

(1) Number of pages.....

(2) Date of repair.....

(3) Initials of the Referencer.....

MADRAS RECORD OFFICE

Government of Madras

Public Works

DEPARTMENT

G.O. No.	259-260	(W)	Press
B.P. No.			
Dated	29-1-	18	

Not to be folded or roughly handled

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 29th January 1876

No 550

No. 260.

FROM

MAJOR-GENERAL G. W WALKER, R E,
Secretary to the Government of Madras,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department

ACCOUNT, No 32-B

SIR,—I am directed to forward, in reply to your letter, No. 654 A G, dated 21st October 1875, reports received from the District Engineers of Godavery and Kistna, and from the Presidency Workshops Superintendent, which contain full information on the subject of the use made of English and Country iron respectively.

2 It will be observed that, as all the Indian iron is of the class called "pig," no use can be made of it in the workshops, as the necessary conversion of the small blocks into large forgings would raise its cost considerably above that of the imported iron

3 In the Godavery district, the rates of the country iron are about 2 Pies per lb cheaper than English In the Kistna district, the charges are about equal In the Presidency Stores Report, the rates of *Country* iron are not given, as that term is there applied to the inferior kinds of imported iron

I have the honor to be,

Sir,

Your most obedient servant,

Major-General, R E,
Secretary to Government

Ed A Raitt
Spare Copies

Codt. of 118761 Madras.
PUBLIC WORKS.

To

THE SECRETARY TO GOVERNMENT
INDIA

Date 1 Jan 1876

From

By

G O, 118761, No 550

JANUARY.

No 550

24 JAN 1876

PRESIDENCY WORKSHOPS, D.P.W.,
Madras, 28 January 1876

No. 4081

From

THE GENERAL SUPERINTENDENT,
PUBLIC WORKS WORKSHOPS AND STORES,

To

THE

District Engineer
Presidency, Fort St George

SIR,

Inclures

With reference to G O dated 1st Nov 1875 No 55086 received with Indorsement No 55229 of the 12th inst, I have the honor to submit two Statements, one showing the issues of iron purchased from England by the P.W. Stores and the other the iron purchased by the Workshops in the Local Market.

2 No country iron has been used by the Workshops. I have not seen any other description of country iron than pig-iron. I believe, is generally known as country iron is the inferior sort of iron imported from England. The iron purchased by the Workshops was for works admitting of no delay, and the black iron was resorted to only when the government depots could not meet demands. The cost at which the iron was procurable during the past three years, and is now procurable is given at the foot of the Statement.

Received Over

179

38837 1/2

1127

1806

99645 1/2

Dimensions of Snow	Small amount climber	1872-73	1873-74	1874-75	Total
Flat $\frac{3}{4} \times \frac{1}{4}$ "	the	141	15	270	429
" $1 \times \frac{1}{4}$ "	"	"	194	488	687
" $1 \times \frac{1}{2}$ "	"	146	200	354	700
" $1 \times \frac{3}{4}$ "	"	107	703	"	810
" $1\frac{1}{4} \times \frac{1}{2}$ "	"	193	736	"	929
" $1\frac{1}{4} \times \frac{3}{4}$ "	"	195	3539	3653	7687
" $1\frac{1}{2} \times \frac{3}{4}$ "	"	107	66	"	173
" $1\frac{1}{4} \times \frac{1}{8}$ "	"	76	"	84	160
" $1\frac{1}{4} \times \frac{3}{8}$ "	"	114	610	500	1229
" $1\frac{1}{2} \times \frac{3}{8}$ "	"	156	159	2224	3137½
" $1\frac{3}{4} \times \frac{1}{4}$ "	"	"	650	1473	2123
" $1 \times \frac{1}{4}$ "	"	476	334	839	2149
" $1\frac{1}{4} \times \frac{1}{4}$ "	"	113	313	287½	713½
" $1\frac{1}{2} \times \frac{1}{4}$ "	"	376	1087	310	1973
" $1\frac{1}{2} \times \frac{1}{2}$ "	"	12081	6145½	"	18226½
" $1\frac{1}{2} \times \frac{3}{8}$ "	"	2635	2286	333	5254
" $1\frac{3}{4} \times \frac{1}{4}$ "	"	"	308	"	308
" $1\frac{3}{4} \times \frac{3}{8}$ "	"	1097	"	1098½	2192½
" $1\frac{3}{4} \times \frac{1}{2}$ "	"	"	"	"	"
" $1\frac{3}{4} \times \frac{3}{4}$ "	"	"	5610	1249	6859
" $2 \times \frac{1}{4}$ "	"	257	5141	2136	8234
" $2 \times \frac{1}{2}$ "	"	1084	"	"	1084
" $2 \times \frac{3}{8}$ "	"	19477	"	"	19477
" $2 \times \frac{3}{4}$ "	"	91	2064	"	2155
" $2 \times \frac{1}{4}$ "	"	2488	2428	1875	6791
" $2\frac{1}{4} \times \frac{3}{8}$ "	"	672	4839	203	5714
" $2\frac{1}{4} \times \frac{1}{2}$ "	"	179	"	1127	1306
Grand Over		41405½	38837½	19399½	99645½

Description of Iron		Quantity received during	1872-73	1873-74	1874-75	Total
Iron pounds	Brought forward	41	111 1/2	124 3/4	137 84 1/2	362 523.
	1 1/2"	45 1/2	577			10366
	1 3/4"		1211		847	2958
	1 3/8"		360		657	817
	2"		1317 1/2	1150 1/2		2468
	2 1/4"		1100		113	1418
	2 1/2"		217 1/2		5132	8304
	3"		1144 1/2	753 1/2	2021	2099 1/2
	4"		2226	257	1300	1071 1/2
Iron round bar	1/2"			117 1/2		197 1/2
Iron round	3/4"		113		135 1/2	1147 1/2
Iron Sheet	6 x 7 x 1/2"		108	150		318
	4 x 2 x 1/2"		1090	117 1/2		339 1/2
	4 x 2 x 1/2"		1845	119	301 1/2	508 1/2
	4 x 2 1/2 x 3/8"				1447	1447
	4 x 2 1/2 x 1/2"		77 1/2		77 1/2	77 1/2
	6 x 2 x 1/2"			72	1532	6160
	6 x 2 x 1/2"				6152	5152
	6 x 2 x 3/16"			2291		2291
	6 x 2 1/2 x 1/2"			585 1/2		585 1/2
	10 x 2 x 1/2"			453	1516	2009
	10 x 2 x 3/16"		57 1/2	697 1/2	889 1/2	1944 1/2
	12 x 2 1/2 x 1/2"		2837	4357		7694
	12 x 2 1/2 x 3/16"		3595		116 1/2	3711 1/2
	12 x 2 1/2 x 1/2"		1099 1/2	3743		14788
	12 x 2 x 3/8"		2024	226		2250
	12 x 2 1/2 x 3/16"		1032		1397	2479
	12 x 3 x 1/2"				11403	11403
	12 x 2 x 1/2"		12322	10165	2923	25412
	5 x 5 x 1/2"			1193	2914	3407
			3118	2660		5848
Carried Over			167 147 3/4	184 653 1/4	210 634 3/4	562 435 3/4

Description of Iron		Quantity received during	1872-73	1873-74	1874-75	Total
Iron Sheet	6 x 4 x 1/4"		1193	381		1574
	6 x 4 x 3/8"			207	6835	7042
	14 x 9 x 1/2"			1052	117	1469
	14 x 9 x 3/8"		634	160	411	4905
	14 x 12 x 1/2"		3377	564	7405	11346
	14 x 12 x 3/8"		1838		1686	3544
	14 x 15 x 1/2"			1073	10232	11305
	14 x 15 x 3/8"		716	11056	1104	12876
	14 x 2 1/2 x 1/2"				1381	1381
Iron Wrought	1 x 1 x 3/16"				1275 1/2	1275 1/2
	1 x 1 x 1/2"		23		30	63
	1/2 x 1 1/2 x 3/16"				40	40
	1 3/4 x 1 3/4 x 3/8"		238	1071	139 1/2	1448 1/2
	2 1/4 x 2 1/4 x 3/8"				11789	11789
	2 1/2 x 2 1/2 x 3/8"		313		314 1/2	627 1/2
	3 x 3 x 1/2"		4513		3057 1/2	3508 1/2
	3 x 3 x 1/2"					2980
Iron T	3 x 3 x 3/8"				6345	6345
	3 1/2 x 3 x 3/8"				4905	4905
	4 x 2 x 3/8"		223		111	1334
	4 x 2 x 1/2"		169			169
	4 x 2 x 3/16"				1021	1021
	4 1/2 x 3 x 3/8"			292		292
	4 1/2 x 3 x 1/2"		3831			3831
	5 x 6 x 1/2"		8905			8905
Iron Angles	1 1/2 x 1 1/2 x 1/4"		1077		454	1531
	2 x 2 x 1/4"		503	302	439	1244
	3 x 3 x 3/8"				11302	11302
Iron Pig			53557	208320	134400	396277
Carried Over			251 317 3/4	409 131 1/4	447 944 1/4	1108 393 1/4

[illegible]

Bring'd forward		25137 3/4	27913 3/4	24792 1/2	110839 3/4
Snow Hoop	1 1/2"	227	567	252	-1048
"	2 3/4"	340	114	146	600
Total		25137 3/4	27913 3/4	24792 1/2	110839 3/4

Service Notes including charges

	1872/73	1873/74	1874/75
Iron flat			
Iron rods			
Iron Square			
Iron Nigle			
Iron Plate			
Iron T			
Iron Swedish round			
Iron Hoops			
Rate for 1875-76			
Iron flat			

How improved are they after

Wilde Works Store Dept.
Chepauk
January 1876

J. H. Chandler
General Supdt. W. Storck.

Statement showing Imported Iron purchased from Local Market
 in the Official years 1872/73-73/74-74/75.

Items	Quantity	Rate	Amount
Iron Sheet $4' \times 2' \times \frac{1}{32}"$	62	195 5 4	5 7 10. " - 1-5. the
Iron rounds $1\frac{1}{2}"$	282	134 16 5	16 14 9 3080 a Candy
" $1"$	169	143 5 9	10 13 1 32 R a Candy
Iron flat $2\frac{1}{2} \times \frac{1}{2}"$	140	147 13 5	7 3 10 33 R a Candy
" $3' \times \frac{3}{4}"$	66	156 12 9	4 9 11 35 R a Candy
" $2 \times \frac{1}{4}"$	56	147 13 5	2 11 2 33 R a Candy
Iron Sheet $1\frac{1}{16}"$	84	206 9 7	7 9 " 45 R a Candy
Iron Hoops $8 \times \frac{1}{8}"$	102	211 9 7	9 2 11 44 R a Candy
" $3\frac{1}{4}"$	18	210 "	1 11 " 41-6 per 100 lbs
Iron round $1"$	24	151 8 "	1 10 " at 11 per 100 lbs
" $\frac{3}{16}"$	21	373 5 4	3 10 " at 12.3 per 100 lbs
Iron rounds $3\frac{1}{16}"$	16	237 140 5 4	4 11 2 " 3-2-a the
Iron Hoops $4\frac{1}{2} \times \frac{1}{8}"$	32	230 "	4 " 6 " 2 " "
Iron Hoops $2"$	12	188 2 6	1 " 10 12 R a Candy
" $1\frac{1}{4}"$	235	188 2 6	23 15 7 12 R "
Iron rounds $1\frac{1}{8}"$	49	192 10 3	4 4 1 43 R "
" $1\frac{1}{2}"$	150	206 13	13 13 6 46 R "
Iron flat $1\frac{3}{4} \times \frac{1}{2}"$	6	188 2 6	" 8 6 12 R "
" $2\frac{1}{2} \times \frac{1}{2}"$	91	197 1 11	8 " 10 44 R "
Iron rounds $1\frac{1}{4}"$	56	210 8 11	5 4 3 47 R "
" $1\frac{3}{8}"$	85	208 5 1	7 14 6 46-8-a Candy
" $1\frac{1}{8}"$	51	212 12 9	4 13 6 47-8 "
" $1\frac{1}{16}"$	8	256 10 8	1 " 1 1-10. a the
Iron Hoops $1 \times \frac{1}{8}"$	699	268 5 4	83 11 9 1-11 "
" $3 \times \frac{1}{8}"$	1233	217 4 5	119 9 7 R 13-8-a Candy
Iron rounds $1\frac{1}{2}"$	482	174 11 6	37 10 2 R 39 " 8 "
Iron flat $2 \times \frac{3}{8}"$	5	211 9 7	" 7 7 R 4-6-a Candy
" $1 \times \frac{1}{16}"$	69	217 4 5	66 14 11 R 18-8-a Candy
Iron rounds $1\frac{1}{4}"$	29	230 "	3 10 " 41-2-a the
Iron Hoops $1\frac{1}{2} \times \frac{1}{8}"$	1	250 "	" 9 " 42-a the
" $3\frac{1}{4} \times \frac{1}{32}"$			

Enclosure to letter.
 No 1081 of 21st January 76
 from the Civil Supply
 Public Works Department
 to the D. & C. Secretary

Statement showing
 the quantities of iron
 round during the last
 three official years
 from 1873/74

Bill No.	Items	Qty	Rate	Amount	Bill No.
539	Snow Hoops 1 1/2 x 1/8"	22 1/2	280	6210	
607	" 2" 3/4 x 3/32"	5	256	1280	
	" 3" 5 x 1/8"	63	291	18353	
28	Snow Hoops 1 1/2 x 1/8"	22 1/2	280	6210	
83	Snow Sheet 1/8"	10	226	2260	
	Snow Hoops 1"	221	218	48178	
	Snow rounds 1 1/2"	10	226	2260	
112	Snow Sheet 1/8"	959	218	209062	
132	Snow flat 2 x 3/8"	6762	218	1474176	
	" 2 x 1/2"	1414	176	248864	
	" 1 3/4 x 3/8"	554	176	97504	
164	Snow Sheet 6 x 3/4"	105	156	16380	
	" 5 1/2 x 3/10"	3957	218	862626	
194	Snow rounds 1 1/2"	6569	218	1431942	
	Snow Sheet	931	176	163856	
	" flat 1 3/4 x 3/8"	774	218	168632	
	" Square 2"	17474	156	2725944	
269	Snow flat 2 x 1/2"	2056	206	423536	
	" 2 x 3/4"	803	176	141328	
	Snow Sheet	831	176	146256	
	" rounds 2"	807	218	175926	
	" 1 1/2"	202	152	30704	
	Snow flat 2 x 1/4"	382	176	67032	
	" Square 1 1/2"	46	176	8088	
342	Snow flat 1 3/4 x 1/2"	101	143	14441	
	" 2 x 1/4"	303	176	53328	
	Snow rounds 1 1/2"	12372	176	2176472	
	Snow flat 2 x 1/2"	285	176	50160	
	Snow Square 1 1/2"	287	176	50512	
395	Snow Sheet 4 x 2 x 1/8"	1185	143	169655	
	Hoops Snow 1 1/2"	626	218	136568	
	" 3/4"	86	210	18060	
	Snow flat 2 x 1/4"	22 1/2	245	5448	
	" 1 1/2"	144	176	25344	

Bill No.	Items	Qty	Rate	Amount	Bill No.
395	Snow Hoops 1"	151	152	22952	
	Snow rounds 2"	3656	158	577648	
402	Snow flat 6 x 1/2"	1060	158	167480	
	" 3 3/8 x 3/10"	199	176	35024	
428	" 1 1/2 x 1/2"	112	245	27440	
	Snow rounds 5/16"	214	176	37664	
	Snow flat 2 x 3/8"	191 1/2	143	27386	
	" Square 1 1/2"	216	156	33696	
	Snow flat 1 3/4 x 3/8"	211	218	45998	
505	Snow Sheet	283	176	49808	
	Snow rounds 1 1/4"	1236	176	217536	
	Snow flat 2 x 3/8"	630	143	90090	
559	Snow Square 1 3/4"	174 1/2	174	30375	
	Snow rounds 1 1/2"	114	176	20064	
	Snow flat 1 1/2 x 1/2"	17 1/4	245	4238	
611	Snow Hoops 1 x 1/16"	328	218	71496	
	Snow Sheet 1/32"	162	143	23166	
	Snow Square 1 3/4"	25	210	5250	
667	Snow Hoops 1 1/4 x 1/16"	2383 1/2	206	491077	
	Snow Square 2"				

Average Rates	1872 1/3	1873 1/4	1874 1/5	1875 1/6
Snow Sheet	199 15 6	211 9 2	190 5 8	158 3 3
Snow rounds	200 10 5	192 14 5	173 15 6	159 14 9
Snow flat	102 5 1	" " "	174 11 6	152 3 2
Snow Square	" " "	" " "	270 10 8	280 " "
Snow Hoops	210 12 6	260 12 10		

Public Works Workshop Dept.
Chapman
21st January 1876

J. H. Munnier
General Supt. P. W. Workshop & Stores

General and Warship Office
Dowlisham, 1st Decr 1375

The Officer.

In charge of Fort Workshops
 & Asst. Superintending Engineer
 Goddard District

With reference to G. O. No 3086 dated
Yek. November 1875 which was communicated
to me with your Memo No 2576 dated
20th ultimo, I have the honor to inform
you that the following are the quantities
of dried Anagapates of imported iron
which was received both from Europe
and Calcutta and used in the last
three official years; but that no country
iron has ever been used since this shop
was established.

Years	Total quantity of imported iron used in each year	Average per ton at which the iron was procured in each off. year.
1872-73	206292½	0—1—9
1873-74	3,23,298¼	0—1—11½
1874-75	341671	0—1—10
		The

12/08/98

No 2865

10.

From. Major J. Beatty R.E.
Supl District Engineer
Godavery District

To. Major General G. W. Walker R.E.
Secretary to Government D. P. W
MADRAS

SIR,
As directed in G.O. No 3086 of 1st November 1875, I have the honor to forward a report from the Officer in charge Government Workshop Dowlaishwarum containing information on the use of country and imported iron at that Workshop.
2. He gives as the reason for using imported iron only, in preference to country iron, that the latter would be more expensive as it is only procurable in short lumps, while for the works carried out in the shop bar iron, round iron, angle iron & sheet iron are principally required.

I have the honor to be

Sir
Your Most obedient Servt.
J. Beatty Major R.E.

Supl Engineer Godavery Dist.

The Country iron could be wrought in the local Market at Rupees 0-1-8 a lb but in my opinion it would be more expensive to work up, than imported iron, as the Country iron is merely forged into 4" Square and about a foot in length, and to convert them into large forgings would involve considerable expense in charcoal, and would bring up its manufactured cost to much more than the cost of English iron.

Recd
J. Beatty Major R.E.
Supl District Engineer Godavery District

1875
21 Dec 1875

1899.

Supg. Engrs Office 1st Div
Camp Begowadab
27th November 1895

From

Lieutenant D. Mac Campbell R.E.
Executive Engineer in charge of the
Kistna District.

Major General G. M. Walter R.E.
Secretary to Government
Public Works Department
Madras.

With reference to G. O. No 3086 dated
1st November 1895, I have the honor to inform
you that no country iron is used for
Government works in this District; it
can be obtained at about the same price
as Europe iron, and it is of good quality
(though rather dirty) and easy to work;
but it can only be got in small pieces
1' long and $1\frac{1}{2}$ " square which is inconvenient
and increases the cost of working it.

I have the honor to be

Yours most obedient servant

D. Mac Campbell R.E.
Executive Engineer in charge of the Kistna District

P. H.

1875 Dec 21

From

Off. No. 822
The District Engineer,
Madras District

11, No. 10, to Government

Department Public Works

MADRAS

Received 11/12/95

NO. 2015

Date

Subject.

Transmitting in-
formation on the
use of country iron
imported from at
Daulatpur
Workshop with re-
ference to G. O. No 308
No 159-100 29-1-96

6-26-1-96

5188

P. W. Department

No 259

Proceedings of the Madras

Govt - under date 29 Jan/76

Read the following

Endorsement of D. S. Presidency
From D. S. Sadaary
D. S. Kistna

(H.S. no 4467 d/24 Jan/75
" no. 2865 d/21 Dec/75
" no. 99 - d/27 Jan/75)

Ordered that these reports
be furnished to the
Government of India,
with reference to their
letter no 654 A.G. dated
21 October, 1875

(H.S. no 260 d/29 Jan/76)
To the Secretary to the
Government of India,
Public Works Department

Since I am directed to
forward

D. S. Presidency
D. S. Sadaary
D. S. Kistna

no 259 - 29 Jan/76

P. W. 1875-2044

The Secretary to the
Government of India
in charge of the
to the Secretary to the
P. W. & Madras
Date 29 Jan/75
No 259

Enclosed that
country from good
quality of the
the obtained in this
District at the same
time, as the
Madras, in the
much to work.

259
No 260 29 Jan/76

54873

26-1-76

Nov 26-1-76

NO. 110200 2771

forward, in reply to
your letter No. 654 A-G,
dated 21st October, 1875,
reports received from
the District Engineers
of Gadagery, and
Kistna, and from
the Presidency Workshop
Superintendent, which
contain full information
on the subject of
the use made of
English and Country
Iron respectively.

It will be observed
that as all the
Indian iron is of
the class called
'pig' no use can

be made of it in
the Workshops, as
the necessary conversion
of the small blocks
into large forgings
would raise its cost
considerably above
that of the imported
iron.

In the Gadagery district
the rates of the
country iron are
about 2 pie per
lb. cheaper
than English. In
the Kistna District
the charges are
about equal. In
the Presidency Workshop
the rates of country
iron are not given.

Jan 26-1-76

as that term is then
applied to the inferior
kinds of imported
iron, iron

Sept. 12. 2-76

N^o 548-550

Jan 26-1-76

~~A. L. Gadsden~~
~~Secretary~~
~~President~~

1/26/76

164

598 17/1/82

Govt. of 1876 Madras.

PUBLIC WORKS.

To Govt of India
S. Presidency

D 1/2

Issd

R 1

G. O. 29/1/82 No 257
260

Hos. 515 @ 5.15

Forwarding reports fur-
nished by certain officers
of the P.W. Dept regarding the
use made of English and
Country Iron respectively.

English & Country Iron.

Ordered that the reports
furnished by certain officers
of the P.W. Dept, regarding
the utilization of
be forwarded to the Govt
of India.