

A MONOGRAPH

ON THE

Brass and Copper Wares

OF THE

NORTH-WESTERN PROVINCES AND OUDH.

BY

G. R. DAMPIER, C.S.

Published by Authority.



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P R E F A C E .

THE following report has been prepared in accordance with G. O. No. $\frac{2199}{1-132}$, dated 2nd August 1893, and Government of India letter No. $\frac{41}{238}$, dated 5th July 1893.

Under these orders, a list of questions bearing on the subject of the Copper and Brass Manufacture of these Provinces was drawn up and despatched to each district. A special officer in each district was deputed to write a district report on the lines indicated in the form of questions circulated, and these reports were submitted to me when completed. Partly from these reports, and partly from personal inquiries instituted at Mirzapur, which is itself an important centre of the trade, I have been enabled to compile the Provincial Monograph on the Brass and Copper Manufactures of the North-West Provinces and Oudh.

Of the reports received from the various districts, that submitted from Benares, compiled by Mr. J. F. Fanthome, Deputy Collector, gave me the greatest assistance. The report was admirably drawn up, and was full of copious information, both as regards the actual manufacturing processes and also as to the present economic conditions of the Brass Trade in Benares. After this I may mention the Etawah report, drawn up by Mr. H. R. C. Dobbs, C.S., the Bareilly report, drawn up by Pandit Janardhan Dat Joshi, the Agra report, drawn up by Mr. H. Hoare, C.S., and the Farukhabad report, drawn up by Saiyid Muhammad Ali, as having been, each in their own department, of special use in compiling this monograph. The Mainpuri and Moradabad reports were also good. My best thanks are due to Mr. Crooke, Magistrate and Collector of Saharanpur, for the hints he has given me as to the form which this report should take, and for the valuable advice I have derived from him during its compilation.

Saharanpur.

G. R. DAMPIER, C.S.

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GLOSSARY.

Note.—The brass and copper manufactures possess a fairly copious vocabulary of technical terms. Accuracy in transliteration has been aimed at, as far as possible, but any one who has ever attempted to carry on a conversation amid the deafening noise of a Thatheri Bazar will readily understand how easy it is to mistake the exact spelling of some new word or term that the enquirer has never heard before.

Hindustani.	Section and Chapter.		English.
	Section.	Chapter.	
A			
Anná	16	III	Open furnace.
B			
Baddhi	11	III	The strap used to pull the lathe.
Bagheli	11	III	A part of the lathe.
Baglá	17	III	The vertical side of a <i>tháli</i> .
Bál	16	III	A sledge hammer, <i>cf. gham</i> .
Bálf	19	III	A pointed headed hammer.
Bánkas	4	I	A grass used for cleaning vessels.
Basuli	8	III	An instrument for removing superfluous molten metal.
Bhángar	1	III	The worst kind of copper.
Bharat	2	III	Prince's metal; an alloy of zinc and copper, <i>cf. kaskut</i> .
Bhatti	9	III	A furnace.
Bimaut	6	III	The soil from anthills. See <i>balua mitti</i> .
Botá	8	III	A crucible, <i>cf. ghariya</i> .
Brihaspati	3	I	The god of gold.
Budh	3	I	The god of lead.
C			
Chák	11	III	A lathe.
Chakti	13	III	A patch of metal, <i>cf. shik</i> .
Charakh	11	III	A lathe.
Chandan	7	IV	A kind of powder rubbed on the forehead.
Chaurai	2	IV	A broad, flat tool, used in raised work.
Chheni	18	III	A short, stout, handleless chisel.
Chitr karnowálá	2	IV	A graver (from Sanskrit <i>chitr</i> = delineation).
Chunákhá	17	III	A pair of compasses, <i>cf. parkál</i> .
D			
Dabká	9	III	The furnace in which metal is fused.
Dálf	7	IV	The branch of a candlestick.
Dánowálá	2	IV	A kind of decorative pattern.
Dántá	13	III	Dove-tailing (lit., a tooth).
Dari	7	IV	The stem of a candlestick.
Darj	7	III	The crack between the upper and lower mould.
Danná	4	I	A platter of leaves.
Dhaláfi			
Dharáfi			
Dharkáfi	10	III	The pouring of the fused metal into the mould.
Dháláfi	10	III	The workman who performs the above process.
Dhamha	9	III	See Dabka.
Dhatá	17	III	Sloping side of a <i>tháli</i> .
Dhaunkni	9	III	Bellows, <i>cf. kháfi</i> .
Dhudká	9	III	The ducts leading from the bellows to the furnace.
Diválf			
Dúálf	11	III	The strap used to pull the lathe, <i>cf. baddhi</i> .

Hindustani.	Section and Chapter.		English.
	Section.	Chapter.	
G			
Gabhá ...	7	III	The inner core of the mould.
Ganga jamni ...	2	IV	A term applied to articles made partly of one metal, partly of another.
Geñrá ...	16	III	A stone anvil.
Gerá ...	4	III	A kind of red earth.
Ghan ...	16	III	A sledge hammer, <i>cf. Bál.</i>
Gharat ...	15	III	Term applied to beating out old metal.
Ghariyá ...	8	III	A crucible <i>cf. bota.</i>
Golqalam ...	2	IV	A tool used in sharpening the outlines of figures in raised work.
Gulmunhá... ..	9	III	Round headed, applied to hammers, &c.
Gursúm ...	2	IV	A kind of punch.
Gulli ...	15	III	Cast plate of metal, <i>cf. khatí.</i>
Guri ...			
H.			
Hári ...	19	III	Concave anvil of stone, <i>cf. okhli.</i>
Haṭhaura ...	18	III	A hammer.
Haṭhauri gol ...	2	IV	A round-headed hammer used in Benares work.
I			
Imli ...	17	III	Tamarind.
Itwár or Suraj ...	8	I	The god of copper.
J			
Jaháf ...	1	IV	Fourth grade copper.
Jajhar ...	1	III	Second grade copper.
Jastá ...	1	III	Zinc.
Jatao ...	6	III	See <i>kálí mittí.</i>
K			
Káiyá ...	8	IV	A tool used in Moradabad work.
Kajanj ...	7	III	See <i>khardant.</i>
Kamothi ...	6	III	See under (<i>Mitti káli</i>).
Kánsá ...	2	III	Prince's metal: an alloy of zinc and copper <i>cf. Bharat.</i>
Kakut ...			
Kánsi ...	2	III	Bell-metal: an alloy of tin and copper <i>cf. Phúl.</i>
Karandá ...	2	IV	A graving tool.
Karod ...	19	III	See <i>Saraj.</i>
Kasaura ...	4	III	A rare kind of solder.
Katarná ...	17	III	A pair of clippers: a wooden <i>groos</i> in the anvil.
Káṭ ...	17	III	A pair of clippers.
Káṭh ...	16	III	A block of wood in which the anvil (<i>Nohát, q. v.</i>) is placed.
Kinárná ...	2	IV	To sharpen the outline of a figure.
Khál ...	9	III	Bellows, <i>cf. Dhawákni.</i>
Khálí ...			
Kharád ...	11	III	A lathe, <i>cf. kund, &c.</i>
Khardant ...	7	III	An iron scraper used in lathing.
Kharwaṭ ...	11	III	A flier's tool made either of wood or iron.
Khas ...	4	III	A sweet smelling grass used for cleaning dishes.
Khinohwá ...	11	III	The work man who pulls the lathe strap.
Khunta ...	7	III	The peg supporting the lathe rod.
Kbuti ...	15	III	A cast metal plate, <i>cf. gullí.</i>
Koṭh or Kathá ...	9	III	A furnace.

-Hindustani.	Section and Chapter.		English.
	Section.	Chapter.	
K—(continued).			
Kumharoti	6	III	See under <i>Mitti káti</i> .
Kúnch	16	III	A long rod or tweezers.
Kúnd	11	III	A lathe.
Kúnj			
Kún			
Kúng			
Kurand	11	IV	Corundum : used for polishing vessels.
Kuthálf	8	III	A crucible, <i>cf. ghurya</i> .
Lahni	17	III	A chisel, <i>cf. randa</i> .
Láhf			
Likhná	2	IV	Sealing wax, lac.
Lodhrá	2	IV	To ink over a pattern.
Lodhrá	1	III	Third grade copper.
Main	2, 4	IV	A mixture of wax and resin for moulding.
Mangal			
Manuri	3	I	The god of brass.
Masturi	8	III	A polishing powder.
Masurhi	9	III	The furnace in which the metal is fused.
Mopibi			
Matban			
Misijosh			
Misijosh	19	III	A square-headed hammer.
Mitthi	4	III	Solder, <i>cf. ránj</i> .
— Kálf or chiknáf	6	III	A heavy dark clay = tank clay.
— Páf			
— Daluá			
Mohkár	20	III	Sandy earth.
Mukhandá			
Mohlá			
Moti			
Muhrá	7	III	The mouthpiece of a <i>gagra</i> .
Mungari	20	III	The upper half of a <i>gagra</i> .
Múnj	2	IV	A graving tool.
Nák	17	III	The hole left in a mould for the entrance of the molten metal.
Nánbáf			
Nánd	2	I	A mallet or hammer.
Naqqásnewálá	4	IV	A grass used for cleansing dishes.
Nariyá	4	I	
Naushádar	21	III	A part of the lathe.
Niháf	4	I	A professional cook.
Niháf	17	III	A vat.
Okhli	2	IV	A graver (from Arabic <i>Naqqash</i> = a painter).
Paggá or Pággá	4	IV	A small brass cap to cover the hole left in hollow idols.
Pallá	4	III	Sal ammoniac.
Pán or Paná	19	III	An anvil of iron.
Parkár or Parkál	19	III	See <i>Hárf</i> .
Pathawar	15	III	Small round earthen mould in which plates are cast.
Pendi	7	III	The outer shell of the mould.
Pharuf	7, 11	III	Metal sheet beaten from a brass plate.
Phól	2	I	A pair of compasses, <i>cf. chundákhá</i> .
Pisáa	7	I	A grass used for cleansing vessels.
		III	The bottom of a vessel.
		III	The bottom of a vessel.
		III	A wooden support for the arm of the workman at the lathe.
		III	An alloy of copper and tin, <i>cf. Kássi</i> . Bell-metal.
		IV	The socket of a candlestick.

Hindustani.	Section and Chapter.		English.
	Section.	Chapter.	
Q			
Qainchí	18	III	A pair of scissors.
R			
Rahu	8	I	The god of <i>kansa</i> alloy.
Randá	11	III	A plane; a turning tool.
Rāngá	1	III	Pewter; sometimes=tin.
Rānj... ..	4	III	Solder, <i>cf. misijash</i> .
Raskapúr	4	III	Corrosive sublimate, used for colouring alloys.
Beh	2	I	Alkali, a purificator.
Beti	11	III	A file.
Ritá	11	III	A filer.
Rukha	2	IV	A kind of chisel; also a decorative pattern named thereafter.
Rúsiá	1	III	A good kind of copper (Russian?), formerly imported into Benares.
S			
Sabrá	19	III	A vertical cone-shaped anvil.
Sabri	8, 19	III	A pointed instrument: an anvil.
Sachhá karná	2	IV	Elaborate a design.
Sajji	4	III	A refuse salt, used as flux.
Sārchá	7	III	A mould.
Sandán	19	III	A kind of anvil.
Sānsá, Sānsí	8	III	Tweezers.
Sandasa, Sanrasa	8	III	Tweezers.
Sani	8	I	The god of iron.
Sarāug	19	III	A slanting anvil, resting on a wooden support (karod).
Sargá, Salgá, Salngá	7	III	Iron rod on which the mould revolves while being lathed.
Shāmdán	19	III	A T-shaped anvil.
Siqligar	2	IV	A burnisher corr. from Persian <i>saiqalgar</i> = Arabic <i>Saiqal</i> , a burnisher.
Sisa... ..	1	III	Lead.
Soma	8	I	The god of silver.
Sudb	8	I	Ceremonially pure (<i>cf. metals</i>).
Subágá	4	III	Borax: a flux.
Sukra	8	I	The god of pewter.
T			
Tānbá	1	III	Copper.
Tasma	11	III	The strap used to pull the lathe of <i>Devulí</i> .
Teráb	2	IV	Aqua-fortis.
Thik... ..	18	III	A patch of metal for mending, <i>cf. ahakti</i> .
Toñtí	5	I	A spout.
U			
Ubhár ká kám	2	IV	Raised work, <i>alto rilievo</i> (for <i>ubhár</i> =rising, swelling).
Uchalyá	8	IV	A graver.
Z			
Zāferání	1	III	The best kind of copper.
Zamín dabihúf ubhár	2	IV	Bas-relief.