Lima 8 reales, 1772, with an oval countermark

8 Reales - Charles III (Colonial Milled Coinage) · Numista #46610



Obverse The crowned shield between the assayer's mark and the denomination. Photograph, even light.



Reverse The crowned hemispheres between the pillars, with the countermark at the centre. Photograph, even light.

Read on the coin: 1772, Lima, assayer JM, variety KM#64.2 (AI reading of the photographs); catalogue type Numista #46610; an oval countermark in the form of the Bank of England's of 1797 (AI reading).

IN SHORT

Your coin carries an oval countermark in the form of the Bank of England's of 1797, struck hard enough to flatten the centre of the shield on the other face. Its weight on your balance is a fifth below the standard for a Lima 8 reales; that is the one question we could not settle from the surface. A lighter metal would mean the piece is a later copy, and only a density test or an assay of the metal can tell.

DIAMETER	WEIGHT	COUNTERMARK
39.4 mm	21.62 g	5.5 × 4.6 mm
photographed outline at the rig's scale; this coin was not calipered	owner's balance; catalogue 27.07 g (−20.1 %)	incuse, 155 µm deep; measured on the reconstructed surface
MEASURED	STATED	MEASURED

CONDITION Detail comparable to About Uncirculated (the examiner's reading of the photographs; confidence plausible, uncalibrated; not a certified grade; no Sheldon number (no ledger basis); no numismatic grade if a copy) In plain words: the design is sharp and the fields carry fine hairlines; if the metal turns out not to be silver, a numismatic grade does not apply.

WHERE TO LOOK

1 page 3 — An oval countermark between the pillars — MEASURED
2 page 4 — Behind it, the centre of the shield is pressed flat — MEASURED
3 page 5 — What the coin says about itself: 1772, Lima, assayer JM, a dot above the L — READ
4 page 6 — The weight: a fifth below the standard, on your balance — STATED
5 page 7 — Sharp detail everywhere, with fine hairlines in the fields — READ
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At a glance

A description you may reuse; each claim in it carries the status printed on the cover.

> Peru, Charles III, 8 reales, Lima 1772, assayer JM (read on the coin); variety KM#64.2, a dot above the L of the left mint mark; Numista #46610. Oval countermark on the reverse in the form of the Bank of England's of 1797 (read), 5.5 × 4.6 mm and 155 µm deep (measured), with the centre of the shield flattened behind it. 39.4 mm on the photographed outline (measured; not calipered). 21.62 g on the owner's balance (stated), a fifth below the type standard; the metal is not tested. Detail comparable to About Uncirculated, a reading of the photographs, not a certified grade; fine hairlines in the fields.

MEASURED	a number from the reconstructed surface or the photographed outline
READ	what the examiner read on the photographs (AI-assisted); not a measurement
STATED	told to us by the owner or the seller; we hold no copy unless the supplement says so
NOT DECIDED	we could not settle it with what we have; the next steps say who can

What we did

Each face was photographed 120 times, each frame lit by one light from a known direction, and reconstructed by photometric stereo into a measured surface at 62.8 px per mm. Readings and the grade are the examiner's reading of those photographs (AI-assisted); depths, relief and outlines are measured on the surface.

Obverse: by eye. Reverse: by eye. Clock positions and the die axis rest on these uprights.

Still open — and who can settle it

1. **Is this a silver 8 reales, or a later copy in a lighter metal?**
   YOU, OR A DEALER Weigh the coin in water on a checked balance (its density follows) or have the metal read by XRF; re-weigh it on a checked balance and record the balance.
   Settles: the weight question; whether the countermark and the coin are what they appear to be; whether a numismatic grade applies at all.

2. **Is the countermark the Bank of England's own punch, or an imitation?**
   A SPECIALIST Compare the punch with the documented original and imitation punches (Manville 2000) and weigh the piece.
   Settles: which punch made the mark; imitations are catalogued and some were made together with their host coins.

3. **How much wear is on the high points, and is there lustre under the hairlines?**
   AN EXAMINER WITH THE COIN IN HAND, OR A GRADING SERVICE View the coin under a moving light for lustre and wear on the crowns, lions and pillars; inspect the hairlines under magnification.
   Settles: whether the reading of About Uncirculated holds, moves up to Uncirculated or down to Extremely Fine.

4. **Are the measured lengths on the rig's own scale rather than a caliper's?**
   AZ ROBOTICS Caliper the coin; no new capture is needed. The fine-grid surface solve's own check against the standard solve is limited on both faces; the figures here use the height map, which that limitation does not touch.
   Settles: the scale of every length printed here; the surface's own quality check.

1 MEASURED OBSERVATION

An oval countermark between the pillars

Over the hemispheres, at the centre of the reverse, a small oval has been punched into the coin: a draped bust facing right, in the form of the mark the Bank of England struck on Spanish dollars in 1797.



The countermark close up: an incuse oval with a draped bust facing right; the profile, the queue with its tie and the folds of the drapery are all there. The bar is 2 mm.



Where it sits: at the centre of the reverse, 3.3 mm from the coin's centre, over the hemispheres.

The oval measures 5.47 by 4.63 mm on the reconstructed surface and is 155 µm deep: about the thickness of two sheets of paper pressed into the metal. Those are measurements, and they repeat to a few micrometres when the coin is lifted and re-seated.

What the mark is, is a reading. Its form is that of the Bank of England countermark of 1797, a draped bust facing right in a small oval, the kind struck on Spanish dollars to make them pass as English money. We read that from the photographs; we did not compare the punch itself with the documented originals, and imitations of this countermark exist and are catalogued, some made together with the host coin.

So this chapter ends where the surface ends. The geometry says a punch of this shape and depth was struck into this coin. Whether the punch was the Bank's, and whether the coin under it is a silver 8 reales, are questions for a specialist's reference and for a test of the metal.

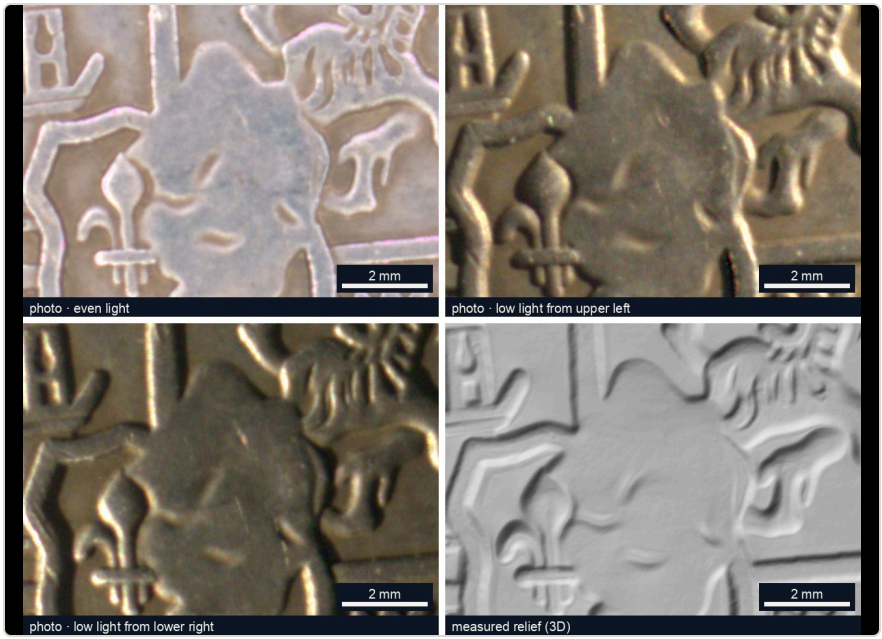
WHAT THIS RESTS ON

MEASURED	The oval's size and depth, from the reconstructed surface at 62.8 px per mm; a second capture after re-seating repeats the design relief to 2.9 µm.
READ	That the form is the Bank of England's of 1797.
NOT DECIDED	Whether this is the Bank's punch or an imitation of it; another oval bust countermark is also possible.
A SPECIALIST	Comparison of the punch with the documented original and imitation punches (Manville 2000), together with the coin's weight.

2 MEASURED OBSERVATION

Behind it, the centre of the shield is pressed flat

Turn the coin over. Exactly behind the countermark, the upper right of the shield is a smooth raised patch where the third fleur-de-lis and the edge of the lion's quarter should be. The two belong together: the mark was struck into a coin lying on a flat surface, and the metal under it gave way.



The patch in four views: even light; a low light from the upper left; a low light from the lower right; and the measured relief itself. The fleurs-de-lis around it throw shadows and stand up in the relief; the patch does neither. Each bar is 2 mm.



Where it sits: the centre of the obverse, 2.9 mm from the coin's centre, behind the mark.

The flattened area is 5.81 by 3.37 mm and stands 65 µm above the field around it, measured on the reconstructed surface. It is not wear: wear takes the high points first and leaves the low ones, while this patch is uniformly smooth from its centre to its edge, and it sits precisely where the countermark's punch pressed from the other side.

For the grade this matters in one way only: the missing fleur-de-lis is the countermark's doing and is not counted against the coin.

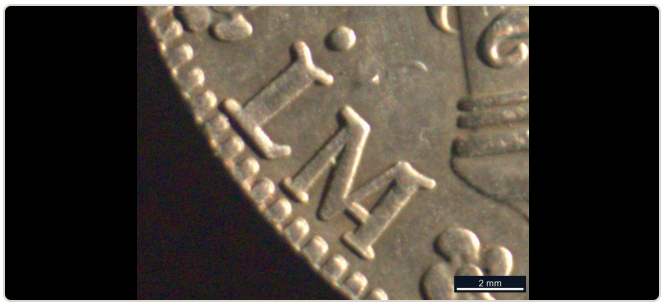
WHAT THIS RESTS ON

MEASURED	The patch's size and height above the field, from the reconstructed surface; the re-seated repeat holds the obverse design relief to 3.4 µm.
READ	That the patch is the mark's doing and not wear.
NOT DECIDED	A detail read here may be an effect of the light direction; each close-up was checked under opposite lights.
NO ACTION NEEDED	The patch is explained by the mark; nothing further rests on it.

3 READ READING

What the coin says about itself: 1772, Lima, assayer JM, a dot above the L

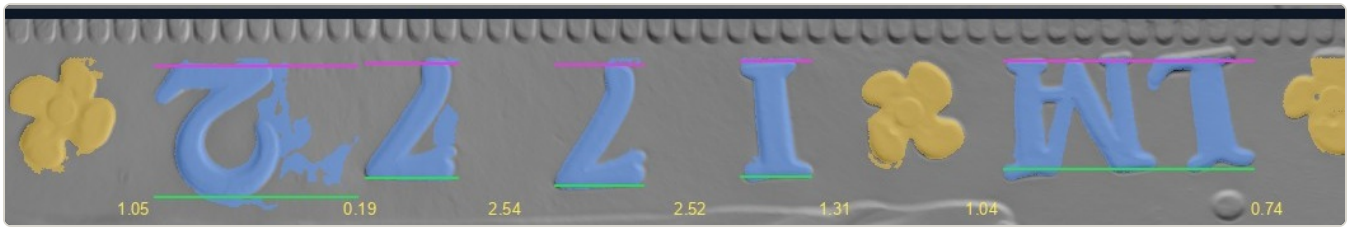
Everything written on the coin was read from the photographs and the measured relief and set beside the catalogue. The readings name the design; they do not test the metal.



The left mint mark, LM, with a dot above the L: the catalogue's variety KM#64.2.



The right mint mark, LM, with no dot.



The mint marks and the date, 1772, unrolled from the measured surface; the small figures and coloured guides are the letter-spacing measurement's own marks, not part of the coin.

Around the shield: CAROLUS · III · D · G · HISPAN · ETIND · REX, the king's name and titles, with the assayer's initials JM at the left of the shield and the denomination 8 at the right. Around the pillars: VTRAQUE VNUM, and below, between two rosettes, the date 1772 flanked by the mint mark LM on each side.

The catalogue lists this type under Numista #46610 (KM#64), and its variety KM#64.2 by one detail: a dot above the L of the left mint mark and none on the right, which is what the two close-ups show. The catalogue's reference line for the type reads LMA ✤ 1769 ✤ LMA, the earlier year of the series; your coin's own line reads LM ❀ 1772 ❀ LM. The difference is the date and the form of the mint mark, not a disagreement about what the coin is.

Automatic letter reading placed the catalogue's letters on the measured surface as a check; where it found a letter it corroborates the examiner's reading, where it did not the reading stands on the photographs alone. The supplement lists the letters it found.

WHAT THIS RESTS ON

READ	The date, denomination, variety, legends and mint marks: the examiner's reading of the photographs and the measured relief, AI-assisted.
NOT DECIDED	A reading names the design; it does not test the metal or decide whether the coin is what it appears to be.
NO ACTION NEEDED	The readings stand as they are; the questions that matter are in the chapters before and after.

4 STATED FACT

The weight: a fifth below the standard, on your balance

You weighed the coin at 21.62 g. The catalogue standard for a Lima 8 reales is 27.07 g. That is −20.1 %, far more than wear or cleaning removes from a coin whose design is as sharp as this one.

We did not weigh the coin ourselves and we hold no record of the balance or its resolution, so the figure is yours and is marked as stated. Its diameter on the photographed outline is 39.38 mm, close to the size of the type; the coin is not small, it is light.

The examiner's reading of that fact is that the piece is more likely a later copy in a lighter or less dense metal than a worn original: the surface shows too little wear to have lost a fifth of its silver. We print that as a reading with its confidence and not as a verdict, because the surface cannot test the metal. Three other explanations are open and are listed in the supplement word for word: an unusually thin flan; metal removed from inside the coin in a way the faces would not show; an error in the declared weight.

One measurement settles it. Weighed in water, the coin gives up its volume, and its weight over that volume is its density: silver of this fineness is about 10.3 g/cm³, the common alloys of copies between 8.4 - 8.9. An XRF reading of the metal answers the same question another way. Either can be done by a dealer or a laboratory in minutes, without harming the coin.

WHAT THIS RESTS ON

MEASURED	Nothing here: the weight is the owner's figure and the catalogue's standard is a published nominal; no distribution of this type is on file, so no tolerance was applied and no verdict is printed.
READ	The examiner's reading that a copy in a lighter metal is more likely than a worn original (confidence high).
NOT DECIDED	A thin or underweight silver flan; a silver original with metal removed inside; an entry or balance error.
YOU, OR A DEALER	Specific gravity by hydrostatic weighing, or an XRF reading of the metal; a re-weighing on a checked balance, and a coin of the same mint and date measured the same way.

5 READ READING

Sharp detail everywhere, with fine hairlines in the fields

The close-ups show the design complete: the pearls and jewels of the crowns, the windows of the castles, the manes and claws of the lions, the ribbing of the pillar crowns. In the open fields run families of fine parallel hairlines.



The crown over the shield: separate pearls along the arches, the orb and cross at the apex, lozenge and oblong jewels in the band.



The lion of the upper-right quarter: crown, mane locks, raised forepaws with claws, tufted tail.



The crown over the hemispheres: pearls on the arches, jewels in the band, scrolls; hairlines run across the field above it.

The examiner's reading of the photographs is detail comparable to About Uncirculated: the high points show no rub in these pictures, and the fine parts of the design that wear first are all present. The hairlines may come from a past cleaning; this examination does not assess cleaning systematically, so they are reported and not scored. The flat patch at the centre of the shield is the countermark's doing and is not counted as wear.

Two things would move this reading. Under a moving light an examiner with the coin in hand can see whether the high points keep their lustre, which photographs under fixed lights cannot show, and whether the hairlines hide light wear. If the metal turns out not to be silver, the question of a grade falls away: a copy is not graded as a coin of the type.

This is a reading of photographs, not a certified grade, and it is not calibrated on graded coins of this type scanned on the same instrument. No Sheldon number is given for that reason.

WHAT THIS RESTS ON

MEASURED	A consistency check only: the share of flat design crests on each face lies outside the heavy-wear band; it supports the reading and is not itself a grade.
READ	Detail comparable to About Uncirculated, from the close-ups; the hairlines and the untested lustre.
NOT DECIDED	Uncirculated if the high points are unworn under a moving light; Extremely Fine if the hairlines hide light wear; no grade at all if the piece is a copy.
AN EXAMINER WITH THE COIN IN HAND, OR A GRADING SERVICE	A view under a moving light for lustre and wear on the high points, and graded coins of this type scanned on this instrument.

What to do next

Each step names who can take it and what it would settle. None of them is required; the report stands as it is.

1 **YOU, OR A DEALER** Weigh the coin in water on a checked balance, or have the metal read by XRF, and re-weigh it on a checked balance.
Settles: whether this is a silver 8 reales or a copy in a lighter metal; the countermark question and the grade both wait on it.

2 **A SPECIALIST** Compare the countermark punch with the documented original and imitation punches (Manville 2000).
Settles: which punch made the mark.

3 **AN EXAMINER OR A GRADING SERVICE** View the coin under a moving light and under magnification for lustre, wear on the high points and the hairlines.
Settles: whether the reading of About Uncirculated holds, and what the hairlines are.

4 **AZ ROBOTICS** Caliper the coin; no new capture is needed.
Settles: the scale of the lengths printed here, now on the rig's own calibration.

THIS REPORT	The technical supplement AZR-8R-1772-JM-supplement.pdf holds the capture and processing checks, the detector settings, every measurement table, the design-element maps, the method, each alternative word for word from the record, a glossary, the artefacts on file and the record identifiers.
REVISION	Editorial issue, from rev C of 26 September 2026, 12:26 PM EDT; no corrections recorded.
REVIEW	Automated examination; no reviewer sign-off is recorded for this revision.
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RECORD	`ax_35df284d04cfb490 · record.json sha256 71ca464a3e31d27f42cddde1276ffafceb7d2e4046a6e9094d2df0663c9e90e3 · exam.autoexam.editorial 0.1.0`

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This report describes the surface of the specimen as photographed and measured on the date of issue. It is not a guarantee of authenticity, grade or value, and is not transferable to any other specimen.