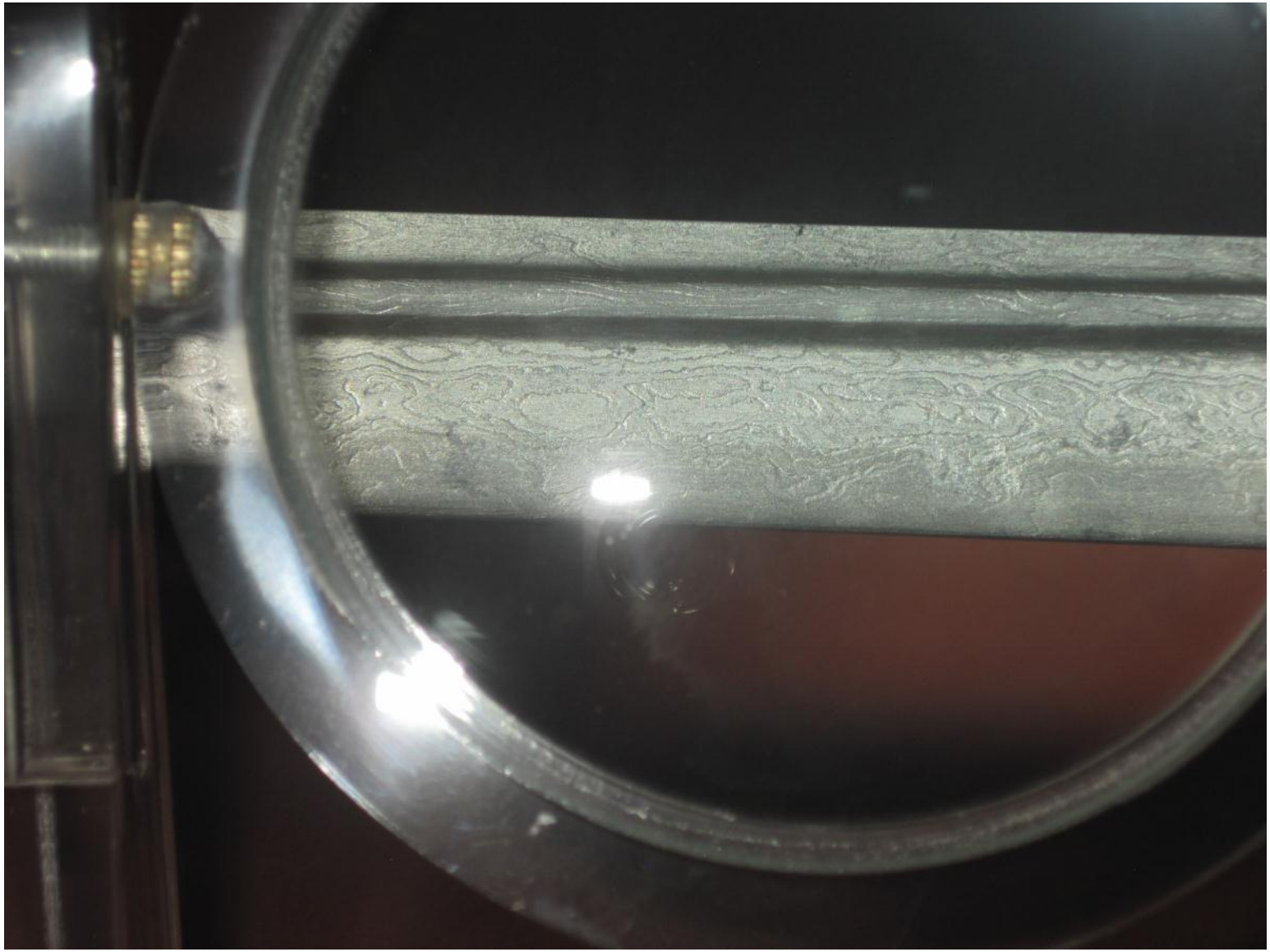

波兰贵族猎刀
Hunting Sword of Polish Nobles
1750/1750







Damascus waist sword of German Royal artillery Gerneral, 19th Century




脇差
短刀

American custom Folders, Set, in beach case.

Bronze razors perhaps? They were labeled as “sharpeners” buy you never know in china.


唐代剪刀
到了唐代，剪刀的运用已十分普遍，材质趋于多样，包括银
仍为“交股屈环”状。
剪刀
Scissors
唐/The Tang Dynasty


16
纱剪
Gauze Scissors
50–60年代/ 1950s-1960s
杭州张小泉集团有限公司捐赠/ 16
Zhang Xiaoquan

END