

## The Royal Museum for Central Africa's collection of World War 1 German East African 20- and 5-heller coins struck in Tabora.

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Thanks to the help of Mathilde Leduc and Nancy Verlinden of the staff of the Royal Museum for Central Africa<sup>1</sup> (RMCA), Tervuren, Belgium, I could inspect the RMCA collection of German East African (DOA) 20- and 5-heller coins struck 1916 in Tabora (Archived as: Jutte zak. RG. 511).

This collection was presented to the Museum 1927 by a donor who can no longer be traced.

I am very grateful for the Museum's kind permission to use the pictures I made of their coins.

In 1916 a makeshift mint was set up in Tabora, on the central railroad of German East Africa. After the war the German colony was split between England and Belgium. The largest part, which we now know as Tanzania, became part of British East Africa. Belgium got Burundi and Rwanda.

Hoarding of silver coins and the need to make payments to a population that was not yet accustomed to paper money had prompted the production of new coins. In the railroad workshops a smelting oven was built to recycle scrap metal, such as used gun shells and salvaged ship parts, into brass coin rods. The rollers of a rubber press were ground down to roll the cast rods into the desired thickness. Steel-cutting machinery was converted into coin-striking and flan-punching equipment. At a later stage trade stock brass and still later copper and bronze plates and pipes were also used.

To strike coins dies are needed, which contain the negative impression of one side of the coin. These production dies were made by striking them with dies that show a particular side of the coin in positive. The two production dies needed to strike a coin form a die combination. Each time a positive die is used it will wear. As a positive die cannot be engraved with a smooth background, the production dies have to be ground to get a smooth background surface on the coin.

Due to the primitive production circumstances, individual die combinations can be recognized. All coins, with exception of the 1-heller, have letter T for Tabora as mintmark. For some unknown reason two different die types were made for each side of the 20-hellers, which resulted in four main types of 20-heller coins.

A zinc pattern 1-heller is known, 5-hellers were struck only in brass. The 20-heller appears in brass as well as in bronze/copper. As patination or a high lead content can make brass look treacherously like bronze/copper no real determination of the material can be made by just telling what you think you see. 15-rupien were struck in gold, the ½-rupie dies were never used.

The RMCA collection of DOA coins is an amazing one in many respects. There is the quality of the coins, which you will find very hard to beat, there is the selection, and there are the irregulars.

**Selection:** besides the afore-mentioned four types of 20-heller dies, a fifth type is recognized which is a variety of one of the other four. Thus six coin types can be recognized as different combinations of three 5-heller-sides with two doa-sides.



If brass and bronze/copper are taken into account, there could be twelve. I reckon with ten as I think two bronze/copper varieties do not exist. Five of the six main types and seven of the ten subtypes are represented here. Five of the seven subtypes are in (near) perfect condition. Strangely enough one of the most common sub-varieties (small crown, pointed tips of LL in bronze/copper) is only available as an irregular. As perfect coins of this last subtype must have been available to the donor, this might indicate he did not give much attention to the different materials.

The 47 struck 20-hellers in the collection were produced by only 21 die combinations. Of these two times two die combinations are die-linked. The totals per die combination are: 4, 1, 7, 4, 1, 1, 3, 1, 1, 3, 3, 1-2, 2, 1, 1-1, 1, 3, 4, 2. With 94 different die combinations known, such a distribution is not to be expected if the coins had been collected at random from the total population.

Present are 22 HA(C)/HA-DA (Jaeger 724) from 9 die combinations (out of 24 known), 5 HB-DA (J 725) from 3 combinations (out of 7), 4 HA-DB (J 726) from 1 (out of 6) and 16 HB-DB (J 727) from 8 combinations (out of 57 known).

Even more remarkable are the 26 struck 5-heller coins. They stem from only 7 die-combinations out of a total of 30. The totals per die combination are: 3, 4, 2, 8, 1, 4, 4. Moreover, these die combinations only produced thick-flan coins (I did not take weights, but there did not seem to be any exceptions here. Thick-flan is 4.0 grams and over). As production of thin-flan (3.7 grams and under) started only after it was officially decided to do so, it gives a production-time limit to the coins available to the donor. Five of the seven combinations were used together in a single "5-heller machine" that struck 5 coins at a time.

**Irregulars:** exchanging e-mails with the RMCA, I wondered what they meant with there being many irregulars in the collection. The answer of course is quite simple: non-regular coins; that is, coins that normally would be sorted out at a mint because they are not up to standard: miss-struck or double-struck, faults of flans etcetera.

In the RMCA collection 24 out of 47 struck 20-hellers are irregular. Ten coins show defects of the flan, four are struck off centre or slipped during striking. Ten are multiply struck.

Telling 5-heller irregulars apart is rather difficult if you do not know that four out of the seven the heller-side dies used here are themselves double-struck dies, which means every coin struck by those dies will show part of the impression double. Where multiple struck 20-hellers are rare, the majority of the coins produced by the five dies in the 5-heller machine show multiple striking. An uninitiated keen observer might at first glance call two of the 5-hellers regular.

Highly irregular you might also call the non-struck 139 20-heller and 22 5-heller flans in the collection. The 5-heller flans are of the thin variety. The total weight of unused flans is +/- 1.6 kilograms. The 5-heller flans may have been bent in the process of punching if they were not so beforehand.

Any collection has a story. Is there any chance we are to unravel this one? We have two starting points: a donor in Belgium in 1927 and a mint in Tabora in 1916.

The Belgian offensive against German East Africa started middle of April 1916; on September 19th they marched into Tabora. Some plundering went on and it would have been little problem for anyone to walk into the mint and leave with his pockets full of flans. If not looted, then, whatever was in the mint will have been confiscated. Either way they could have ended up at a market as scrap metal.

The problem is that the latest series of 20-hellers were (most likely) struck on copper flans, as this was introduced only after brass had run out. Production of 20-hellers drop dramatically in August, so probably they also ran out of bronze and copper. The majority of the unused 20-heller flans in the collection are brass. Some of the flans that seem bronze/copper show faults that make me wonder whether they stem from cast rods and thus may be something else than what they look like.

So we must consider the possibility that the unused flans left the mint earlier. Even nowadays non-struck flans of circulating coins are found outside the mint. In Tabora 1916 the percentage of non-struck flans escaping the mint among their more lucky peers might have been much higher than you would normally expect. If so they would get sorted out at the receiving end, by a cashier who would handle large amounts of coins in smaller transactions. Such a selection would also explain the multiple struck coins.

A problem is whether the collector of the irregulars is the same as the collector of the regulars. The collector of the irregulars must have had huge amounts of coins passing through his hands. If he is the same as the collector of "regulars", you may wonder why there is no perfect HB-DA or bronze/copper HB-DB in this collection. A natural reaction of a collector, if a large amount of the same coins are available to him, is to pick out the best. If he has got enough of these he may give the rest less attention than he should. This first pick might be recognizable here. I would suggest 5 HA(C)1-DA (2 die combinations), 6 H2a-DA1b, 4 HA2d-DB3w, (1 HA4b-DA10a), 3 HB2e-DB2h, 1 HB2g-DB2i, (2HB2g-DB2j). The picture with the 5-hellers is less clear.



Some of them may be a first pick, the rest just what remained in his pocket. That just these specific seven 5-heller die combinations are present could give a tentative production date of the coins available for first picking of before +/- end of May. The HA4b-DA10a is certainly later and the quality is not 100%.

The coins produced were distributed mainly directly to the army. This will have been in large quantities, sending production of several die-combinations at a time to different parts of the country. What someone could collect thus depended directly on the part of the country in which he was staying. As war moves people around the place and office of first pick may be different from that where the irregulars were found.

The English did not recognize the locally produced coinage; I do not know what the Belgians did. As they had no easy access to Indian rupees, it would seem wise to my Dutch logic to keep using the available money in their part as long as expenditure was higher than income. All confiscated emergency money could thus be spent at full value, instead of becoming worthless scrap. This would give a longer time range for the irregulars to be assembled.

There are no lightweight 5-heller coins in the collection. As over 200,000 5-heller coins were struck in Tabora in August and September, most of them on lightweight flans and with little space left to go; the fact that they are not found in this collection might indicate that our collector was never in Tabora himself. So to explain the unused lightweight 5-heller flans in the collection we must introduce a friend who knows of his interest in coins and who is friendly enough to bring him a handful when he finds them.

Probably this is all just daydreaming and the real story might be much more interesting or just a tale of dumb luck. So in the end it may be the donation of the coins in 1927 to the museum that gives some ground to the tentative conclusion that these coins were assembled somewhere in the western parts of German East Africa and that they offer a glimpse of which die combinations coins were in circulation there.

Enough talking, better see and enjoy the coins below.

Don't hesitate to enlarge the pictures to **300%** in this version

Kees Uitenbroek  
3 June 2012

Text published in *De Muntmeester*, year 7, number 2, June 2012

<sup>1</sup> [www.africamuseum.be/home](http://www.africamuseum.be/home)

A selection of sources:

**Krenkel**, Erich - Notenpresse und Kriegsmünze in Deutsch Ostafrika - part 1 - Wirtschaftsdienst, 15 March 1918 [pages 265-267] – see [www.zeno.ru/showphoto.php?photo=110479](http://www.zeno.ru/showphoto.php?photo=110479)

**Krenkel**, Erich - Notenpresse und Kriegsmünze in Deutsch Ostafrika - part 2 - Wirtschaftsdienst, 22 March 1918 [pages 291-293] – see [www.zeno.ru/showphoto.php?photo=110480](http://www.zeno.ru/showphoto.php?photo=110480)

**Schumacher**, Friedrich - Die Prägung von Kriegsmünzen in Deutsch-Ostafrika - Metall und Erz, April 1918 [pages 103-108] – see [www.zeno.ru/showphoto.php?photo=110484](http://www.zeno.ru/showphoto.php?photo=110484)

**Schnee, Heinrich** - Deutsch-Ostafrika im Weltkriege - Quelle & Meyer, Leipzig, 1919, pages 280-291 – see [www.zeno.ru/showphoto.php?photo=102879](http://www.zeno.ru/showphoto.php?photo=102879) & [www.zeno.ru/showphoto.php?photo=102880](http://www.zeno.ru/showphoto.php?photo=102880)

**Schlobach**, Peter - Die Buntmetall-Notprägung zu Tabora in der Kolonie Deutsch-Ostafrika im Jahr 1916 - Money-Trend 7-8/2008 [pages 132-153].

**Uitenbroek**, Kees - German East Africa emergency coinage struck at Tabora in 1916, a die catalogue - 2011 (CD). Last edition see [www.numismatischekringamsterdam.nl/leden/stukjes](http://www.numismatischekringamsterdam.nl/leden/stukjes)

**Zeno.ru** - Special Project German Colonies. [www.zeno.ru/showgallery.php?cat=7136](http://www.zeno.ru/showgallery.php?cat=7136)

Die combinations present in the collection.

**5-hellers** - 26 pieces

H1-D1 - 3 pieces  
H2-D2 - 4 pieces - 2x multi struck  
H4-D4 - 2 pieces - 2x multi struck  
H6-D6 - 8 pieces  
H8-D8 - 1 piece - multi struck  
H10-D10 - 4 pieces - 3x multi struck  
H11-D11 - 4 pieces - 2x multi struck

**20-hellers** - 47 pieces - 21 die combinations

**Jaeger 724** - 22 pieces - 9 die combinations

HA(C)1a-DA1a - 4 pieces  
HA(C)1b-DA3b - 1 piece  
HA2a-DA1b - 7 pieces - 1 irregular  
HA3c-DA6b - 1 piece - irregular  
HA3d-DA6c - 1 piece - irregular  
HA3g-DA9b - 3 pieces - all irregular  
HA3i-DA9f - 1 piece - irregular  
HA4a-HA8a - 1 piece - irregular  
HA4b-DA10a - 3 pieces - 2 irregular - copper

**Jaeger 725** - 5 pieces - 3 die combinations

HB3d-DA6a - 2 pieces - both irregular  
HB4c-DA11b - 1 piece - irregular  
HB5y-DA8a - 2 pieces - all irregular

**Jaeger 726** - 4 pieces - 1 die combination

HA2d-DB3w - 4 pieces

**Jaeger 727** - 16 pieces - 8 die combinations

HB2e-DB2h - 3 pieces  
HB2g-DB2i - 1 piece  
HB2g-DB2j - 2 pieces  
HB3y-DB2x - 1 piece  
HB4c-DB3b - 1 piece - irregular  
HB5d-DB3g- 1 piece - irregular  
HB5f-DB3h - 3 pieces - all irregular  
HB5m-DB3m - 4 pieces - all irregular





HA(C)1a-DA1a



HA(C)1a-DA1a



HA(C)1a-DA1a



HA(C)1a-DA1a



HA(C)1b-DA3b



HA2a-DA1b



HA2a-DA1b



HA2a-DA1b



HA2a-DA1b



HA2a-DA1b



HA2a-DA1b



HA2a-DA1b







HA2d-DB3w



HA2d-DB3w



HA2d-DB3w



HA2d-DB3w



HA3c-DA6b



HA3d-DA6c



HA3g-DA9b



HA3g-DA9b



HA3g-DA9b



HA3i -DA9f



HA4a-HA8a  
H-side incuse



HA4b-DA10a







HA4b-DA10a



HA4b-DA10a



HB2e-DB2h



HB2e-DB2h



HB2e-DB2h



HB2g-DB2i



die linked



HB2g-DB2j



HB2g-DB2j



HB3d-DA6a



HB3d-DA6a



HB3y-DB2x



HB4c-DA11b  
die link to next page







HB4c-DB3b  
die link to last page



HB5d-DB3g



HB5f-DB3h



HB5f-DB3h



wobbly flan, first struck normally, then vertically, then rolled through a press



HB5f-DB3h



HB5m-DB3m



HB5m-DB3m



HB5m-DB3m



HB5m-DB3m



HB5y-DA8b



HB5y-DA8b







H1-D1

H-die double struck top right



H1-D1



H1-D1



H2-D2

double struck H-die



H2-D2



H2-D2



H2-D2



H4-D4  
multiple struck coin



H4-D4  
multiple struck coin



H6-D6  
double struck H-die



H6-D6



H6-D6







H6-D6



H6-D6



H6-D6



H6-D6  
piece broken off H-die



H6-D6  
piece broken off H-die



H8-D8  
multiple struck coin



H10-D10  
multiple struck coin



H10-D10  
multiple struck coin



H10-D10  
multiple struck coin



H10-D10  
multiple struck coin



H11-D11



H11-D11







H11-D11  
multiple struck coin



H11-D11  
multiple struck coin



b1



5-heller flans



b2



b3



b4



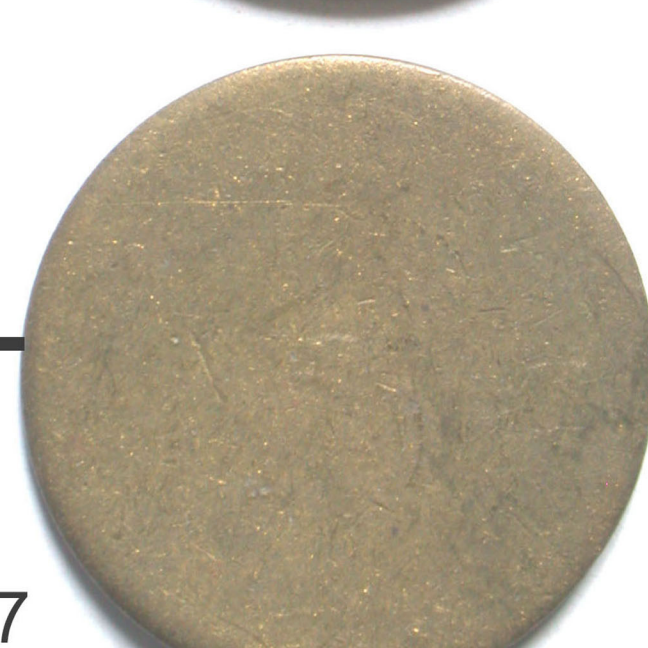
b5



b6



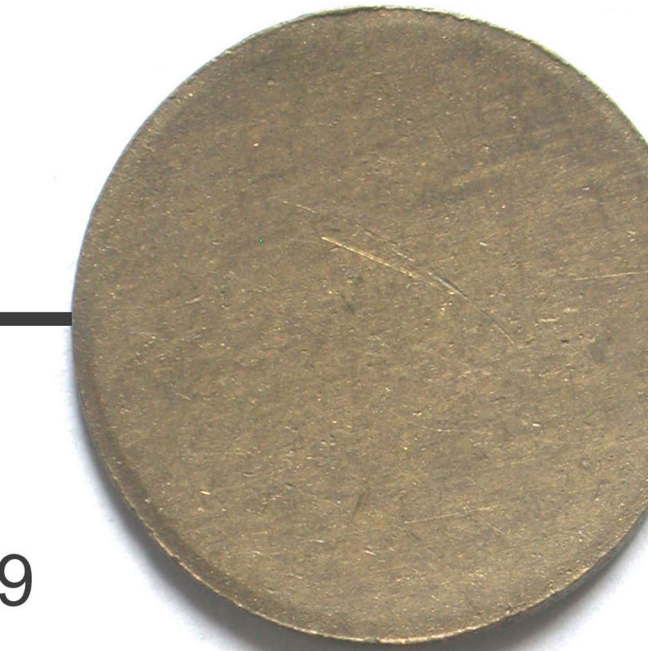
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b8



b9



b10

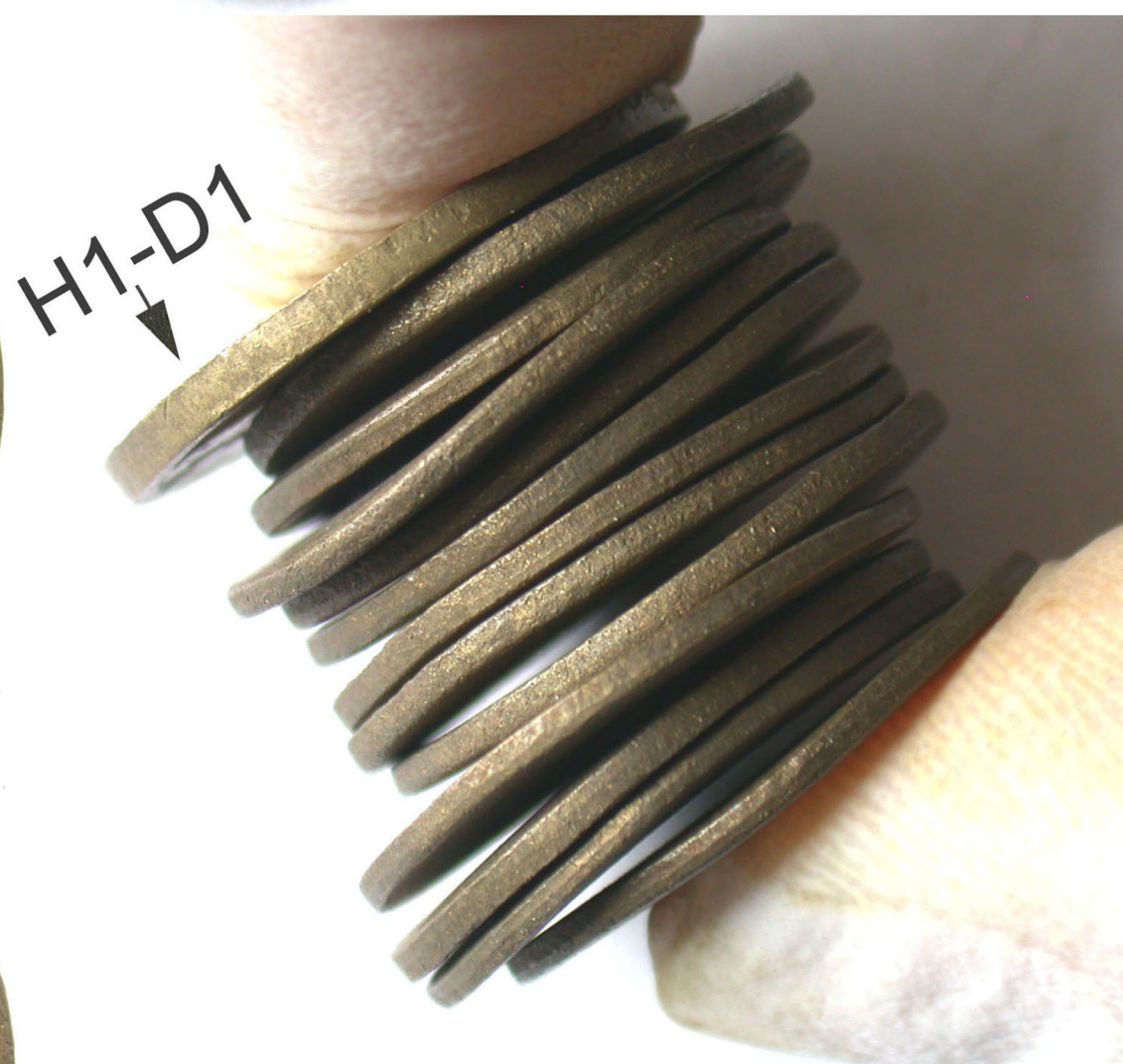




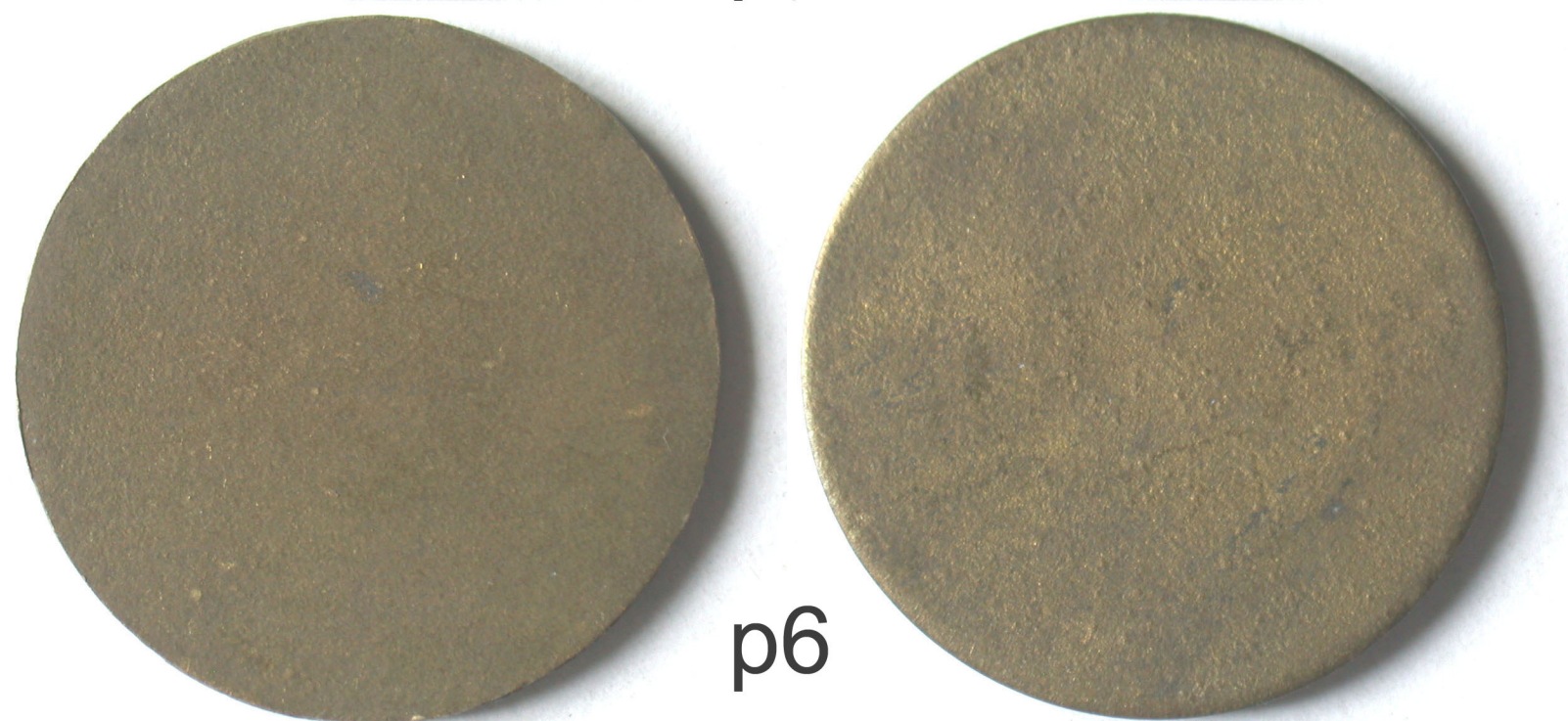
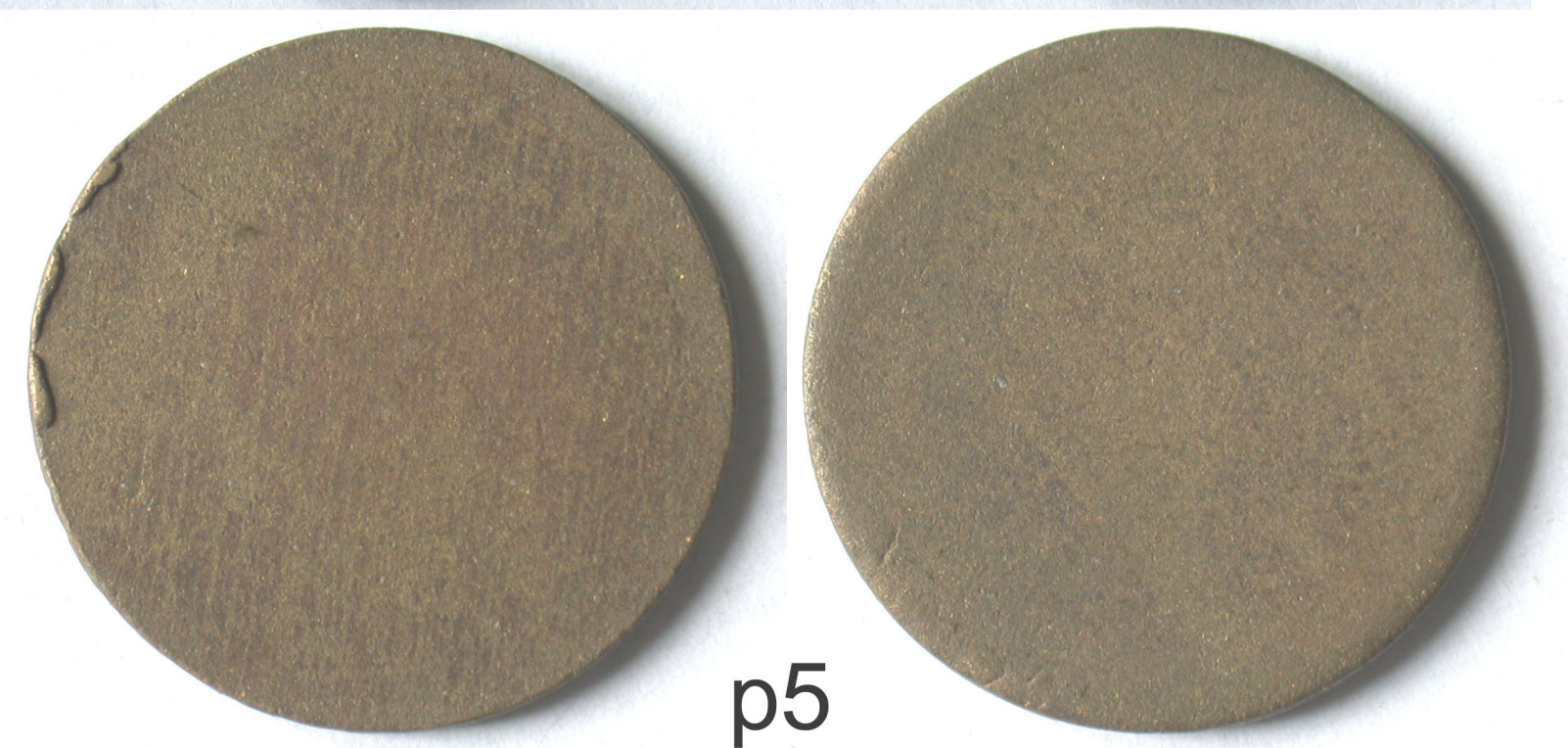


5-heller flans

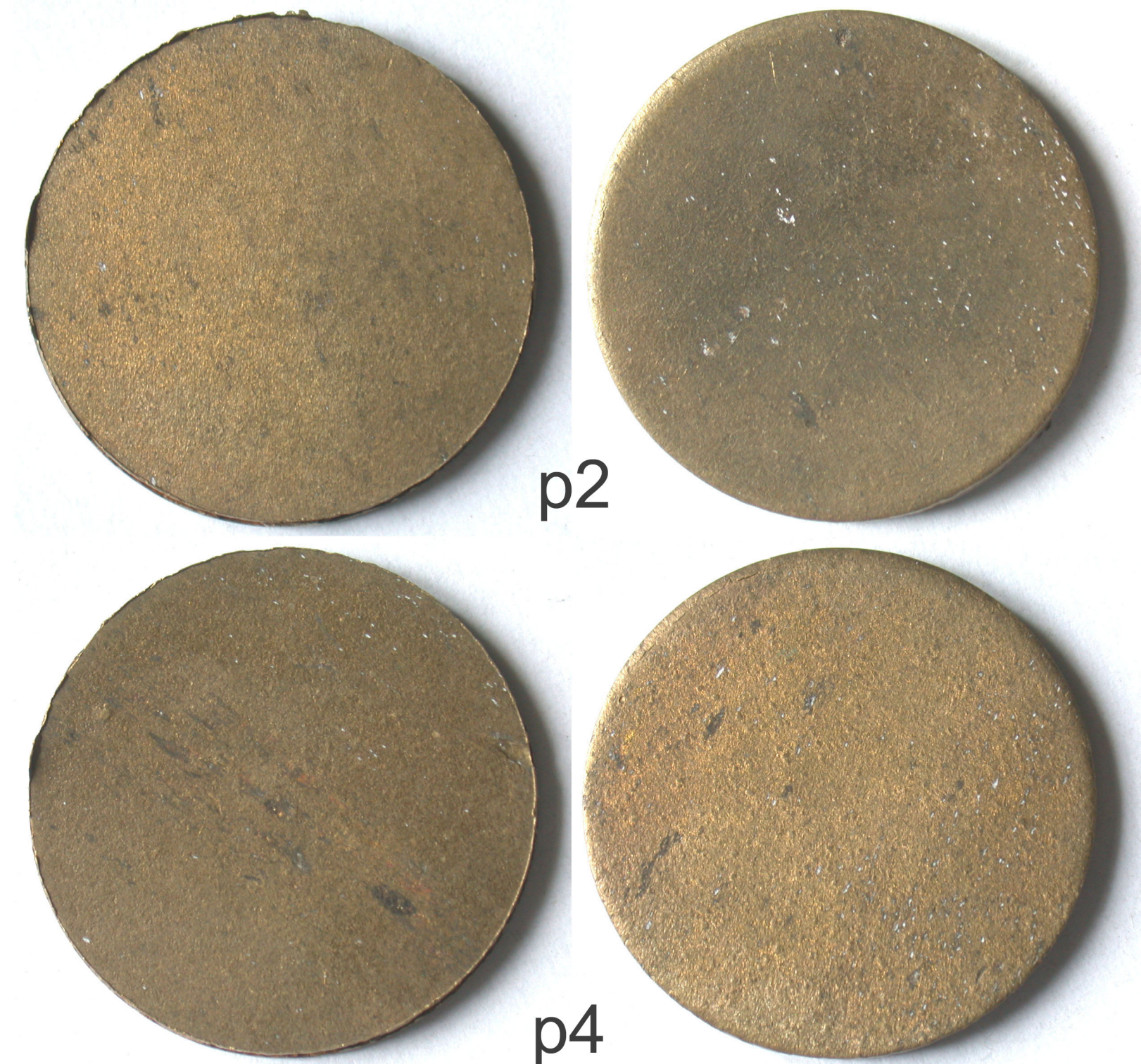
H1-D1







20-heller flans







q1



q2



q3



q4



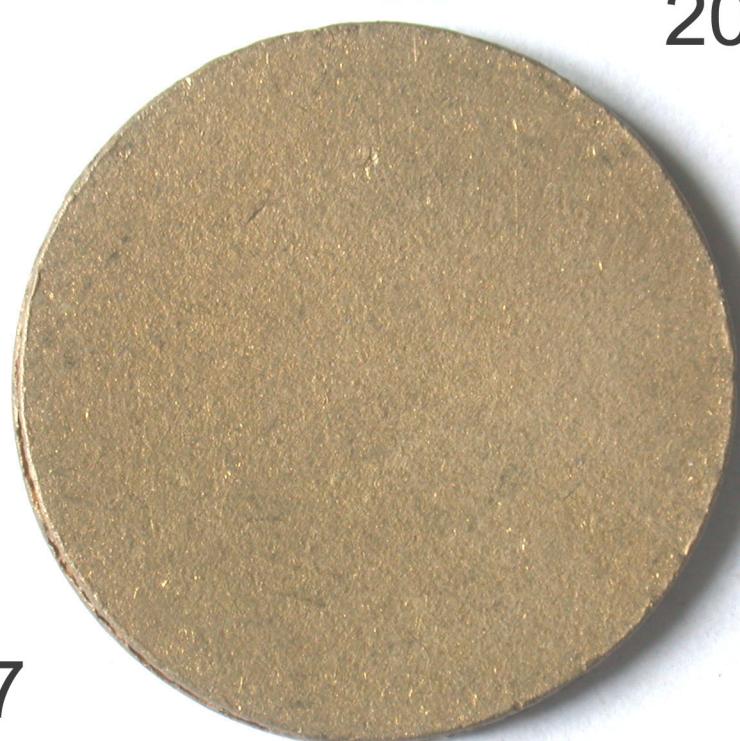
q5



q6



q7



20/heller flans



q8







r1



r2



r3



r4



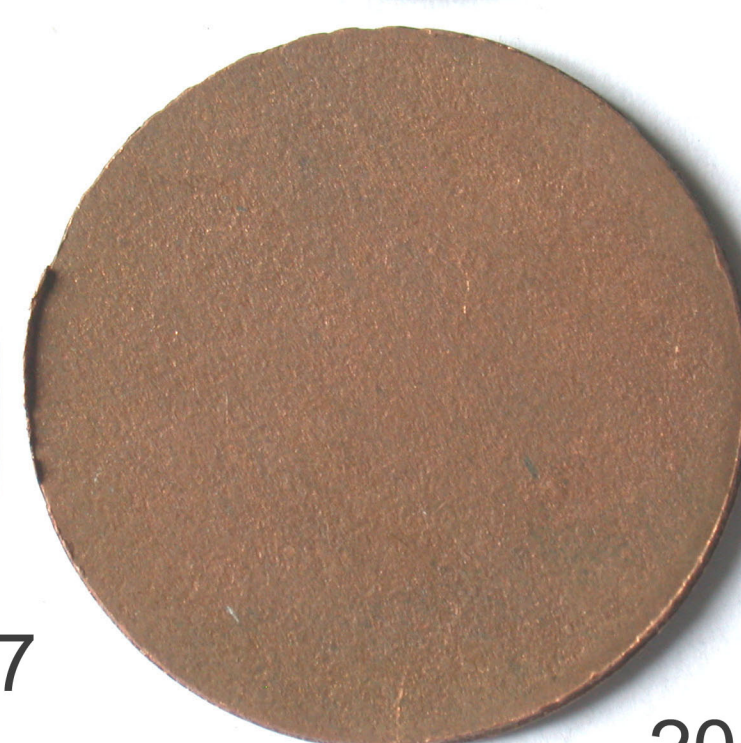
r5



r6



r7



20-heller flans



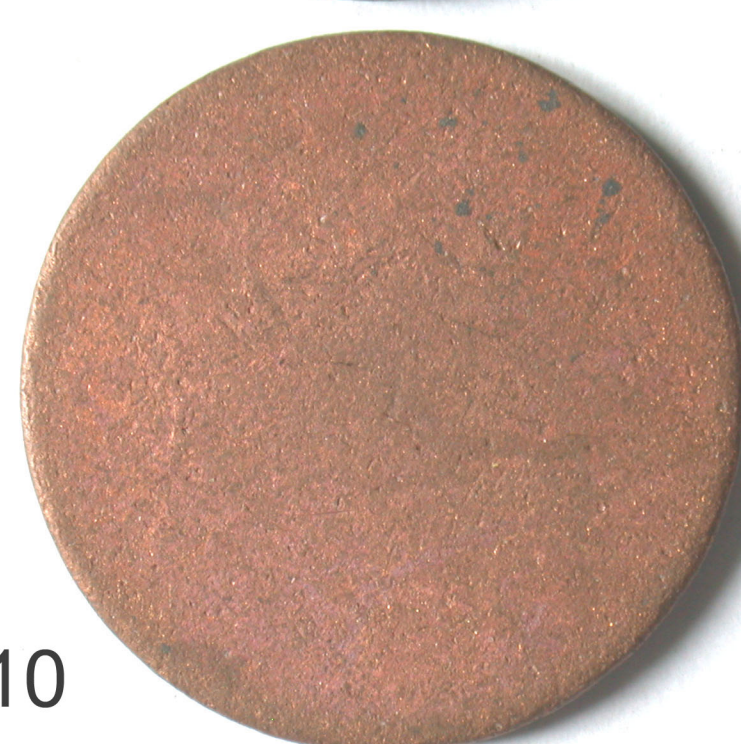
r8



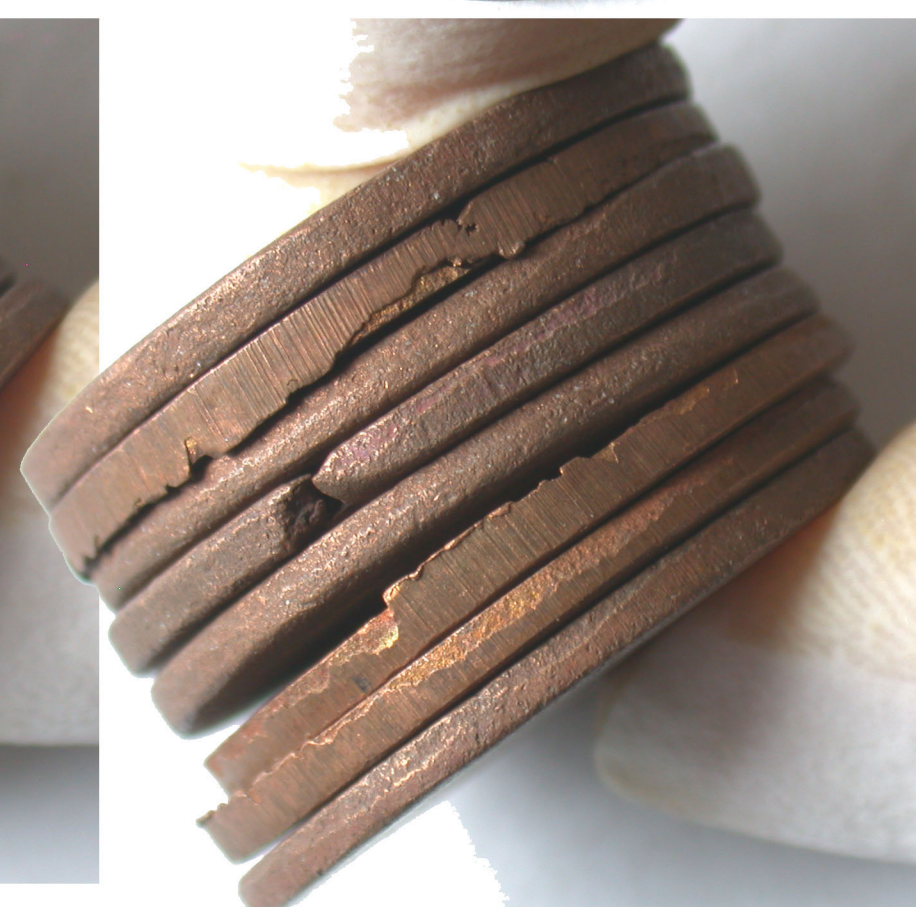
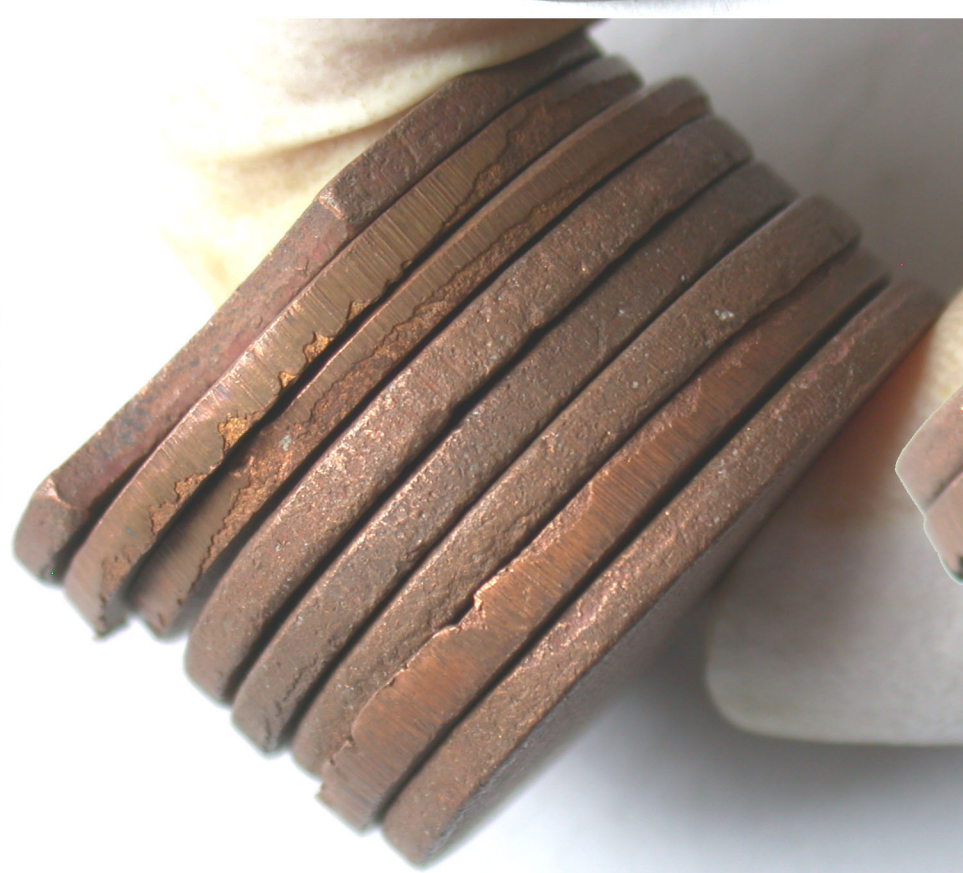
r9



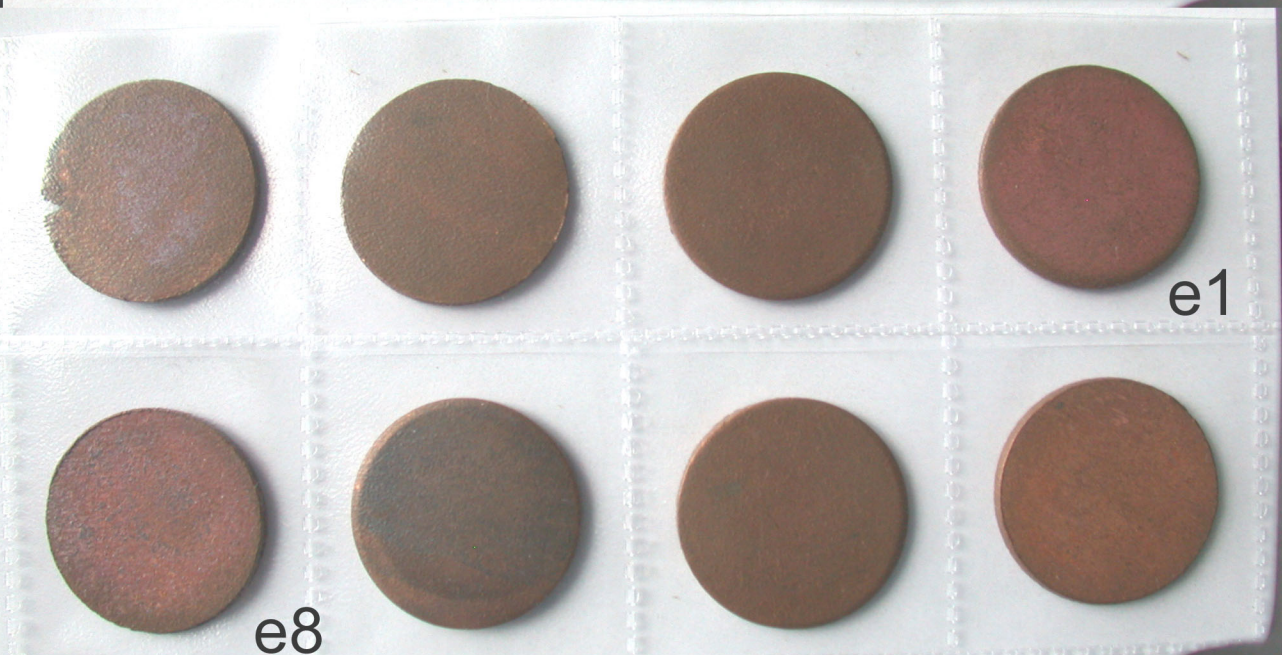
r10



r11

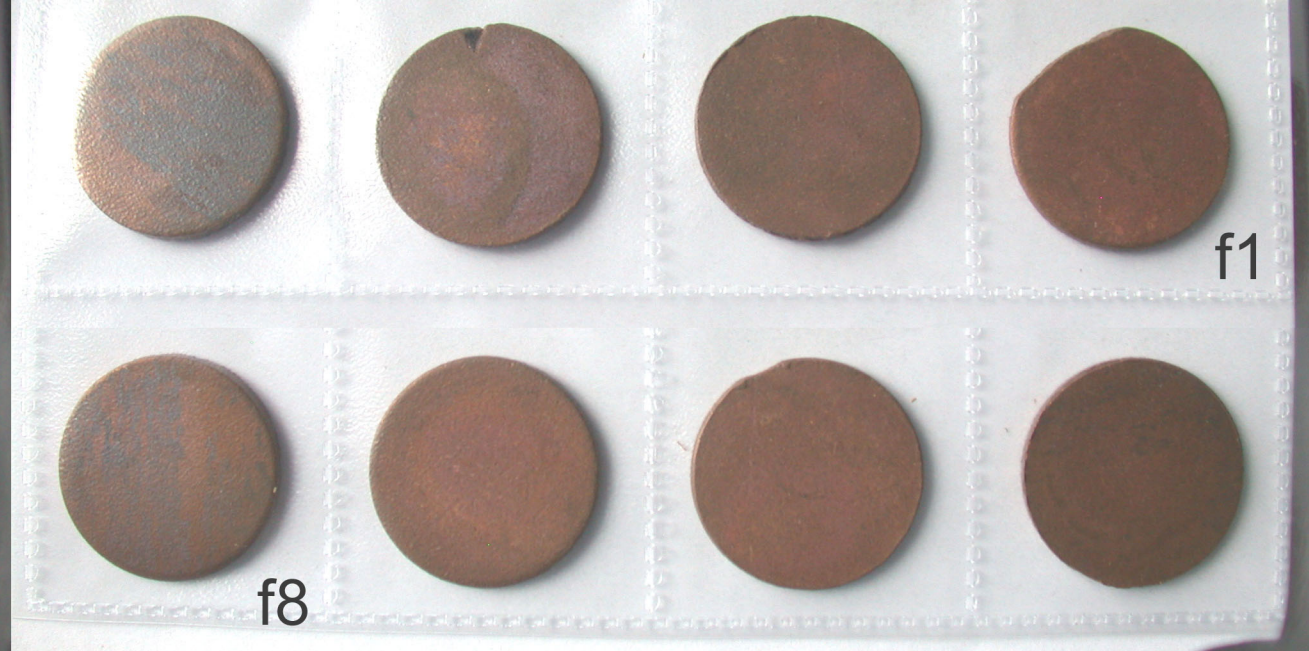






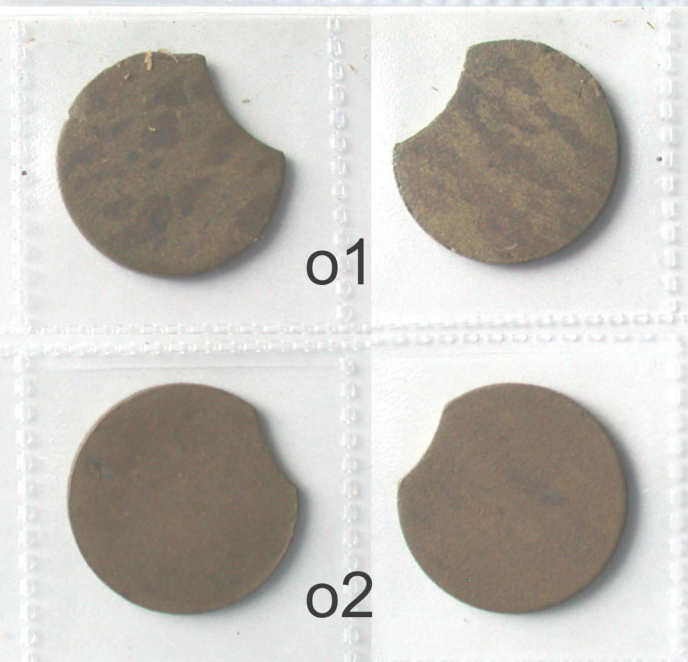
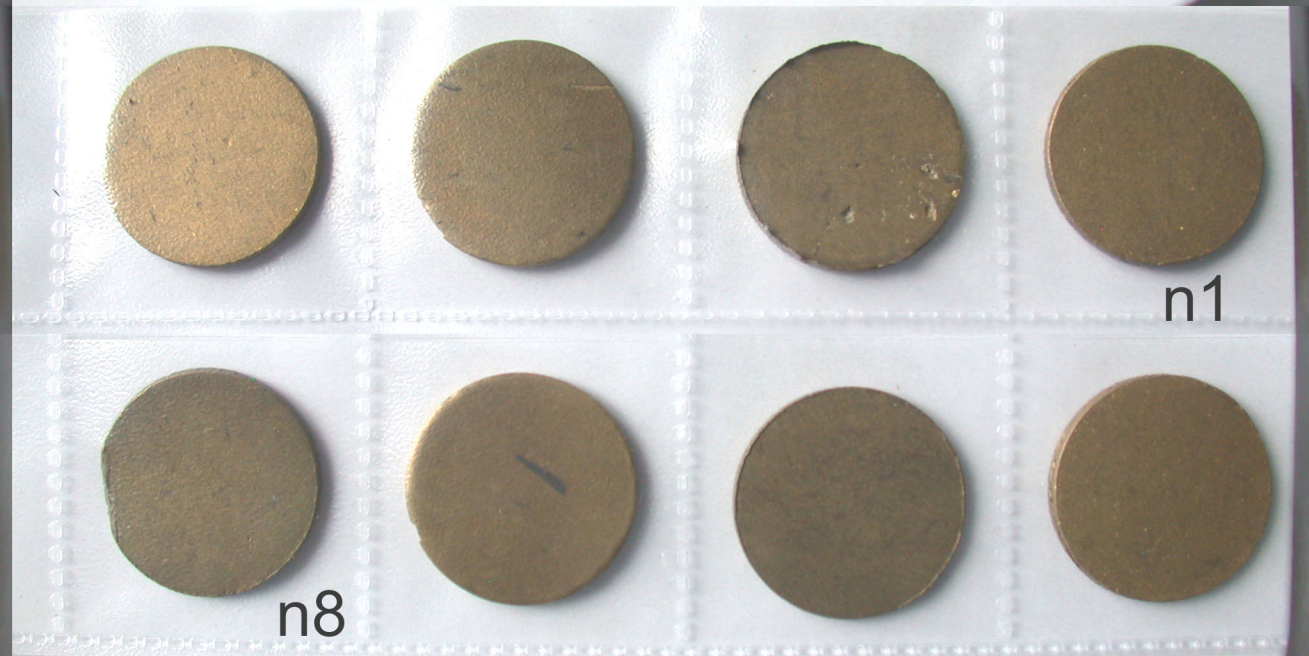
20-heller flans





20-heller flans





20-heller flans