HANDBOOK OF INDIAN PHILATELY



THE STAMPS OF WADHWAN

by R. J. BENNS B.Sc.

I N D E X

Chapter	1:	Introduction to the Stan	nps of Wadhwan	Ţ	WADHWAN/3
Chapter	2:	The Main Features of the	Stones	• • •	ϵ
Chapter	3:	Identifying Individual I	Positions of S	tamps	14
Chapter	4:	Postmarks and Covers of V	Vadhwan	•••	4]
Chapter	5:	Forgeries of Wadhwan	• • •		48
Chapter	6:	Future Research	•••	• • •	53
		The Catalogue	• • •	• • •	54
		Bibliography and Credits	· · ·		5.5

Written on behalf of and with the help of Members of The India Study Circle for Philately.

N/537/A WADHWAN/2

Published by

THE INDIA STUDY CIRCLE FOR PHILATELY
11 Boston Court, Brownhill Road, Chandler's Ford,
Eastleigh, Hampshire, U.K.

OCTOBER 1990

N/538/A WADHWAN/3

THE STAMPS OF WADHWAN

by R.J.BENNS B.Sc.

Chapter 1: INTRODUCTION TO THE STAMPS OF WADHWAN

The stamps of Wadhwan were first described in the Illustriertes Briefmarken Journal of the 1st September 1888, page 238. The design comprises two lions standing on a floreate ornament with an inscription across it, holding a shield surmounted with a pennant and a trident. The shield contains a sun with the characters 'OMA' meaning 'the Almighty' The English lettering 'WADHWAN STATE' is curved across the top and the value 'HALF ANNA' is set in a tablet at the The article describes the inscription as reading bottom. 'YESHOW' (= 'Success'), 'BHOOSHAN' (= 'Glory'), (= 'Forever'). 'VARDAMAN' (= 'to grow'). Later articles. e.g. 'The Philatelic Record' of December 1888 and 'The Philatelic Journal of India' of November 1913 and February 1914 give variants of this translation but the literal translation is basically 'The Almighty may he augment our future success and glory'.

The Stanley Gibbons catalogue lists seven stones as having been used for the production of these stamps. This was probably based upon Major Evans' article in Gibbons' Monthly Journal of February 1914 but, unfortunately, that article is rather unclear in many aspects and is not a great help to the collector in identifying these stones. The original article in the Illustriertes Briefmarken Journal (1st. September. 1888) confuses matters by referring to a perf.14 which is completely unknown, and a subsequent article in the same journal of July 1889 (page 201) states that "the new issue is in sheets of 28 (formerly 42) and is now perforated (!)". It also refers to a thick paper which is unlikely to have existed as early as 1889. Stone II is known to contain 42 stamps and stone I may be 28, although this is not yet confirmed, and so it appears to suggest that II may have preceded I, but it is too confused to place much reliance upon it.

Several other articles have appeared on the stamps of this State, the most important being that of Lt.Col. F.M.Douie in Volume XXXVIII of the Philatelic Journal of India (1934, page 68) which supplements Evans' article.

WADHWAN/4 N/539/A

Evans indicated that the master die was engraved in taille-douce, possibly on copper, and that he possessed a die proof on card, evidently a line engraving. This die proof showed a barely perceptible dot between 'Wadhwan' and 'State', this being a feature which was frequently absent on the printings from the earlier stones I and II, but was clearly present in the printings from the later stones. Mr. T.Sturton has such a die proof with the dot reasonably prominent and it has no shading in the pennant! Recent research shows clear evidence that the same master die was used in the preparation of all the stones as there are several minor flaws which appear on many stamps of every stone. The following illustration shows the positions of the most prominent master die flaws:



None of the stones shows any evidence of the use of an intermediate (matrix) stone and all were prepared directly from the master die or a single copy of it. As usual with lithographic printing, there are many dots and breaks in the design which appear in single positions and so are of use in determining the position of individual stamps in the sheet rather than in identifying the stone itself. Earlier writers described certain features which help to identify the actual stone such as the presence or absence of a dot after 'Wadhwan', the shading in the pennant which was a clear triangle in the earlier stones but which deteriorated to a dot in the late ones, and the presence of a hair-line across the 'F' of 'HALF' in most

N/540/A WADHWAN/5

stamps of stone III and some stamps of stone IV. All these are helpful but are not always conclusive and many features have been discovered during the recent research which are described in the present Handbook and which should help the majority of stamps to be allocated to a particular stone and even to the actual position of the stamp in the stone. The thickness of the paper, together with the direction of its wove mesh, provides a very useful starting point as will be shown.

It was only a few months before completion of this work that I received a copy of what I take to be a fairly recent publication entitled 'The Indian State Wadhwan, its Postal History and Philately' by Sten Christensen in Swedish. this excellent work Sten has attempted to describe and illustrate the flaws on each stamp of each stone just as I had done. Unfortunately, the illustrations in my copy were not very clear but nevertheless there was much useful information, to which I have made several references in the present Handbook. very few weeks before completion, an American member kindly loaned me an English version of Sten's book which had been updated and included more new information. These are both excellent reference works. The present Handbook extends Sten's two forgeries to five and includes, in the following chapters, many new discoveries, e.g. the constancy of the mesh direction, the probable discovery of two Stone I's, further hairlines in stones III and IV, short-cut illustrations of the flaws to make it easier to identify the position of stamps in the sheet, a study of the postmarks and other features which I hope will increase the interest of collectors of this rather neglected State.

A further item of general interest comes from a photostat of a Wadhwan approval page, which has been in my collection for some time. The page is printed in what I believe to be Swedish and shows two stamps (possibly a pair) at the bottom which are inscribed underneath "probably an essay". The illustration shows one of these and it clearly differs from the issued stamps in many features e.g. the seriffed lettering of 'WADHWAN STATE', the short central prong of the trident, the ornaments at the corners of the value tablet etc.



I know nothing more about it other than that I am advised that the page was sold in an ISC auction some time pre-1974.

WADHWAN/6 N/541/A

Chapter 2: THE MAIN FEATURES OF THE STONES

STONE I

During the recent research, examples of complete sheets of all the stones have been seen with the exception of stone I. Only one block of four has been reported despite a request to see such items in 'India Post' of November 1989. This may be due to their rarity or the inability of collectors to recognise this stone, a possibility which the publication of this Handbook should remedy. Neither Evans nor Douie possessed a sheet of this stone. The details supplied below are, therefore, a compilation of the details given by those authors together with further deductions from the recent research and the knowledge that all the other stones, II to VII, have been plated.

Features of Stone I

The Perforation: Line perf.12½ with fairly large holes is most commonly seen, but stamps are also known with a very irregular pin-perf. of about $6\frac{1}{2}$ which is often too rough to measure. A single stamp has been seen which is pin-perf. at the left, trimmed (or marginal) at the right and is perf.12½ at the top and bottom, and so these perforations do exist in combination. The margins of the sheet itself are imperforate all round.

The Paper: There are again two variants: A thin, fairly smooth, toned wove with a horizontal mesh which is often not particularly clear, especially in gummed copies where the gum tends to obscure the mesh; and a thin toned unmeshed wove. The unmeshed stamps are usually printed quite black whereas the meshed paper stamps are often quite greyish in appearance. Two exceptional copies have been seen which have a vertically meshed wove. One of these is the combination perf. stamp mentioned above and the other, surprisingly, is a distinctly thick meshed wove. They both have the no dot, pennant shaded characteristics and cannot be plated against the other stones.

The Sheet Size: This is not known. Douie concluded that there were probably at least seven rows and not more than four columns. This, together with the very confusing evidence from the Illustriertes Briefmarken Journal, suggests that the sheet may have been of 28, but there is now evidence that two stones may actually exist and these may be of different sizes.

Dot after 'WADHWAN': There was no dot or only a faint trace in the seventeen copies known to Douie but, among the 95 copies examined during the recent studies, there were five with a dot. All five were on stamps printed on the unmeshed paper and none could be plated against stones II or III, the only other thin paper, perf. $12\frac{1}{2}$, fully shaded pennant stones.

N/542/A WADHWAN/7

The Pennant Shading: This appears as a clear black triangle frequently with a slight gouge in the top in all the copies examined. It is a feature which gradually deteriorated in the later stones.

<u>Comment</u>: There is now a distinct probability from the recent research that two stones exist instead of just one. It is possible that there is Stone IA represented by the meshed paper stamps, perf. $12\frac{1}{2}$ and pin-perf. and Stone IB represented by the unmeshed paper stamps, perf. $12\frac{1}{2}$. The evidence for this is discussed in the next chapter.

STONE II

This stone can be fully described since the writer has been loaned a complete sheet for examination and also a large block comprising two-thirds of a sheet. The details match those described by Evans closely but, although he believed that this was the second stone, Gibbons' current catalogue places it as S.G.1.

Features of Stone II

The Perforation: This is a distinctive small-holed pin-perf of size $12\frac{1}{2}$. It is slightly irregular in alignment and in hole-size but the size of the holes is a good clue to the stamps from Stone II. Like Stone I, the sheet is imperforate all round.

The Paper: This is a thin, smooth, toned wove, invariably with a vertical mesh.

The Sheet Size: 6 rows of 7 stamps.

Dot after 'WADHWAN': This is present on 35 of the 42 stamps and, as described by Evans, is absent on R2/3, R3/2, R4/4,5 and 6, R5/6 and 7 (i.e. Row 2, No.3 etc.). It is weak in a few other positions.

The Pennant Shading: This is a black triangle like Stone I but, in many positions, shows a gouge in the top.

Varieties: Evans described a vertical pair from the lower left-hand corner of the sheet which was imperf-between but but he did not make it clear which of the thin paper printings it originated from. From the text, he appears to be talking about Stone I but it is probable that he did not have sufficient information to distinguish between I and II. The current Gibbons catalogue lists the variety under Stone II as S.G.la, but the writer has not seen a copy to confirm this.

STONE III

Evans' third stone comprised forty stamps in ten rows of 4. Unlike the earlier stones, all stamps in the sheet show a dot between 'Wadhwan' and 'State'. He also described a hairline on

WADHWAN/8 N/543/A

the 'F' of 'HALF' on most stamps of the sheet which is distinctive of this stone, although it does occur on a few stamps of Stone IV also. Evans possessed two sheets and some small blocks. A member of the India Study Circle has kindly loaned the writer a number of blocks from which a reconstruction has been possible thus enabling a full sheet to be described.

Features of Stone III

The Perforation: This is a fairly large-holed perf. $12\frac{1}{2}$, usually clear but sometimes containing the cut circles of paper. The sheet margins are imperf. all round.

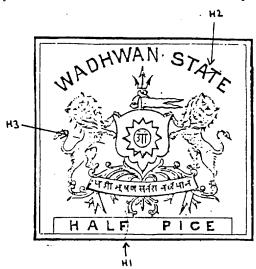
The Paper: This is a thin, toned wove or less commonly, a medium, slightly roughish wove. The mesh direction is invariably horizontal on both papers.

The Sheet Size: 10 rows of 4 stamps.

<u>Dot after 'WADHWAN'</u>: Unlike the earlier stones, this is present on all stamps.

The Pennant Shading: This is a black triangle although many of the stamps now show a gouge in the top. The exception is Row 8, No. 3 in which it is merely a dot.

 $\frac{\text{Hairline Flaws:}}{\text{across the 'F'}} \text{ but there are two others which occur less} \\ \text{regularly.} \text{ They are described here as Hl, H2 and H3.} \text{ H1 and H3} \\ \text{also appear faintly in some positions from the printings of Stone IV but they have not been recorded in any other stone.} \\$



Hl: This is a ')'-shaped flaw just to the right of the 'F' of 'HALF'. It occurs in all positions except for Row 8, Nos.2, 3 and 4 but is usually quite faint or only part of it shows.

N/544/A WADHWAN/9

H2: This is a fine line which joins the crossbar of the 'A' of 'STATE' to the top centre of the second 'T'. It shows quite clearly in R6/4, R7/2 and 3, R9/1 and R10/4 and faint traces have been seen in other positions.

H3: In its most extreme form it is a fine line which commences behind the back of the left-hand lion and ends across the bottom of the sun's lower rays. In its most common form, however, there is only the line behind the lion's back. This is to be found in R7/1, 2 and 3, R8/2 and R10/3 and 4 with traces to be seen in other positions.

All these hairlines may appear or disappear according to the inking and cleanliness of the stone.

STONE IV

Evans' details are sparse on this stone since he only possessed a dozen copies including a block of four and a pair. Douie possessed a complete sheet and Sten Christensen, in his recent publication on the stamps of Wadhwan, illustrates two sheets, one of which is described as "ex Major Evans" and so it is possible that Evans obtained a sheet after the publication of his article.

Features of Stone IV

This is the first stone to have perf.12. The Perforation: The holes are quite large and cleanly cut. A curiosity is that at least one row of the sheet has perf.ll. In both sheets illustrated by Christensen, there is a single row of perf.ll between the bottom two rows of stamps. I have a number of stamps in my collection from rows 7 and 8 which confirm the position of the perf.ll and no copies have been seen or reported from rows 7 and 8 which are perf.12 throughout. This is certainly curious since the stamps are line perforated and even if several sheets were perforated at a time, which is highly likely, one would expect to find some normals. However, this may be due to the inability of most collectors to plate the stamps, which this Handbook should rectify. Two exceptions have been found, however:- (i) a copy of Row 7, No.1 which is perf.11 at both top and bottom, and (ii) a copy of Row 2, No. 2 with perf.ll at the top as if the sheet had been inverted when perforating. Mr. T. Sturton possesses two sheets with the usual perf.ll between rows 7 and 8 and yet another which has three rows of perf.11 -Rows 7/8, 6/7 and 5/6!

The mystery remains as to why a line of a different size perforation was used at all. Unlike the thin paper printings of the earlier stones, the sheet is perforated at the bottom and at the left margin, but is imperf. at the top and right.

WADHWAN/10 N/545/A

The Paper: This is a thick, off white or yellowish wove, invariably with a vertical mesh.

The Sheet Size: 8 rows of 4 stamps.

<u>Dot after 'WADHWAN':</u> Present on all stamps although sometimes a little faint.

The Pennant Shading: Still mostly a black triangle but now showing distinct wear, particularly at the bottom of the sheet. Most stamps show it with a deep gouge in the top or a hollow appearance and in R6/4, R7/2, R8/1 and 2 it is little more than a large dot.

Hairlines: This is the only stone, other than Stone III, to show the Hl and H3 hairlines. They are less frequent and very much less distinct than in Stone III. According to Douie, Hl is to be found on R1/2 and 4, R2/1 and 3, R3/1, 2, 3 and 4, R4/2 and 3, but I have only seen traces of it in R1/4, R2/1 and R4/1 and 3. Traces of H3 have been seen on R1/2 and 4, R2/1, 2, 3 and 4, and R3/1 and 2, and Christensen reports traces of it in R2/2, R5/1, R6/1. R7/1, R8/1 and R8/4. As indicated under Stone III, these flaws may come and go according to the cleanliness of the stone.

 $\underline{\text{Dates of Use}}$: Evans indicated that he had first seen the thick wove stamps in December 1892 but several covers have been seen bearing Stone IV stamps which are dated July 1892, the earliest reported so far being the 2nd of July.

STONE V

Evans did not mention this stone although Douie described it and indicated that it appeared to be fairly common and that he possessed a complete sheet of it. The writer obtained a small packet of 30 or so of this stone some years ago mainly in small blocks and pairs and, due to the frequency of of spots and breaks in the design, was able to reconstruct the sheet, making use of the three imperf. margins to the sheet. Since then, the late Dr. Benders loaned me a complete sheet and so the constancy of the flaws is well established.

Features of Stone V

The Perforation: Size 12, a little rough in appearance. The sheet is perforated at the left and imperf. on the other three sides.

The Paper: This is a medium-thin wove, usually white but sometimes off-white. The mesh direction is invariably vertical.

The Sheet Size: 5 rows of 4 stamps.

N/546/A WADHWAN/11

<u>Dot after 'WADHWAN'</u>: Present on all. Douie indicated that it was scarcely visible in R5/2 but it is clearly visible in all copies that I have seen of this position.

The Pennant Shading: This has now deteriorated to a short, almost horizontal line to the naked eye.

Hairline Flaws: None has been found.

Dates of Use: Stamps of this stone are frequently to be found with the undated circular obliterator inscribed in Gujerati 'Svasthan Darbar Wadhwan', but unlike the other three medium and thick paper stones, no cover has been reported, and so, as yet, its dates of use are not known.

STONE VI

Evans possessed a complete sheet of this and indicated that he had seen others. He had a note that the printing had appeared in 1894 or 1895 and so was probably not the first of the thick paper printings. Christensen points out a slight doubling of the bottom frame lines of the pennant in this stone and in stone VII. I do not believe that this is due to retouching as there are some signs of it in Stone I, but the absorbency of the ink into the paper in that stone and subsequent ones prevented it showing clearly. It is my belief that a less absorbent paper was used for Stone VI printings (and even more so for Stone VII) together, possibly, with a thorough cleaning of the master die.

Features of Stone VI

The Perforation: A fairly clean-cut perf.12. Unlike all other stones, the sheet is perforated all round.

The Paper: This is to be found in both medium thickness and also quite thick. The colour varies from fairly white to quite heavily toned. Its mesh direction is invariably horizontal.

The Sheet Size: 6 rows of 5 stamps.

Dot after 'WADHWAN': This is present on all stamps.

The Pennant Shading: This is similar to Stone V, i.e. usually a short line but often merely a dot and quite faint. It is sometimes, but not always, missing in R4/2 and R5/5.

Hairline Flaws: None has been found.

 $\frac{\text{Dates of Use:}}{21.6.93.} \quad \text{Stone VI appears to have been reported with postmarks} \\ \text{dated } \frac{21.6.93.}{21.6.93.} \quad \text{Stone VI appears to have been the most commonly used of all the stones and some } 70-80\% \quad \text{of copies seen bear a postmark.} \\$

WADHWAN/12 N/547/A

STONE VII

Major Evans indicated that Messrs. Whitfield King had loaned him their stock of Wadhwan which comprised only printings from this stone, which he surmised was the last. Whereas he could not complete a sheet, he was able to allocate each stamp to a position in one or other of two blocks of 16. The stamps had originated from a person who had obtained them from the Post Office in Wadhwan in blocks of 16 or less and Mr. Jno. Godinho later confirmed to Evans that he possessed a complete sheet of 32.

Features of Stone VII

The Perforation: This is size 12, frequently with the paper discs not fully punched out. The sheet is imperf. at the top and right but perforated at the left and bottom.

The Paper: This is a thick, quite smooth wove, with a vertical mesh. It is usually more or less toned.

The Sheet Size: 8 rows of 4 stamps. usually found split horizontally into two blocks of sixteen

Dot after 'WADHWAN': Present on all stamps but usually
quite faint.

The Pennant Shading: To the naked eye, there is a short dash in all positions, weak in places.

 $\frac{\text{Dates of Use:}}{6.5.94}$ and three covers dated 12.7.94, the latter all being addressed to Shankarlal Mohanjee at Wadhwan City.

Other Features: This is a remarkably fine printing with thin sharp lines throughout the design, which usually makes it recognisable from all the other printings. Certain features, like the occasional doubling of the lower line of the pennant and a frequent split appearance of the thick right-hand frame line, led Christensen to suspect that retouching had occurred. However, these features are to be seen on rare occasions on the earlier stones and I believe it to be due to the smooth, less absorbent nature of the printing paper, possibly together with a thorough cleaning of the master die. On many of the stamps, there is a fine white scratch at one o'clock in the 'P' of 'PICE' (particularly Nos.1 to 6, 9, 10, 13 to 19, 22, 25, 26, 29 and 31) and occasionally there is one at 4 o'clock (Nos.1, 4 to 7, 12, 16, 19 and 31). These features have been seen only rarely on earlier printings, e.g. I have seen them on two copies of Stone IV and two of Stone V, but never on the thin paper printings which seem to have been printed on a more porous paper.

N/548/A WADHWAN/13

IDENTIFYING THE STONES

The preceding notes have dealt with each stone in turn and have revealed a number of very useful features which are characteristic of the stones. The table below summarises most of the more important features which should enable a high proportion of individual stamps to be allocated to the correct stone. It should be noted that the constancy of the mesh direction, together with the paper thickness, is an important starting point.

Feature	<u>I</u>	<u>II</u> .	111	<u> </u>	<u>v</u>	<u>1 V</u>	<u>VII</u>
Paper, Thin	Χ	Χ	Χ	_	_	-	=
Paper, Medium	-	-	Χ	-	Х	Х	-
Paper, Thick	-	-	-	Χ	_	Χ	X
Mesh, None	Х	-	-	-	-	-	-
Mesh, Horiz.	X	-	X	-	-	X	-
Mesh, Vert.	-	Χ	-	Χ	Х	-	X
Pin-perf. ca.6½	X	-	-	-	-	-	-
Perf.12⅓ large	Χ	-	X	-	-	_	-
Perf.12⅓ small	-	Х	-	-	-	-	-
Perf.12	-	-	-	X	Х	Х	X
P.12,11 compound	-	-	-	Х	-	-	-
Top Margin	Imp.	Imp.	Imp.	Imp.	Imp.	Perf.	Imp.
Right Margin	Imp.	Imp.	Imp.	Imp.	Imp.	Perf.	Imp.
Bottom Margin	Imp.	Imp.	Imp.	Perf.	Imp.	Perf.	Perf.
Left Margin	Imp.	Imp.	Imp.	Perf.	Perf.	Perf.	Perf.
Dot after WADHWAN	Few	Most	All	A11	All	A11	All
Hairline Hl	-	-	Most	1 in 3	-	-	-
Pennant triangle	A11?	A11	Most	Most	Dot	Dot	Dot
Other features	-	-	-	-	-	Most used	Sharp Impression

WADHWAN/14 N/549/A

Chapter 3: IDENTIFYING INDIVIDUAL POSITIONS OF STAMPS

The preceding chapter should enable any stamp to be pinned down to a single or, at worst, a limited number of stones. The present chapter should allow the actual position of the stamp in the stone to be identified, with the exception of Stone I.

STONE I

Unfortunately this stone has proved very elusive in multiples and it has not been possible to reconstruct the stone. Sheets are unknown. Christensen, in his Handbook, had the same problem and, whereas he did describe the features of a number of units, their locations were, for the most part, unknown. To complicate matters, there is a possibility that we are not just looking for one stone but possibly two and so this is a most interesting field of work for future specialists to investigate.

The evidence for this lies in the following discoveries:-

- (1) Two stamps have been seen from the top left-hand corner of the sheet (i.e. imperf. top and left), both of which clearly show the features described in Al below. Two other stamps from the same position show the features of A2 but none of those of Al. Both are on thin paper, perf.12½ and without a dot after 'WADHWAN' and cannot be plated against the remaining stones II to VII.
- (2) Furthermore, two stamps have been seen from the top right-hand corner showing features of Bl. I have a note of another stamp from this position which shows the features of B2 and also Christensen reports a stamp from this position which shows different features from the Bl stamp which he tabulates although his illustration is not sufficiently clear to determine if it matched the features of B2. He also describes a Dl which differs from his listed D2, from the bottom left-hand corner.

All this is strong evidence of at least two stones instead of one, which I will call IA and IB to avoid altering the well-established numbering system of the other stones. There are other subsidiary facts found in the recent studies which might prove significant:-

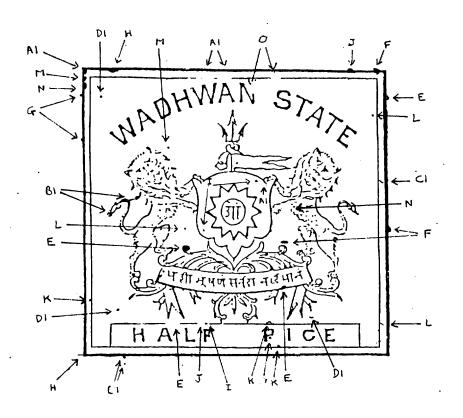
(3) Stamps of Al, Bl and Dl are on the paper with a faint horizontal mesh whereas both those seen of A2 are on the unmeshed paper. The papers of B2 and D2 are not recorded. In an attempt to start the complex task of starting a reconstruction, I have recorded below all the flaws seen on marginal copies only. In many instances, two or more copies have been seen but in no case has a particular set of flaw features been found on both meshed and unmeshed paper.

N/550/A WADHWAN/15

(4) Five different perf.12½ stamps with the full triangular shading in the pennant, and which cannot be plated against the other stones, have been seen with a dot after 'WADHWAN'. All these are on unmeshed paper. No copies have yet been seen on the meshed paper although, of course, they may exist.

In short, a pattern is building up that the unmeshed paper stamps are from a different stone from the meshed paper stamps and, in view of this possibility, the diagrams below have been separated to show the marginals of the meshed paper stamps separately from those of the unmeshed paper stamps. Very few stamps have been seen with the pin-perf. $6\frac{1}{2}$, but all those seen have the horizontal mesh and are included in the meshed paper diagram. Only stamps with a sufficiently wide margin to be sure of them being marginals have been recorded so as to avoid confusion with trimmed stamps, and it is now necessary to find blocks or pairs to allocate them to their true positions and to establish the size of the stone(s). Only one block of four has been available for examination i.e. that from the bottom right-hand corner of the sheet.

Flaws on Marginal Stamps from the Meshed Paper Sheets



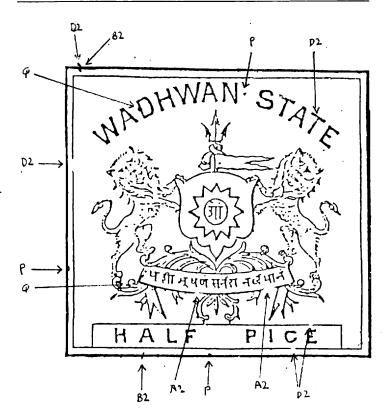
WADHWAN/16 N/551/A

Al — Imperf. top and left. Two copies seen - Top left hand corner filled in; large gaps in thin frame over second 'W' and 'A' of 'WADHWAN'; top of shield extends slightly below the paw.

- Bl Imperf. top and right. Two copies seen Tiny blob on thick bottom frame, 4mm from the left corner and tiny dot just below it; tail of left-hand lion dark and shaggy and top of tail joined to the lion's neck.
- C1 Imperf. bottom and right. Three copies seen oblique line between righthand frames level with lions head.
- D1 Imperf. bottom and left. One copy recorded by Christensen, not known if meshed paper, details taken from a rather unclear illustration dot near top left hand corner and another over the left end of the value tablet; mark outside value tablet above the 'C' of 'PICE'; said to be a hair-line after the 'F' of 'HALF' (latter not illustrated).
- E Imperf. right. Two copies seen, one of which is on an exceptional thick, vertically meshed paper Projection on thick right-hand frame opposite the top of the first 'T' of 'STATE'; black ball ornament right of left-hand lion's foot; tiny lump on lower frame of Hindi inscription ribbon; large gap in thin top frame of value tablet just to right of 'A' of 'HALF'.
- F Imperf. right. Six copies seen Prominent horizontal line over right-hand ball ornament; slight lump just below centre of right-hand thick frame; black flaw at right end of thick top frame.
- G Imperf. right. Two copies seen Two projections near top of left-hand thick frame; thin right-hand frame is extra thin for its top three-quarters.
- H Imperf. right. Only one copy seen, details may not be constant Slight extension of the bottom thick frame to the left; thickening of the top thick frame near the left-hand end.
- I Imperf. right. Three copies seen, two of which are the pin-perf.6½ on three sides Two dots in shield (top right and bottom left); tiny break in the thin frame over the 'F' of 'HALF'.
- J Imperf. bottom. This is the second stamp from the right corner. Two copies seen - Thickened top frame over the 'TE' of 'STATE'; gap in thin frame over the 'F' of 'HALF'.
- K Imperf. bottom. Only one copy seen, pin-perf.6½ on three sides, so details may not be constant Dot on thin left-hand frame near the bottom; another on the thin bottom frame between 'P' and 'I' of 'PICE'; smudge on thin frame over the 'P' of 'PICE'.
- L Imperf. left. Three copies seen Tiny dot between knee of left-hand lion and shield; faint hairline between right-hand frames level with top of value tablet; tiny dot inside right-hand thin frame opposite top of 2nd 'T'.
- M Imperf. left. Two copies seen Lump close to top of left-hand thick frame; tiny dot above left-hand lion's face.
- N Imperf. left. Only one copy seen, pin-perf.6½ on three sides, so details may not be constant Lump between left-hand frames near top; bottom outline of right-hand lion's lower arm missing.
- O Internal stamp this forms part of a block of four from the bottom right-hand corner of the sheet with types O and E over types J and Cl. Two copies seen Tiny dot below loop of 'P' of 'PICE'; short second vertical to 'N' of 'WADHWAN'; gap in thin top frame just left of the 'S' of 'STATE'.

N/552/A WADHWAN/17

Flaws on Marginal Stamps from the Unmeshed Paper Sheets



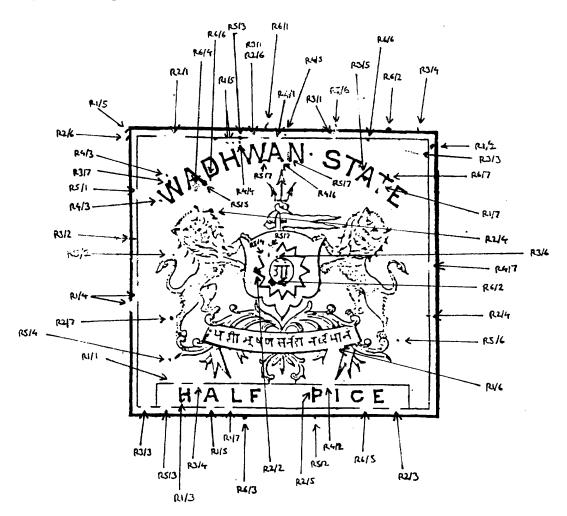
- A2 Imperf. top and left. Two copies seen Distinct thinning of two areas of the bottom frame of the Hindi inscription ribbon.
- B2 Imperf. top and right. One copy seen, so details may not be constant Oblique stroke on thick frame under the 'A' of 'HALF'; projection under thick top frame near the left-hand end.
- D2 Imperf. bottom and left. Two copies seen Hook-like mark on top of top thick frame near the left-hand end; break in the thin left-hand frame opposite the lion's lower ear; tiny break in thin frame under the 'C' and another over the 'E' of 'PICE'; vertical stroke of the second 'T' of 'STATE' thinned near the top.
- P Imperf. right. Only one copy seen, so details may not be constant Lump on thick bottom frame just left of centre and another on thick left-hand frame opposite lower foot; dot after 'WADHWAN'.
- Q Imperf. bottom. Only one copy seen, so details may not be constant Lump on the back of the 'D' of 'WADHWAN'; short horizontal stroke to the left from the ball ornament between the left-hand lion's legs.

Insufficient copies have been seen on the unmeshed paper to make any predictions about its sheet size but it is very likely that the meshed paper stone will be the seven rows of four predicted by earlier writers since, apart from the corner stamps, five from the right-hand side and two from the bottom have been identified above.

WADHWAN/18 N/553/A

STONE II

I have seen a complete sheet of this stone which closely matches certain features described by Major Evans in the sheet available to him and also a block comprising rows 4 to 7. These, in addition to various plateable singles and small multiples, enable me to describe flaws on individual stamps with reasonable certainty as to their constancy. The following composite diagram summarises the features.



- R1/1 1mm gap in thin frame over the 'H' of 'HALF' (Imperf. top and left).
- R1/2 Heavy dot between right-hand frames, 15mm from the top (Imperf. top).
- R1/3 Mark inside first stroke of 'H' of 'HALF' (Imperf. top).
- R1/4 3/4mm break in thick left frame 10mm from the bottom and 2mm gap in the thin inner frame just above it (Imperf. top).
- R1/5 Two tiny dots above 'HW' and small gap in the thin frame under the 'A' of 'HALF'. Dash outside top left-hand corner (Imperf. top).

N/554/A WADHWAN/19

R1/6 - 1mm break in the lower line of the ribbon containing the Hindi inscription under the penultimate letter (Imperf. top).

- R1/7 Break in stem of the second 'T' of 'STATE' and gap in the thin frame under the 'AL' of 'HALF' (Imperf. top and right).
- R2/1 $2\frac{1}{2}$ mm gap in the top thin frame, 2mm from the left corner (Imperf. left).
- R2/2 Blotch on the leftmost point of the central sun.
- R2/3 Gap in lower thin frame to right of 'E' of 'PICE'. No dot after 'WADHWAN'.
- R2/4 Blob on rightmost side of head of the left-hand lion. Dash inside right-hand thin frame level with the lion's leg.
- R2/5 Vertical stroke of 'P' of 'PICE' projects slightly upwards.
- R2/6 Dash on thick left-hand frame just below top. Gap in thin frame over the second 'W' of 'WADHWAN'.
- R2/7 Heavy black dot just left of lower leg of left-hand lion (Imperf. right).
- R3/1 Small break in thin frame over the second 'W' of 'WADHWAN' and tiny break over the 'S' of 'STATE' (Imperf. left).
- R3/2 Horizontal mark joining left-hand frame just below level of the ear. No dot after 'WADHWAN'.
- R3/3 Break at left end of thin bottom frame. Faint scratch in upper right corner.
- R3/4 Faint projection above top frame 1½mm from the right corner. Gap in the thin frame over the 'HA' of 'HALF'.
- R3/5 Cross-bar of the 'A' of 'STATE' is a triangle pointing downwards.
- R3/6 Dot outside circle of central sun at about 11 o'clock.
- R3/7 Projection on top centre of first 'W' of 'WADHWAN' (Imperf. right).
- R4/1 Gap in top thin frame over the second 'A' of 'WADHWAN' (Imperf. left).
- R4/2 Gap in thin frame over the 'PI' of 'PICE'.
- R4/3 Dot to left and another over the first 'W' of 'WADHWAN'.
- R4/4 Dot over first stroke of second 'W' of 'WADHWAN'. No dot after 'WADHWAN'.
- R4/5 Dot between centres of top frames and another hanging from the thin frame over the 'DH' of 'WADHWAN'. No dot after 'WADHWAN'.
- R4/6 Fine line inside right-hand stroke of the second 'A' of 'WADHWAN'.

 No dot after 'WADHWAN'.
- R4/7 1mm gap in centre of thin right-hand frame (Imperf. right).
- R5/1 Gap in thin frame to the left of the first 'W' of 'WADHWAN' (Imperf. left).
- R5/2 Tiny projection under the thick frame under the 'P' of 'PICE'. Tiny dot over left-hand lion's tail.
- R5/3 Dot in the thin frame over the 'HW' of 'WADHWAN'. Gap at the left-hand end of the bottom thin frame of the value tablet.
- R5/4 Top surface of the 10 o'clock point of the central sun is broken. Dot at the end of the pointed ornament over the 'H' of 'HALF'.
- R5/5 Extended second stroke to the first 'A' of 'WADHWAN'.

WADHWAN/20 N/555/A

R5/6 - Dot above top thick frame over the 'S' of 'STATE'. Dot level with ornament below right-hand lion's lower foot. No dot after 'WADHWAN'.

- R5/7 Smudges left of 'N' of 'WADHWAN' and second 'WA' joined at the bottom. 11 o'clock point of sun almost missing. No dot after 'WADHWAN'. (Imperf. right).
- R6/1 Projection above top frame over second 'WA'. (Imperf. bottom and left).
- R6/2 Lump above top thick frame over second 'T' of 'STATE'. Black mark on the sun's inner circle at 8 o'clock. (Imperf. bottom).
- R6/3 Lump below bottom thick frame under 'LF' of 'HALF'. (Imperf. bottom).
- R6/4 Smudges and dot below first 'A' of 'WADHWAN'. (Imperf. bottom).
- R6/5 Gap in thin frame below the 'CE' of 'PICE'. (Imperf. bottom).
- R6/6 Projection on bottom corner of the 'D' of 'WADHWAN'. Dot hanging from the thin frame over the 'A' of 'STATE'. (Imperf. bottom).
- R6/7 Lower legs of right-hand lion and right-hand part of the Hindi inscription very weak. Mark on the top centre of the second 'T' of 'STATE'. (Imperf. bottom and right).

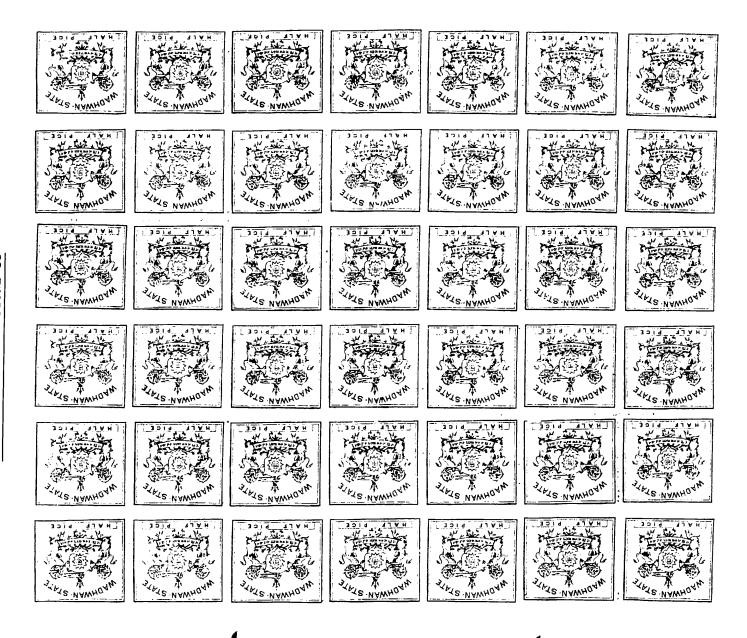
The following page illustrates a complete sheet of Stone II which, owing to the vagaries of reproduction, may not show all the above features or may show others which may or may not be constant.

(Illustration reduced to 80% of original)

556/A

 \geq

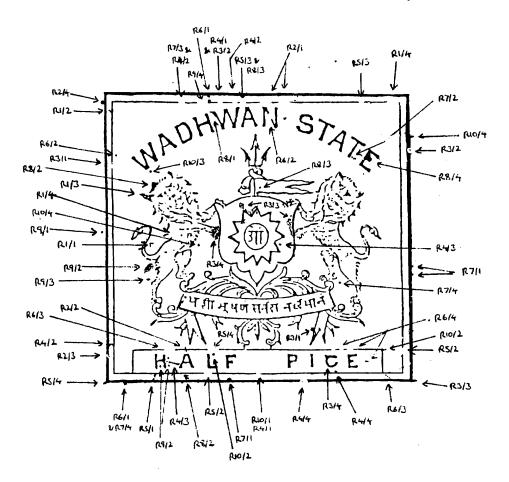
COMPLETE SHEET OF STONE II



WADHWAN/22 N/557/A

STONE III

Whereas I have not seen a complete sheet of this stone, with considerable help from John Somerwill, I have been able to complete a reconstruction and have seen sufficient small blocks to confirm the constancy of the flaws described. As mentioned in the previous chapter, this stone shows three types of hairline flaws but they are frequently weak and come and go according to the cleanliness of the stone. I have indicated in the table below where I have seen traces of them but their use to confirm the location of a particular stamp should be used with caution. The location of the hairlines was illustrated in the previous chapter. HI is the most common, this being the ")" shaped mark after the 'F' of 'HALF' and has not been noted in the table since it occurs in most positions, often faintly, except for R8/2, 3 and 4. H2 is the stroke joining the 'AT' of 'STATE' and H3 is the line across the left-hand lion's body.



N/558/A WADHWAN/23

R1/1 - Rectangular mark between body and tail of left-hand lion. (Imperf. top and left).

- R1/2 Small projection on thin left-hand frame near the top. (Imperf. top).
- R1/3 Left-hand lion with long lower ear. (Imperf. at top).
- R1/4 1mm gap in upper back of left- hand lion. 1mm gap at right-hand end of the upper thin frame. (Imperf. top and right).
- R2/1 Two gaps in the top thin frame over the 'N' of 'WADHWAN' (Imperf. left).
- R2/2 Tiny accent-like dash over the 'A' of 'HALF' through the thin frame.
- R2/3 Break in left-hand thick frame level with the value tablet.
- R2/4 Projection outside left-hand thick frame near the top. (Imperf. right).
- R3/1 Projection left of ribbon over the 'I' of 'PICE'. Tiny gap in thin frame left of first 'W' of 'WADHWAN'. (Imperf. left).
- R3/2 White mark in thick frame to the right of the 'TE' of 'STATE'. Gap in thin frame over the second 'W' of 'WADHWAN'.
- R3/3 Heavy smudges on the sun's upper rays and top right of shield. Bottom frame extends a little to the right.
- R3/4 Enlarged lower paw of left-hand lion touching shield. Small projection on the back of the 'C' of 'PICE'. (Imperf. right).
- R4/1 Small gap in the thin frame over the second 'W' of 'WADHWAN' and another near the centre of the bottom thin frame. (Imperf. left).
- R4/2 Small gap in the thin frame over the 'D' and another over the second 'W' of 'WADHWAN'. Mark between left-hand frames 3½mm from the bottom.
- R4/3 Line joining 'H' and 'A' of 'HALF'. Dot just right of the sun.
- R4/4 Black projection on thin frame line under the 'C' of 'PICE' and white flaw on the thick frame under 'IC'. (Imperf. right).
- R5/1 Oblique stroke, sometimes broken, between frames under 'H' of 'HALF'. (Imperf. left).
- R5/2 Gap in the thin frame under the 'L' of 'HALF' and another $2\frac{1}{2}$ mm from the bottom of the thin right-hand frame.
- R5/3 Gaps in thin top frame over the second 'WA' and over the second 'T'.
- R5/4 Gap in thin frame over the 'L' of 'HALF'. Projection at bottom left-hand corner. (Imperf. right).
- R6/1 Projection outside thick bottom frame 2mm from the left corner. Mark between frames over the 'HW' of 'WADHWAN'. (Imperf. left).
- R6/2 Dot near thin frame left of first 'W'. White flaw in diagonal of 'N'.
- R6/3 Oblique line between bottom frames, 2mm from the right corner. Gap in thin frame over 'HALF' just right of the 'H'.
- R6/4 Weak frame over 'CE' and dot just after 'CE'. Clear H2 hairline. (Imperf. right).
- R7/1 Small lump on thick frame under 'F' of 'HALF'. Two dots attached outside right-hand thick frame 10mm from bottom. H3 hairline. (Imperf. left).
- R7/2 Foot of the second 'T' of 'STATE' projects to the right. Hairlines H2 & H3.
- R7/3 Small gap in thin frame over the 'D' of 'WADHWAN'. Hairlines H2 and H3.

WADHWAN/24 N/559/A

R7/4 - Dot between lower legs of left-hand lion and projection as R6/1. (Imperf. right).

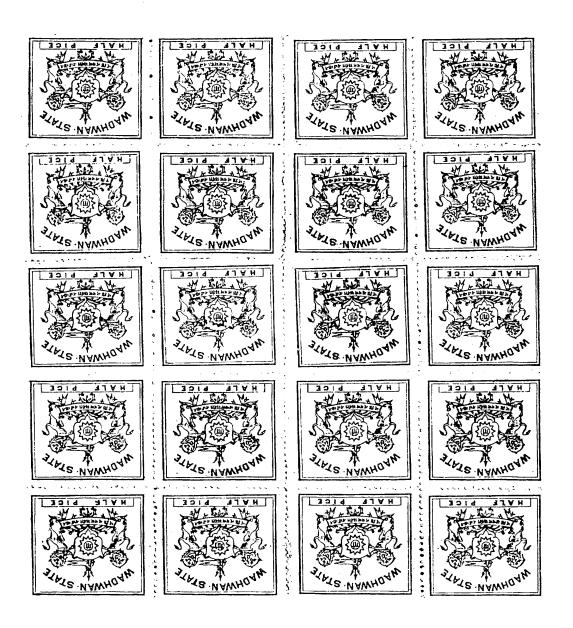
- R8/1 First stroke of second 'W' of 'WADHWAN' projects to left. (Imperf. left).
- R8/2 Large dot between lower frames under 'A' of 'HALF'. Black flaw on top of left-hand lion's head. Faint H2 and H3 hairlines but no H1.
- R8/3 Small gap over second 'WA'. Dot instead of triangle in pennant. No HI hairline.
- R8/4 Thickened centre bar of the 'E' of 'STATE'. (Imperf. right).
- R9/1 Tiny dot outside centre of left-hand thick frame. H2 hairline. (Imp. left).
- R9/2 Major black flaw under left-hand lion's tail. Colon after and dot under the 'H' of 'HALF'.
- R9/3 Dot behind lower leg of left-hand lion.
- R9/4 1mm gap in thin frame over the 'H' of 'WADHWAN'. (Imperf. right).
- R10/1 Small gap in the centre of the thin bottom frame. (Imperf. left & bottom).
- R10/2 Dot over the 'L'. Top of value tablet projects to right. Faint H2 hairline. (Imperf. bottom).
- R10/3 Dot under first 'W' of 'WADHWAN'. Faint H2 & H3 hairlines. (Imperf. bottom).
- R10/4 Dot under left-hand lion's chest. Small projection outside thick right-hand frameline level with top of second 'T'. H2 and H3 hairlines. (Imperf. bottom and right).

The following two pages illustrate a reconstruction of Stone III.

ZS/WAWHGAW A\085\V

KECONSTRUCTION OF STONE III.

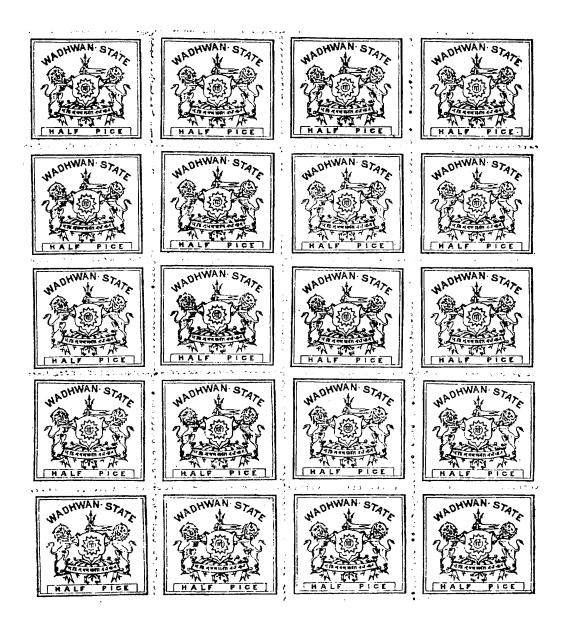
Top Half (Rows 1 to 5)



WADHWAN/26 N/561/A

RECONSTRUCTION OF STONE III.

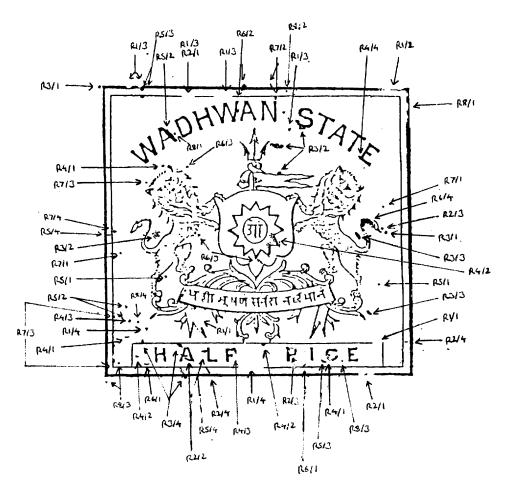
Bottom Half (Rows 6 to 10)



N/562/A WADHWAN/27

STONE IV

Work was slow on this stone owing to the infrequency of finding blocks for plating, until the receipt of Sten Christensen's excellent Handbook with its illustrations of both Douie's and Evans' complete sheets of 32. With due credit to that publication I am now able to describe the features of each stamp. dicated in the previous chapter, in all copies that I have seen of rows 7 and 8, perf.ll occurs between these rows and so these have been noted in the table. As I also indicated, two exceptional copies have been reported - R7/1, perf.ll top and bottom, and R2/2, perf.11 at the top, and so the constancy of this perf. variation must be treated with caution. The presence of traces of the Hl and H3 hairlines have also been tabulated but they are frequently very weak and may not appear at all due to the state of cleanliness of the printing stone. They may also turn up in other positions and so they should not be relied upon.



WADHWAN/28 N/563/A

R1/1 - Top frame of value tablet has a gap at the right-hand end. Large break in thick ribbon over 'AL' of 'HALF'. (Imperf. top).

- R1/2 Deep dent at right-hand end of top thick frame. (H1/H3 traces). (Imp. top).
- R1/3 Two dents near left-hand end of top thick frame. Break in top thin frameline over 'DH' and second 'W' of 'WADHWAN'. Dot south-west of 'S'. (Imperf. top).
- R1/4 Large break in centre of bottom thin frame line. Dot north-west of 'H' of 'HALF', outside value tablet. (H1/H3 traces) (Imperf. top and right).
- R2/1 Damaged thick bottom frame just right of 'E' of 'PICE'. Gap in thin frame over 'DH'. (H1 traces).
- R2/2 Oblique black line across bottom of 'A' of 'HALF' and short line in front of 'L'.
- R2/3 Damaged top to 'P' of 'PICE'. Dot above tip of tail of right-hand lion. (H1 traces).
- R2/4 Diagonal line joining frames under 'AL of 'HALF' and a horizontal dash between right-hand frames level with top of value tablet. (Imperf. right).
- R3/1 Tiny dot outside top left-hand corner. Heavy dot right of tail-tip of right-hand lion. (H1/H3 traces).
- R3/2 Various black flaws right of trident, between tail and back of left-hand lion, under 'S' of 'STATE' and on top of pennant. (H1/H3 traces).
- R3/3 Black mark between tail and body of right-hand lion and another to right of ornament below its lower foot. (H1/H3 traces).
- R3/4 Heavy black mark over 'A' of 'HALF' and between frame beneath it. Mark on left end of top frame of value tablet. (H1/H3 traces) (Imperf. right).
- R4/1 Flaw in 'C' of 'PICE'. Dash top left of value tablet. Dot over upper ear of left-hand lion. (H1/H3 traces).
- R4/2 Dot near centre of upper frame of value tablet and at left-hand end of this tablet. Smudges in right-hand rays of sun. (H1/H3 traces).
- R4/3 Line hanging from top stroke of 'F' of 'HALF'. Dot north-west of value tablet. (H1 traces).
- R4/4 Foot of 'E' of 'STATE' projects slightly left. (Imperf. right).
- R5/1 Tiny dot between heel of right-hand lion and frame. Another between legs of left-hand lion.
- R5/2 Second stroke of first 'A' of WADHWAN' curved. Two dots north-west of value tablet.
- R5/3 Oblique stroke under left of 'C' of 'PICE'. Black projections near lefthand end of top frame, under one another.
- R5/4 Line joining centres of the two left-hand frames. Horizontal line attached to the 'L' of 'HALF' (similar to R2/2). (Imperf. right).
- R6/1 Fine horizontal line in the left end of the value tablet. Mark attached to the bottom thin frame between 'P' and 'I'. This stamp often has a heavier, blacker appearance than the others in the stone. ($\underline{\text{May}}$ be perf.ll at the bottom).
- R6/2 Mark on the right stroke of the second 'W' and a heavy lump on the thick frame over the second 'WA' of 'WADHWAN'. (May be perf.11 at bottom).

N/564/A WADHWAN/29

R6/3 - Dot right of left-hand lion's head and in front of its chest. Line joining bottom ray of sun to shield. (May be perf.11 at bottom).

- R6/4 Heavy mark on right-hand lion's tail. (May be perf.11 at bottom). (Imperf. right).
- R7/1 Tiny dot near left thin frame opposite lower part of tail. Dot over tip of tail of right-hand lion. (Probably p.11 at bottom, may be p.11 at top).
- R7/2 Dot attached to thin frame over 'N' of 'WADHWAN' and accent-like mark on thick frame above it. (Probably perf.ll at bottom, may be perf.ll at top).
- R7/3 Retouched lower part of left-hand thin frame-line. Tiny dot over lefthand lion's lower ear. (Probably perf.ll at bottom, may be perf.ll at top)
- R7/4 Inward projection on thin left-hand frame level with tip of lion's tail. (Probably perf.11 at bottom, may be perf.11 at top). (Imperf. right).
- R8/1 Top 5mm of thick right-hand frame thinned. Dot right of first 'A' of 'WADHWAN'. (Probably perf.11 at top).
- R8/2 Tiny dot between top frames above 'N . S'. (Probably perf.11 at top).
- R8/3 Tiny dot just below bottom left-hand corner of stamp. Another inside the thin frames at that corner. Another between the bottoms of the 'C' and 'E' of 'PICE'. (Probably perf.11 at top).
- R8/4 Dot above the left-hand frame of the value tablet. (Probably perf.11 at top). (Imperf. right).

On the following page is an illustration of Douie's complete sheet of Stone IV, with acknowledgement to Sten Christensen's Handbook.

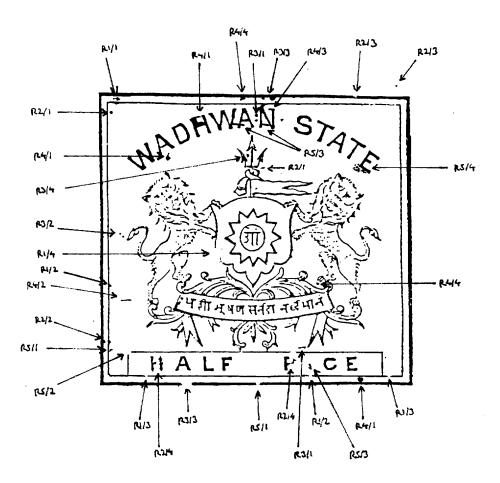
(Illustration reduced to 80% of original)

WADHWAN/30



STONE V

The stamps of this stone are not uncommon although it is not so frequently seen as a complete sheet of twenty. The flaws described below may be regarded as constant as several copies have been seen of each.



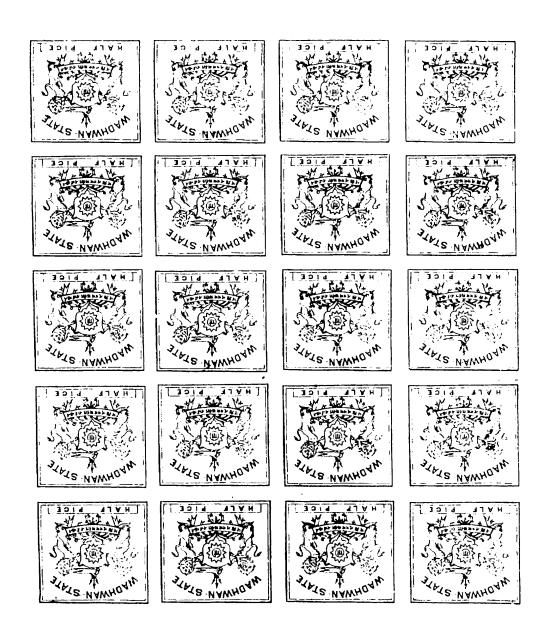
- R1/1 Flaw between top frame-lines, 2mm from left corner. (Imperf. top).
- R1/2 Break in thin frame under 'I' of 'PICE' and weak 'I'. Dot on thin left-hand frame level with lion's heel. (Imperf. top).
- R1/3 Tiny break in thin bottom frame-line, 1mm from the right-hand corner and another just left of the 'H' of 'HALF'. (Imperf. top).
- R1/4 Shield broken at bottom left. (Imperf. top and right).
- R2/1 Dot inside thin frames at top left-hand corner. Dash just to right of the trident.
- R2/2 Dot on both inner and outer left frames, 4mm from the bottom.
- R2/3 Tiny notch in top frame over 'AT' of 'STATE'. Dot above top right corner.
- R2/4 Break in horizontal stroke of 'H' of 'HALF'. Vertical white scratch across the loop of the 'P' of 'PICE'. (Imperf. right).

WADHWAN/32 N/567/A

R3/1 - Colon between 'A' and 'N' of 'WADHWAN'. Horizontal stroke over the thin frame over the 'PI' of 'PICE'.

- R3/2 Two tiny diagonal dots over the tip of the left-hand lion's tail.
- R3/3 Heavy black marks over the 'N' of 'WADHWAN'. Large break in the thick frame under the 'A' of 'HALF'.
- R3/4 Dot between central and left prongs of the trident. (Imperf. right).
- R4/1 Black line across top of 'H' of 'WADHWAN' and heavy dot under 'A' of same. Heavy blob between frames under the 'E' of 'PICE'.
- R4/2 Horizontal line between foot of lion and left-hand thin frame.
- R4/3 'N' of 'WADHWAN' has slight projection to left at top of second vertical.
- R4/4 Projection inside top thick frame over the second 'A' of 'WADHWAN'. Dot under upper toes of right-hand lion's foot. (Imperf. right).
- R5/1 Tiny inward projection on thin left frame, 2mm from the bottom. Tiny break in the centre of the bottom thick frame. (Imperf. bottom).
- R5/2 Top left corner of value tablet open. (Imperf. bottom).
- R5/3 Bar through second 'WA' and through 'N' of 'WADHWAN'. 'I' of 'PICE' only half length. (Imperf. bottom).
- R5/4 Heavy smudge under 'E' of 'STATE'. (Imperf. bottom and right).

The illustration on the following page is a reconstruction of a complete sheet of twenty.



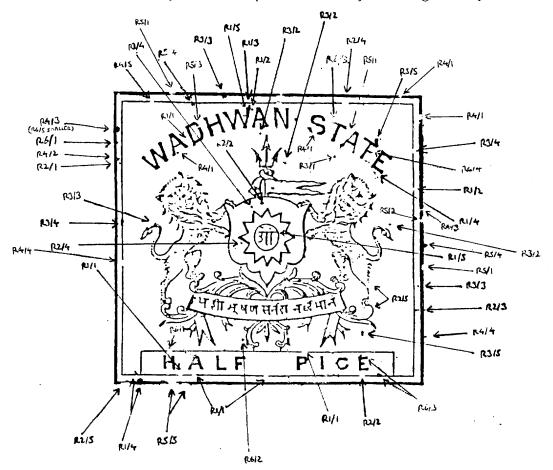
KECONSTRUCTION OF A COMPLETE SHEET OF STONE V

M/868/A A/832

WADHWAN/34 N/569/A

STONE VI

Some 80% of the stamps of this stone are found in used condition and, as such, they are difficult to plate. However, several clear copies have been seen of each of the flaws described below and so they should be reasonably constant. The sheet is perforated all round and so there are no imperf. edges to help with the plating, but a narrow piece of perforated margin sometimes remains intact, which helps to identify the edge stamps.



- R1/1 Projection on the bottom of the 'D' of 'WADHWAN'. Three breaks in the thin bottom frame right of 'H', under the 'A', and in the centre. Also a break in the thin frame over the 'P' of 'PICE'.
- R1/2 Tiny dot top right of the second 'W' of 'WADHWAN'. Tiny break in the thin right-hand frame opposite the lion's ear.
- R1/3 Final stroke of the second 'W' of 'WADHWAN' points upwards.
- R1/4 Several dots below the 'TE' of 'STATE'. Blob on the thick bottom frame near the left end and an oblique stroke on the thin frame above it.

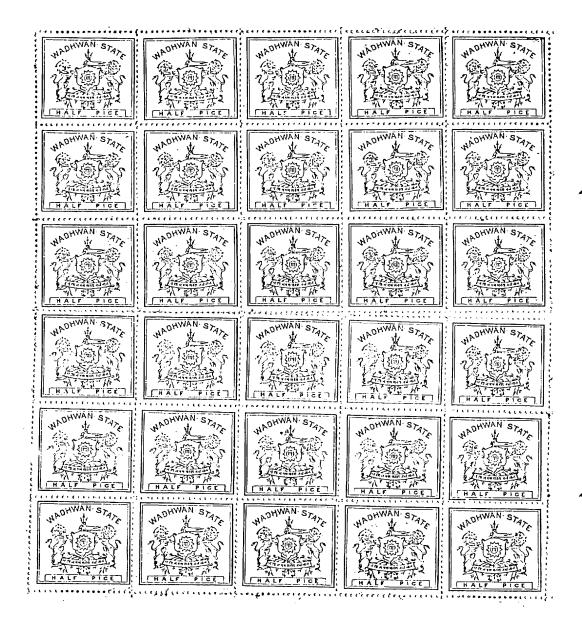
N/570/A WADHWAN/35

R1/5 - Dash inside the second 'V' of the second 'W' of 'WADHWAN'. Top horizontal of the central 'OM' character extends to the right.

- R2/1 Tiny dash on thin left frame-line level with the 'W'.
- R2/2 Black dot over central sun. Broken thin frame below the 'E' of 'PICE'.
- R2/3 Dash to the right on both right-hand frames, 61/2mm from the bottom.
- R2/4 Dot outside the sun at 8.30 and at 11 o'clock. Break in the thin frame over the first 'T' of 'STATE'.
- R2/5 Part of the right-hand lion's lower leg and circular ornament below are missing. Dent under the bottom thick frame at the left end.
- R3/1 Tiny dot below the 'TA' of 'STATE'.
- R3/2 Tiny dot below the second 'A' of 'WADHWAN', another to the right of the trident and another over the tail of the right-hand lion.
- R3/3 Attached dot inside top thick frame over 'HW'. Tiny bump on top of the tail of the left-hand lion.
- R3/4 Kink in the thin left-hand frame just above the tail. Tiny break in the thin right-hand frame, $4\frac{1}{2}$ mm from the top.
- R3/5 Heavy dot $1^3/4$ mm above the value tablet, over the 'E' of 'PICE'.
- R4/1 Prominent gap near top of thick right-hand frame. Small gap in the top thick frame over the 'E' of 'STATE'.
- R4/2 Smudges between the left-hand frames level with 'W' of 'WADHWAN'. No dot after 'WADHWAN'.
- R4/3 Heavy spot between the left-hand frames, near the top. Two cracks in the thick right-hand frame just above the centre.
- R4/4 Break in the thin left-hand frame level with the lion's backside. Tiny projection outside the thick right-hand frame above top of value tablet.
- R4/5 Gap in the thin top frame over the first 'W' of 'WADHWAN'.
- R5/1 Dent in outside of thick right-hand frame level with the lion's backside and another in the top thick frame over 'AD'. The left side of the 'A' of 'STATE' is thin and weak.
- R5/2 Strong white oblique scratch in the centre of the thick right-hand frame.
- R5/3 Nick in the right curve of the 'D' of 'WADHWAN'.
- R5/4 Black mark on the thin frame over the 'D' of 'WADHWAN'.
- R5/5 Major break in the thick bottom frame under the 'HA' of 'HALF'. Mark on top of the second 'T' of 'STATE'. No dot after 'WADHWAN'.
- R6/1 Tiny inward projection on thick left-hand frame, 4½mm from the top. Gap in the thin frame over the 'H' of 'HALF'.
- R6/2 Dot by the side of the floreate ornament over the 'F' of 'HALF'.
- R6/3 Top bar of first 'T' of 'STATE' broken at left. Spot on top of 'E' of 'PICE' and mark on the thin bottom frame to right of that 'E'.
- R6/4 Perpendicular stroke on the centre of the vertical stroke of the second 'T' of 'STATE'.
- R6/5 Mark inside the thick left-hand frame level with the 'AD' of 'WADHWAN' (Similar to R4/3 but smaller.
 - The complete sheet in two blocks of fifteen is illustrated on the following page. (Reduced to 80% of original).

WADHWAN/36 N/571/A

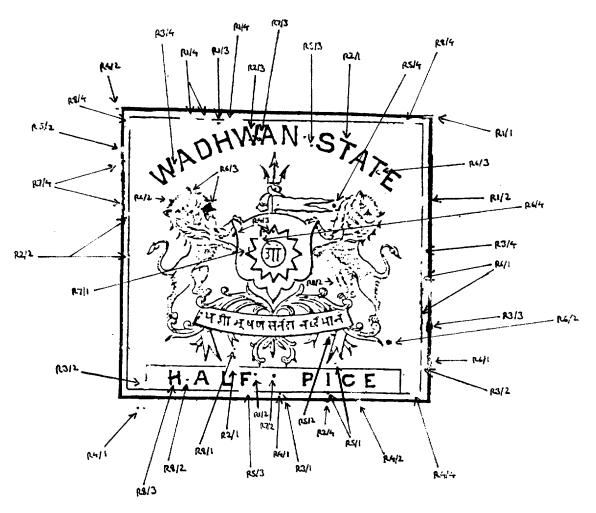
THE COMPLETE SHEET OF STONE VI IN TWO BLOCKS OF FIFTEEN



N/572/A WADHWAN/37

STONE VII

Several large blocks (mostly half sheets of 16) have been seen of this stone, which enables me to confirm the constancy of the features described below.



- R1/1 Horizontal white line in the top thick frame at the top right-hand corner. (Imperf. top).
- R1/2 Gap in the thin right-hand frame, 7½mm from the top. Dot right of the top stroke of the 'F' of 'HALF'. (Imperf. top).
- R1/3 Tiny dot over the 'H' of 'WADHWAN' just below thin frame. (Imperf. top).
- R1/4 Breaks in the thin top frame, over 'AD', 'DH' and 'HW'. (Imperf. top & right).
- R2/1 Small projection on vertical stroke of first 'T' of 'STATE'. Gap in thin frame over the 'LF' of 'HALF'.
- R2/2 Tiny breaks in the thin left-hand frame, 9mm and 13mm from the top.

WADHWAN/38 N/573/A

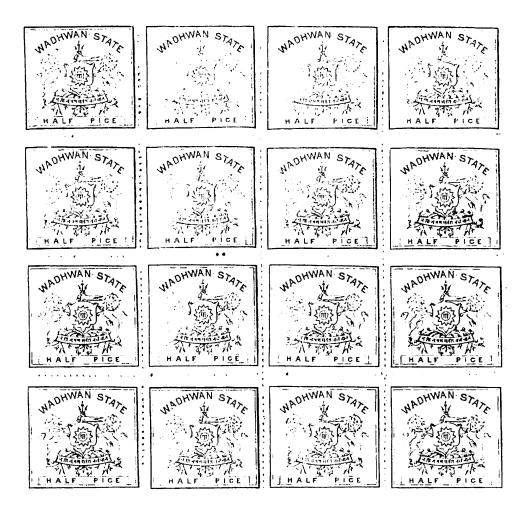
R2/3 - Projection inside and another on the left side of the second 'V' of the second 'W' of 'WADHWAN'.

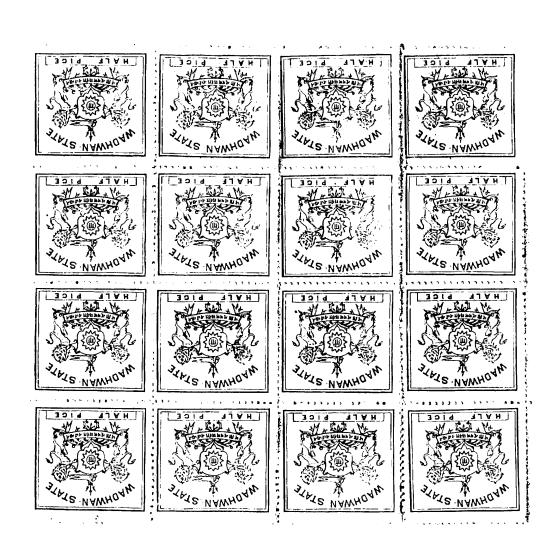
- R2/4 Tiny bump under thick bottom frame under 'I' of 'PICE'. (Imperf. right).
- R3/1 Thin inward oblique dash on thick bottom frame near the centre.
- R3/2 Break at bottom of left frame of the value tablet. Another in the thin right-hand frame, 2½mm from the bottom.
- R3/3 Thickening of the thick right-hand frame, 7mm from the bottom.
- R3/4 Large break in the thin right-hand frame near the lion's tail. White mark in the bottom of the second 'V' of the first 'W' of 'WADHWAN'. (Imperf. right).
- R4/1 Attached dot under centre of the thin bottom frame. Two horizontal dashes outside bottom frame in line with left of value tablet.
- R4/2 Nick in thick bottom frame under 'CE' of 'PICE'. Spot in margin at top left-hand corner.
- R4/3 Black dot on left of shield between the paws. Dot inside top ray of sun.
- R4/4 Gap at right-hand end of thin bottom frame. (Imperf. right).
- R5/1 Dot below right-hand thick ribbon. Dot on thin line below 'I' of 'PICE'.
- R5/2 Projection on top left of thick ribbon over the 'I'. White dot on thick left-hand frame, 3½mm from the top.
- R5/3 A second dot between 'N' and 'S'. Large break in thin frame below 'F' of 'HALF'.
- R5/4 Dot between pennant and right-hand lion's head. (Imperf. right).
- R6/1 Retouch in thin right-hand frame, 5-10mm from the bottom. Also ar irregular thick right-hand frame.
- R6/2 Large dot at end of ornament under lower foot of right-hand lion. Small projection on top of the left-hand lion's head.
- R6/3 Black blotch on the right of the left-hand lion's face and one eye missing. Curly mark to the right of the second 'T' of 'STATE'.
- R6/4 Small break in the inward ray of sun at 10.30 o'clock. (Imperf. right).
- R7/1 Thin vertical dash attached to upper surface of the sun's 9 0'clock ray.
- R7/2 Heavy dot between 'HALF' and 'PICE'.
- R7/3 Black mark joining the second 'W' and 'A' of 'WADHWAN'.
- R7/4 Irregularity in thick left-hand frame, 5-9mm from top. (Imperf. right).
- R8/1 Dot below small ribbon over the 'LF' of 'HALF'.
- R8/2 Dot between 'H' and 'A' of 'HALF'. Line over right-hand lion's upper foot.
- R8/3 Horizontal bar of 'H' of 'HALF' slopes and projects slightly to the left.
- R8/4 Break at top of the thin left-hand frame. Break at the right end of the top thin frame. (Imperf. right).

The complete sheet of Stone VII in two blocks of 16 is illustrated on the following two pages.

N/574/A WADHWAN/39

UPPER HALF OF SHEET OF STONE VII



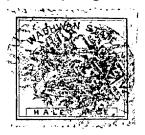


TOMER HALF OF SHEET OF STONE VII

A\Z\Z\W

Chapter 4: THE POSTMARKS AND COVERS OF WADHWAN

The earlier writers gave little information on the Obliterators used on the stamps of Wadhwan but, following the recent research, seven main types can be recorded. Pl has the appearance of being genuine but has not been recorded on cover and only a couple of examples have been seen, at least one of which was Stone 1. P2 to P4 are to be seen much more frequently, especially P3, and were used on genuine mail. P5 to P7 are rare and are probably bogus.



<u>TYPE P1</u>: This is an intaglio circle, resembling a 'boot-heel'. It is in black and is approximately 30mm in diameter and contains some Gujerati(?) characters which are indecipherable in the few examples seen. If genuine, it is probably the earliest canceller to be used.



TYPE P2: This 'grill' type was described by Evans. It is a rectangle of lines with no lettering, making up a grill of 11 by 11 squares. It has been reported on stamps of Stones I, III and IV. There are three colour variants: P2A - Greyish black, P2B - Violet (described by Evans) and P2C - Green (described by Christensen).



TYPE P3: This is by far the most common type and, on cover, was usually used in combination with type P4. It is a 27-27½mm circle containing some invariable Gujerati characters which read: 'SVASTHAN' around the top, 'DARBAR' across the centre and 'WADHWAN' around the bottom (inverted). Only one genuine type exists although there are two forged types which are only known on the forged stamps of type F1 (q.v.). The colour variants

are: P3A - Black (often oily), P3B - Bluish-Green (often very watery), P3C - Magenta (only one seen on cover, possibly c.t.o.) and P3D - Indigo (only one seen). These are to be found on stamps of stones III to VII, although rarely seen on stamps of stone III. The size of the strike allows it to fit neatly on to a stamp, which may throw some doubt on to untied covers.



TYPE P4: This is a large circular date-stamp, said by some writers to have been a receipt stamp. However, in most covers seen, the colour of the ink used for the P3 (or occasionally P2) stamp canceller is identical to that used for the P4 strike and so it was probably applied at the same time as the stamp was cancelled. It rarely appears on the stamp and is more frequently found on the

WADHWAN/42 N/577/A

on the back of the cover than on the front. It is a 45mm double circle with 'WADWHAN STATE' (i.e. spelt wrongly) in English around the bottom and its equivalent in Gujerati characters around the top and ornaments at the sides. The date appears in English, in three lines, in the centre and so it is of great value in determining the dates of use of the various stones, since it the only State canceller to contain a date. It exists in the same colour variants as P3: P4A - Black, P4B - Bluish-Green (often very watery), P4C - Magenta (not yet reported but probably exists), P4D - Indigo (reported by Sommerwill on stone V). Curiously, one of the indigo strikes (which are difficult to decipher) appears to show the correct spelling 'WADHWAN'.

Another large circular type was reported recently by Walker of which I cannot see enough detail to describe. It is on cover cancelling a Stone VI stamp and is in the watery bluish-green colour but has a P3 strike in the same colour superimposing it. No details can be given except to say that it is a 40mm circle! It is possible that this mark was faked to tie the stamp to the cover (see Fig.5).



TYPE P5: This could be a worn version of type 2 but the lines appear to be in only one direction. There appear to be at least 11 lines and the general shape could be rectangular or, more likely, oval. Only one copy has been seen, this is cancelling a Stone VI stamp, which is probably too late a period for it to be type P2.



<u>TYPE P6</u>: This is a very doubtful type, appearing to be barrel-shaped and containing a 'W', possibly inspired by the Sirmoor cancels. Only two copies have been seen, both cancelling stamps of Stone V.



TYPE P7: This is another very doubtful type. The illustration shows a reconstruction from a portion showing on a stamp of Stone I and another on Stone VII and so they might be two completely different types, but the size and the central characters seem to match. It is a 32mm double circle with native characters (language?) and the word 'STATE' in English.

N/578/A WADHWAN/43

During the recent studies, Stone I has only been reported with Pl or P2 strikes and no used copies at all have been reported of Stone II. Stone III is also rarely seen used and only types P2 and P3 have been reported on this stone. P3 is to be found on all stones from III to VII but its colour variants have only been seen on Stones V to VII. P4, although not intended for cancelling the stamps, is known to be used on cover with P2 and with P3 and so may exist with all stones, although the earliest reported is 2nd July 92 on a Stone IV cover. Stone VII is rarely seen used other than on cover.

WADHWAN COVERS

Covers are not particularly common but there has been the opportunity to examine two dozen or so. A number of these were no doubt philatelic but it is not always possible to be sure; they are none the less interesting. A selection of the covers seen are described below.

- (1) There is a series of covers, mostly bearing Stone VII stamps and all bearing a similar address Shankarlal Mohanjee/same in Gujerati/Wadhwan City/same in Gujerati. Five of the nine seen are small white laid envelopes, all in the same handwriting and with the stamp cancelled with type P3 but no accompanying P4 strike. Three others, in a different handwriting from the others, have both strikes in the watery blue-green shade, with P4 dated 12 July 94 on all of them and variants of the same address including the word 'Vaishnan'. Yet another is illustrated by Christensen but cancelled with P4 only (same date).
- (2) Another sequence of covers is that to various persons 'c/o Messrs. Ralli Bros., Fort Bombay'. Four of these have been seen addressed respectively to Mr. Byranjee Cawasjee Battliwala (two covers), Zigorus Esq., and to Mr. Jamjetjee Billimoria. All bear the same characteristics:- P3 cancelling a Stone VI stamp, and a circular mark inscribed W75 JU 21 cancelling a ½a Indian stamp, and backstamped with P4, all dated 21 JUNE 93 and a Fort Bombay receipt stamp dated 22 JU 93.
- (3) Most covers are to be found with a single Wadhwan stamp, but an exceptional one reported by Mr. Peter Röver bears no less than six, three on the front and three on the back, all of Stone IV. Each is neatly cancelled with type P3 and there is a P4 strike on the reverse dated 8 MAY 93. The address is wholly in Gujerati which he transliterates as SVASTHAN WADHWANNA NEK NAMDAR KHUDHAWED THAKOR SAHEB WADHWAN SHEKER. Four other covers have been seen with two Wadhwan stamps, all with different handwritings and addresses and all Stone IV dated 8 MAY 93 and 11 MAY 93.

WADHWAN/44 N/579/A

(4) Strikes other than P3 are not common but I am illustrating one showing P2 cancelling a Stone IV stamp. It has a black P4 strike on the reverse dated 12 JULY 92 which is the earliest date so far reported. Two other similar covers have been seen with the same address, handwriting and date.

- (5) Finally, I am illustrating the 40mm variant of P4(?) previously mentioned, the details of which are not clear enough to describe. It is in blue-green and has a P3 strike, also in blue-green, superimposed upon it. The stamp is Stone VI and backstamps are 'Wadhwan City, May 10', 'Ajmere May 13' and 'Kuchaman May 15'. It has no Indian stamp and could be a faked cover.
- (6) Curiously, no covers at all have been reported of the thin paper printings, Stones I, II or III.

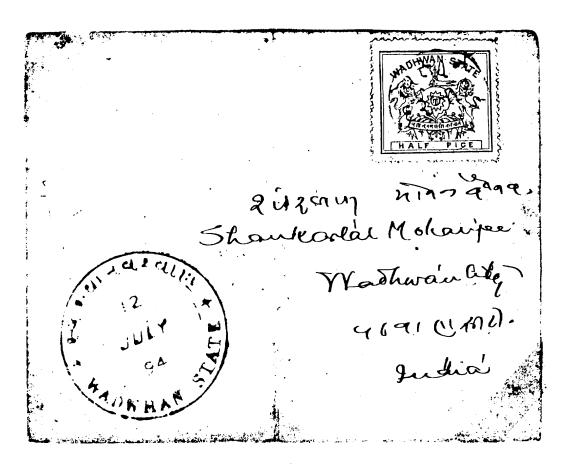


Fig.1 - Shankarlal Mohanjee

N/580/A WADHWAN/45



Fig.2 - Ralli Bros.

(Illustrations Nos.1, 2, 4 and 5 are shown by kind permission of Mr. W. Danforth Walker)

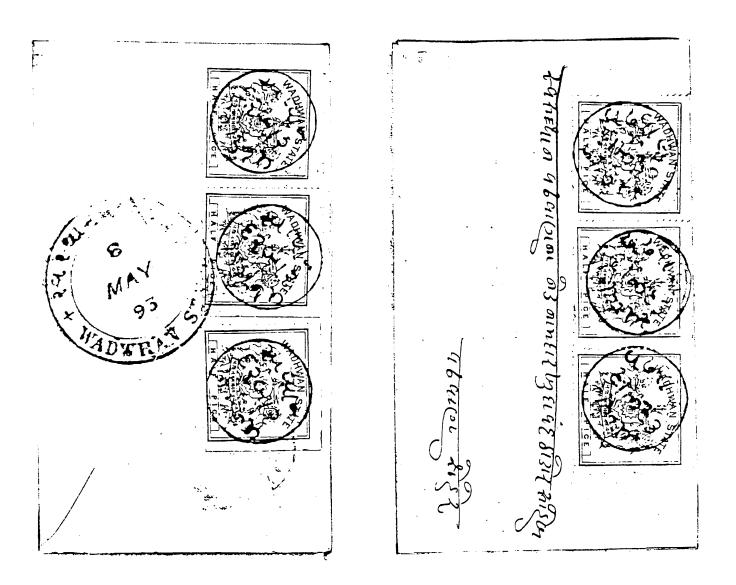


Fig.3 - Multiple usage (front and back)

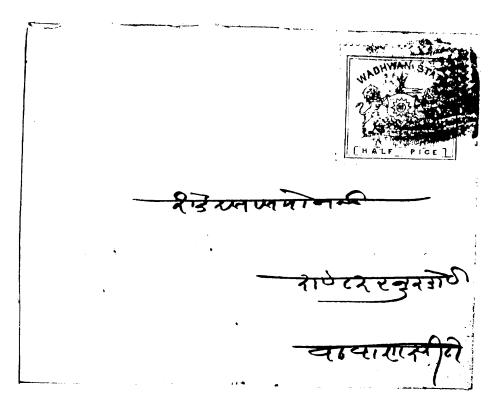


Fig.4 - Type P2.

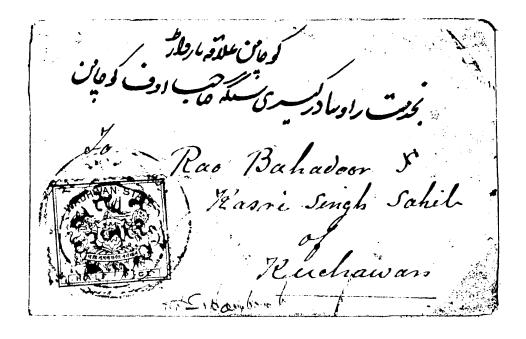


Fig.5 - The 40mm variant

WADHWAN/48 N/583/A

Chapter 5: THE FORGERIES OF WADHWAN

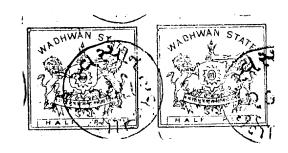
Five distinct forgeries have been discovered, none of which is particularly dangerous to anyone familiar with the characteristics of the genuine stamps. That most frequently seen is type Fl, the others being much less common.

TYPE F1:

<u>Perf:</u> Size 12, usually clean-cut or, less common, imperforate.
The latter is often found in pairs.

Paper: The perforated stamps are on a white or off-white thick wove paper with a clear vertical mesh. The imperforate stamps are usually on a distinctly buff coloured paper.

Main Features:



- (i) The central circle of the sun and its rays are squashed vertically.
- (ii) The small ribbon over the 'HA' of 'HALF' is too thick and points more downwards.
- (iii) The top right-hand corner of the shield under the paw is missing.
- (iv) The lettering in the value tablet is too small.

Other Details: From a block of 12 and another of 15 which have been seen, it is probable that the sheet comprises five rows of three stamps, clearly lithographed. This was of the imperf. stamps but it is probable that the same plate was used for the perforated stamps also. Evans gave brief details of a forgery in his 1914 article (perforated) which is probably the same one. Both perf. and imperf. stamps almost always bear a postmark resembling the common P3 type. There are two types of this postmark, which are described later in this chapter. Only three copies (imperf.) have been seen without a postmark.

TYPE F2:

Perf: Line perf.12, either clean-cut or with paper in the holes.

Paper: Medium wove with a mesh of indeterminate direction.

N/584/A WADHWAN/49

Main Features:



- (i) Distinct arc like a reversed 'C' in the upper left-hand corner.
- (ii) A line joins the knee to the chest of the reft-hand tion.
- (iii) Very little shading on either lion's body.
 - (iv) No shading in pennant and no dot after 'WADHWAN' (like Fl).

Other Details: Curiously, this one is one of two stamps which head Evans' 1914 article, although there is no comment in his article describing it as a forgery. It has even been used as an illustration in Gibbons' catalogue for many years! No multiples or cancelled copies have been seen. It appears to be typographed.

TYPE F3:

<u>Perf:</u> This is very rough and difficult to measure but appears to be about 11 with the holes partially filled with paper.

Paper: This stands out as being whiter than most genuine stamps but has a faint grey tone to it. It is medium thickness but appears patchy against the light and has a mesh of indeterminate direction.

 $\frac{\text{Main features:}}{\text{accurately drawn and has the dot after 'WADHWAN'}}$ and has the triangular shading in the pennant, although a little blunted.

- (i) The lower arm of the right-hand lion is rather triangular with its apex touching the body.
- (ii) There is heavy black shading on the left-hand lion's chest.
- (iii) The floreate leaf at the lower left of the shield is a single line touching the shield.

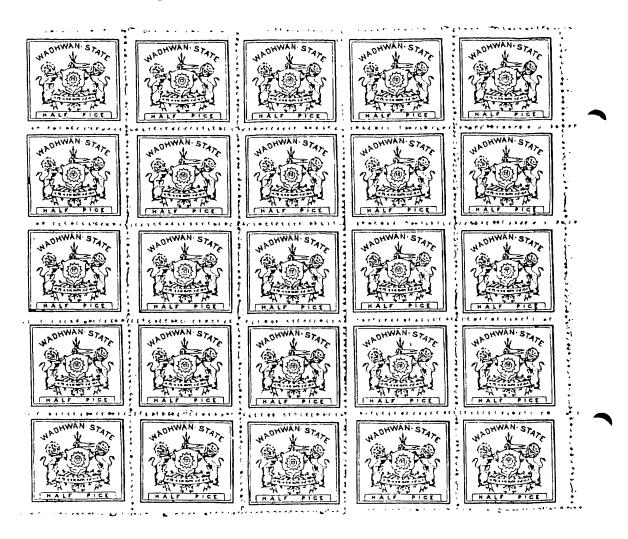
Other Details: Two single stamps were known to me for a short time and then three large blocks were sent for examination by a member in North America which turned out to be the same forgery. These were (i) five rows of three, imperf. at the left, (ii) five rows of two with a perforated right margin, and (iii) five rows of four with no margin which overlapped the other two blocks.

WADHWAN/50 N/585/A

From this could be reconstructed five rows of five stamps but it is not known if the complete sheet had more than five rows. The reconstruction is illustrated below (reduced to 80% of original).

N.B. No genuine sheet was imperf. at the left and perforated at the right. It appears to be typographed and is possibly of

recent Indian origin (1970's ?).



N/586/A WADHWAN/51



TYPE F4

Perf: These are imperforate

Paper: A little glossy such that the ink tends to smudge.

Main Features: Only two copies have been seen, with identical features.

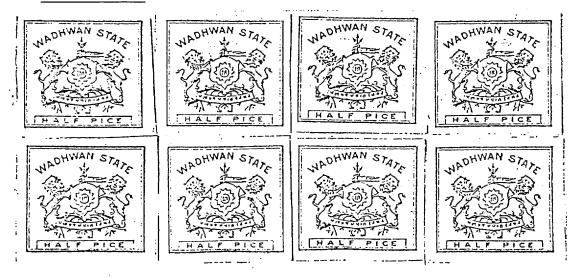
- (i) The upper foot of the left-hand lion is completely missing.
- (ii) The ball ornament between the left-hand lion's legs is not circular but is an inverted 'U'.
- (iii) There is a clear gap in the thin frame under the 'E' of 'PICE'.

TYPE F5

Perf: These are imperf. with cutting lines drawn between the stamps.

Paper: Thin toned wove.

Main Features:



(i) The floreate ornaments at the bottom centre are wrongly shaped and do not extend down to touch the value tablet.

WADHWAN/52 N/587/A

(ii) 'HALF' is much too long so that the 'F' is directly under the left-hand part of the floreate ornament.

(iii) Instead of a triangle or dot shading in the pennant, there are two vertical bands of short lines.

There are many other design differences which could be described.

Other Details: This forgery is described by Christensen in his Handbook and I believe that it is not common. He indicates that the sheet probably consists of two rows of four stamps and illustrates such a block, as shown on the previous page. He also illustrates a block of four (Nos.1, 2, 5 and 6) printed in isolation without the cutting lines, which he describes as a facsimile of the forgery.

THE FORGED POSTMARKS OF WADHWAN

Of the five types of forged stamps, only type Fl has been seen with a cancellation and, as mentioned earlier, is rarely seen without one. Curiously, there are two types of this forged postmark, one which was used only for the perforated stamps and the other used only for the imperforate stamps. Neither has been seen cancelling any genuine stamps.

TYPE FP1: This is slightly larger than type P3, i.e. 28mm instead of 27-27½mm. The lettering differs considerably from P3 and is somewhat bolder. The Gujerati W's have almost closed loops i.e. c instead of c. It is invariably impressed in black and usually has a sooty or granular appearance. It is only known on the type Fl forgery, the perforated printings only.

TYPE FP2: This is only 26mm and the lettering and circle are distinctly thinner. The circle is noticeably flattened between 11 and 12 o'clock, i.e. over the second 'S' of 'SVASTHAN', and the second 'W' of 'WADHWAN' and the 'V' of 'SVASTHAN' are again almost closed. This type is only known on the imperforate printings of the type Fl forgery.







Type FP2.

N/588/A WADHWAN/53

Chapter 6: FUTURE RESEARCH

As will have been seen in the preceding pages, there are still a number of loose-ends to be resolved and so studies of the stamps of Wadhwan are by no means at an end. A few suggestions are:

- (1) The discoveries of Stone I which probably indicate that there are two stones: possibly IA on meshed paper and IB on unmeshed paper clearly a major area for future research, and I would like to hear from members who may possess blocks or pairs, particularly of marginals, so that the jig-saw can be completed.
- (2) Other features of Stone I are the rarely seen pin-perf. $6\frac{1}{2}$, the single stamp seen on thin vertically meshed paper with the left side pin-perf. $6\frac{1}{2}$, the right side trimmed, and the horizontal sides perf. $12\frac{1}{2}$; and the single stamp seen on thick vertically meshed paper. All these lead to speculation as to how they occurred and how rare they are.
- (3) It also has to be resolved as to whether the imperf. between pair from the bottom left-hand corner mentioned by Evans, and in Chapter 2, originated from Stone I or Stone II and if other examples exist.
- (4) The true chronological order of the stones may be from I to VII, but it has not been conclusively proved. The disappearance of the shading in the pennant, the appearance of the dot after 'WADHWAN', the introduction of thicker paper, the hairline flaws suggesting the adjacency of Stones III and IV are all subsidiary clues, but a study of the dates on postmarks might tell a different story. Much work still has to be done on the dates of use of the various cancellers.
- (5) There is something of a mystery surrounding the perf.ll variant of Stone IV. Why does this variety appear almost always between the bottom two rows of the sheet, especially as it is a line perf.? Even if a number of sheets were all perforated together, one should find some other variant perhaps equally common when another set was perforated. The only variants reported are a single stamp which is perf.ll between the bottom two rows and between the next one up, and another single stamp which is perf.ll between the top two rows of the sheet. It would be very interesting to know how many sheets were actually printed from each stone! Philip Kinns point out a similarity to the 1904 Jaipur issue which had a single row of perf.12½ between the bottom two rows!

THE CATALOGUE

The following table lists all the main types of stamp discussed in the preceding chapters. A dash indicates that the item may exist but has not been seen or reported in the recent studies. Nearly 1200 stamps have been seen or reported and a rough scarcity rating is given based on the number of items examined. The system used is an arbitrary one based on the following:- RRR - only one copy; RR - two to four copies;

R - five to twelve copies; S - thirteen to twentynine copies; M - thirty to seventy copies; C - over seventy copies.

In the case of mint copies, only singles and small blocks are included for rating purposes.

REF.	STONE	PAPER	MESH	PERF.	MINT	USED	COVER	½SHEET OR MORE
1	ΙA	Thin	Horiz	12½	М	RR	-	-
2	ΙA	Thin	Horiz	Pin-perf.6⅓	R	-	-	-
3	ΙA	Thin	Vert	6½,12½combin	RRR	-	-	-
4	IA	Thick	Vert	12½	RRR	-	-	-
5	IB	Thin	None	12½	S	RR	-	-
6	I or II	Thin	?	<pre>Imp.bet.pr.</pre>	RRR	-	-	-
7	ΙΙ	Thin	Vert	12⅓ small	М	=	-	R
8	111	Thin	Horiz	12½	S	RR	-	RRR
9	III	Med.	Horiz	12½	С	RR	-	RRR
10	IV	Thick	Vert	12	М	S	R	R
11	IV	Thick	Vert	12,11combin	S	RR	-	-
12	٧	Med.	Vert	12	С	М	RRR	RR
13	VI	Med.	Horiz	12	R	М	RRR?	RRR?
14	ΙV	Thick	Horiz	12	\$	С	RR	RR
15	ΙΙV	Thick	Vert	12	С	R	R	R

Other details are necessary to separate Nos.1 and 8 (e.g. No.8 often shows the hairline after the 'F' flaw) and also between Nos.10 and 15 (e.g. No.15 is a much clearer printing than No.10).

N/590/A WADHWAN/55

BIBLIOGRAPHY AND CREDITS

Much valuable information has been gathered from the following publications:-

Sept. 1888 - Illustriertes Briefmarken Journal, p.201, earliest reports.

July 1889 - " " p.238, further report

Nov. 1913 - Philatelic Journal of India, Vol.XVII, p.280, J. Godinho.

Feb. 1914 - Stanley Gibbons' Monthly Journal, p.42, Evans' important article.

Feb. 1914 - Philatelic Journal of India, p.41, E.Dickenson Price re inscriptions.

1934 - Philatelic Journal of India, p.68, Douie's important article.

Oct/Dec 1979 - India Post, p.112, Forgery F1 imperf. illustrated.

Oct/Dec 1989 - India Post, Wadhwan Questionnaire.

Date unknown - The excellent publication entitled 'The Indian State Wadhwan, its Postal History and Philately' by Sten Christensen FRPSL, in Swedish and English.

In addition, much valuable information and help has been received from members of the India Study Circle over the six years or so that it has taken to get this publication together, particularly the following who made invaluable contributions by supplying information or loaning material:—Messrs. D.H.Bates, R.V.Bentley, D.O.Davies, P.Kinns, G.H.Longden, A.J.M.Meadows, W.P.Molineux, P.Rover, J.Sommerwill, N.Thadani and W.D.Walker.
