

(1) Number of pages _____

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(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	1560	(W)	Press
-B.P.-No.			-Mis.-
Dated	21-6-		1876

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
21st June 1876, No. 1,560.*

Read the following letters —

No 442 From Major H M. VIBART, R E, District Engineer, Bangalore, ,
Major-General G W WALKER, R E, Secretary to Government, Public
Works Department, dated Bangalore, 8th April 1876, No 4.

With reference to G O., No. 115, dated 12th February 1876, I have the honor to forward herewith, for sanction, a plan and estimate of Rupees 45,500, with site plan and specification for constructing a fourth-class gymnasium at Bangalore.

2 The plan and estimate have been approved of both by the Major-General Commanding the Division and His Excellency the Commander-in-Chief

No. 442-A. From Major R. THOMPSON, R E, Officiating District Engineer, Bangalore, to Major-General G. W. WALKER, R E, Chief Engineer, Public Works Department, dated Bangalore, 31st May 1876, No. 43.

In returning herewith the plan and estimate duly corrected, as requested in your memorandum, No. F-151, dated May 1876, I have the honor to state that the ornamental work in the standard plan being too expensive to build in stone is omitted in the plan now submitted

1 Plan
2 Estimates
1 Data

2 The height allowed for the basement in excess of that in the standard plan is owing to the unevenness of the site on which the building is to be built.

3 The rate 3-6 for stone in chunam shown in the district schedule is only up to 12 feet high, and for every 6 feet additional height 3 Pies are added to the rate. The walls for gymnasium being 25 feet high, a rate of 4 Annas is allowed in the estimate

4 The rate Rupees 15 in the district schedule is for rough stone flooring laid on concrete, but the rate now allowed in the estimate is for neat stone flooring, arrived at according to the rates in the district schedule thus; 100 square feet of flooring stone at 12-8-0, concrete under stone flooring 3 inches thick at 0-3-3 per cubic foot Rupees 5 = total Rupees 17-8-0, as per details herewith enclosed.

5 The higher rate for batten doors allowed in the estimate is on account of the doors being made of two thicknesses strong diagonal planks $\frac{3}{4}$ inch thick, the total thickness of the doors being $1\frac{1}{2}$ inches as per details herewith enclosed; the rate in the district schedule is only for ordinary battened door

6 The lump sum of Rupees 7,500 allowed for in the estimate for apparatus and fittings has been reduced by Rupees 900 according to the abstract estimate now submitted

Proceedings of the Madras Government, Public Works Department,
21st June 1876 No 1,560.

No 413

ORDER THEREON, 21st June 1876, No 1,560

MILITARY WORKS, No 10

(a) Heads of Service—Imperial

Fund—Ordinary

Class—Original Works

Min head—Military

Sub head—Miscellaneous, Military

Name of Work—Constructing a fourth class Gym-

nasium at Bangalore

Amount—Rupees 44,600

To be carried out by the Public Works Department

HIS GRACE the Governor in Council sanctions the plan and estimate of Rupees 44,600 for constructing a fourth-class gymnasium at Bangalore

2 A sum of Rupees 10,000 has been provided for the work in the Imperial Budget of 1876-77, and a further sum of Rupees 15,000 will, subject to the sanction of the Government of India, be transferred from item No 1 of that Budget

3 The above sanction has been registered as Imperial No 38 W of 1876-77

(True Extract)

Colonel,

Offg. Under Secy. to Govt, P.W.D

Data for strong batten
doors & stone flooring.

Quantity	Particulars	Rate	Per	Amount	Total
	Pair of Strong batten door with frame & locks hinges bolts &c complete				
	6 x 9 1/2 feet				
	34 x 6 x 5 = 7-1-0 Door frames				
	48 x 4 x 6 x 3/4 = 6-0-0 Diagonal Door planks				
	8 x 9 x 6 x 1 = 2-0-0				
	6 x 5 1/2 x 6 x 1 = 1-4-6				
	Total 17-5-6				
17.5-6	Qty of Framed timber	2	12	48	
60	Lbs of Framed Iron for 6 hooks &c	3	6	132	
6	hinges				
4	Lbs of Batten nails	3	6	14	
4	Qty of Iron round bolts	4	0	1	
6	Qty of screw nails 1 1/2"	16	0	9	
1	Iron cross bar bolt with hooks	2	0	2	
16	Carpenters	8	0	8	
7	Lawyers	10	0	46	
6	Men cooly	3	0	12	
1	Strong Padlock with keys	1	8	0	18
	Lundres				7
	Total Rupees				81

Quantity	Particulars	Rate	Per	Amount	Total
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Glazed circular fanlight
complete (6' x 3') Complete

9 1/2 x 6 x 5 = 1-11-9 circular frames

9 x 5 x 2 = u-7-6 — de — de

4 1/2 x 2 x 2 = u-1-6 — de — de

6 x 5 x 2 = u-5-0 bottom frame

14 x 2 x 1 = u-2-4 Doors

6 x 6 x 2 = u-u-6 Planks

Total 3-4-7

3-4-7 Lft. Hrought timber — 2 12 u-9 4 10

4 Screws 3" — " 3 u-1 1

16 Pairs of glass 12 x 10 — " 2 6 Each 2 8

3 Sawyers — " 10 . . 1 14

9 Carpenters — " 8 . . 4 8

3 Men cooly — " 3 . . 9

Lundries — " 3 2

Total Rupees for fanlight — 19

Pair of strong latten door
with glazed fanlight 6 x 12 1/2

feet frames hinges hooks

locks &c complete

Door 6 x 9 1/2 — " . . 81

Fan light 6 x 3 — " . . 19

Total Rupees — 100

Quantity	Particulars	Rate	Per	Amount	Total
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Stone flooring laid on 3" concrete & neatly pointed

100 sq ft

100 Lft. of Stone slabs — 1 . . 14 7 2

1 Parak of chunarn — " 9 . Parak . 9

2 de sand — " 9 . . 1 6

4 Stone cutters — " 10 . Each 2 8

1 1/2 Brick layers — " 8 . . 12

2 Men coolies — " 3 . . 6

4 Boys — " 1 6 . . 6

Contingencies — " . . . 11 6

25 Lft. of concrete bed 3" thick — 3 3 5

For one square 178

District office

Bangalore

31st May 1876

Sd/-

H. J. Deftman

Mr. P. M. S. S. S.

Major D. C.

Offg. District Engineer

Abstract Estimate for Gymnastic apparatus and fittings.

Quantity Description of Work Rate Per Amount Total

Gymnasium

Apparatus

1	Prepared wall or Port	850	Each	850
2	Ladder Ranks	55		110
1	Bridge Ladder	180		180
1	Elastic Ladder	480		480
1	Iron Horizontal Bar	85		85
2	Parallel Bars	40		80
1	Oscillating Beam	90		90
1	Row of Rings	80		80
2	Vaulting Horses	80		160
2	Trapeziums	20		40
2	Leaping Standards	55		110
1	Step platform	15		15
1	Post	28		28
1	Turning Pole	30		30
2	Horizontal Bars	50		100
1	Octagon	460		460
Carried Over				2898

P. 4. 3949/76

From the 1st Corps
Barracks
the 6th Corps
Cavalry
Recd Dec 31st 1895
Data for 1895
Latter 1895
Home 1895

<i>Aug 1894</i>	Description of work	Rate	Per	Amount	Total
	Brought Over	2978			
1	Horizontal Beam	250	..	Each	250
1	Step platform	110	..		110
1	Shelf	70	..		70
6	Vertical ropes	8	..		48
2	Pairs of Rings	17	..		34
2	Inclined Ladders	50	..		100
1	Great Leap Beam	660	..		660
4	Horizontal Ladders	55	..		220
1	Horizontal Planter	80	..		80
2	Vertical Poles	30	..		60
1	Life Line	100	..		100
2	Vertical ropes	10	..		20
	<u>Fittings</u>				
4	Rows of pegs for belt & shoe	3	8	..	Each 14
4	Do Do Do	5	..		20
4	Do Do Do	4	8	..	18
1	Rack for 15 rings	4	8	..	48
1	Do Do Do	4	8	..	48
1	Do wrestling staves	7	8	..	78
1	Do Do Do	7	8	..	78
1	Do 16 belted 18 lbs shot	2	10	..	210
1	Do Do 24 lbs Do	2	4	..	24
1	Do for 6 lbs shot	2	4	..	24
1	Do for 15 Leaping Poles	3	12	..	36
	Carried Over	4936	14		

<i>Aug 1894</i>	Description of work	Rate	Per	Amount	Total
	Brought Over	4936	14		
	<u>School of Arms</u>				
2	Rows of Pegs for shoes & belts	3	8	..	Each 7
4	Racks for Boots & gloves	3	12	..	15
2	Do for sticks & helmets	3	12	..	78
2	Do for Pads, jacket & aprons	5	..		10
2	Do for cutlasses & spring	5	..		10
	<u>Bayonet Manufact</u>				
2	Do for Lances	3	12	..	78
6	Fixed Benches	7	8	..	45
1	Small armourers bench				
	and Tools	5	..		5
	<u>Recruits Gymnastic Drill room</u>				
4	Fixed Benches	7	8	..	Each 30
5	Red patches, Dumb bells	3	12	..	18 12
5	Racks for Bar Bells	3	12	..	18 12
	<u>Men's Dressing room</u>				
12	Rows of Pegs for Men's cloths	45	..		540
90	Rft of fixed Benches	1	8	..	Rft 135
4	Troughs for washing feet	5	..		Each 20
	<u>Officers Dressing room</u>				
7	Rows of pegs for Officers cloths	26	8	..	185 8
33	Rft of fixed Benches	1	8	..	Rft 49 8
	<u>Office</u>				
1	Standard for measuring height	30	..		Each 30
1	Weighing Machine	150	..		150
	Carried Over	6024	6		

Quantity

Description of work Rate per Amount Total

Brought forward — 602 6.0

1 Office Desk with lock key 20 . . . 20 . . .

1 Office Table — 30 . . . 30 . . .

1 Row of pegs — 5 8.1 . . . 5 8 . . .

1 Fixed Bench — 10 8 . . . 10 8 . . .

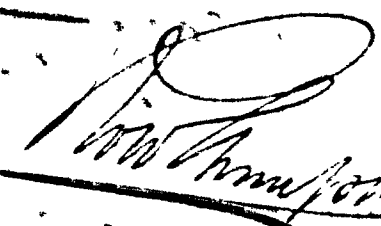
1 Shelf — 6 . . . 6 . . .

6 Chairs — 3 . . . 18 . . .

Painting & scaffolding re. — 3 . . . 18 . . .

Total Rupees for apparatus & fittings 6.600

Distt Engineer's Office
Bangalore
31st May 1876.



Major R. E.

Offg. Distt. Engineer

Copied
Self
H. E. Thompson

Imperial Military Original Works
Detail Estimate No. 228 of 1875-76
District — Bangalore

adium

14 July 1875

Contract Total

1182

1422

2044

2487 1/2

3426

1008

1080

765

Total est. of Excavation 17445 7/16

Concrete

Long walls of Gymnasium 2 126 1/4 1 1197

End walls — Do — 2 39 1/2 1 316

Lowest walls — Do — 2 39 1/2 1 335 1/4

Carried Over 18487 1/4

2000

Description of work Rate Rs Amount Rs

Brought forward — 602 6 0

1 Office Desk with lock key 20 20 00

1 Office 20 20 00

1 Room 20 20 00

1 Office 20 20 00

1 Shelf 20 20 00

6 Chair 20 120 00

Painting

46/6468 28

From

The Dist. Eng.
Bangalore

To

The Chief Eng.
Madras

Dated 31st May/96.
Recd

Estimate for

Gymnastic Appa-
ratus and fittings

amounting to Rs 6600

Distt. Eng.
Bangal.
31st May,

Copied

Imperial Military Original 88000

Detail Estimate No 228 of 18/5-96

District — Bangalore

Work — Constructing 4th class Gymnasium
at Bangalore.

Vide 28th Dec 1895 General C. M. D. No 287/14 July 1895

Particulars of work

Measurement for work that
L. P. D.

Excavation

Long walls of Gymnasium 2 126 4 1/4 6 1182

End walls — Do — 2 39 1/2 4 1 1/2 1122

Cross walls — Do — 2 39 1/2 4 1/4 6 204 1/2

Partition wall between c. n.

officers' Drilling room & office } 1 15 3/4 8 1/2 4 1/2 248 1/6

Side walls of school of arms } 4 51 3/4 4 1 1/2 8 1/2 26

and recruits Drill room } 2 28 4 4 1/2 10 08

Front and rear of — Do — 2 28 4 4 1/2 10 08

Pillars for supporting wooden

floors in the recruits Drill } 90 0 2 3 1080

room and school of arms } 18 8 1/2 5 1 765

Steps — 18 8 1/2 5 1 765

Total est. of Excavation 17445 1/4

Concrete

Long walls of Gymnasium 2 126 4 1/4 1 1197

End walls — Do — 2 39 1/2 4 1 316

Cross walls — Do — 2 39 1/2 4 1/4 1 325 3/4

Carried Over 18487 1/4

Particulars of work ^{Measurement} sq. ft. cubic ft. Total

Brought Over 1848 $\frac{3}{4}$

Partition wall between Dressing room and office — 1 $16\frac{1}{2}$ $3\frac{1}{2}$ 1 57 $\frac{3}{4}$

Side walls of school of arms and Recruits Drill room — 4 $52\frac{1}{4}$ 4 1 836

Front and rear walls — 2 28 4 1 224

Total cft. of concrete 2966 $\frac{1}{2}$

Foundation

Long walls of Gymnasium 2 $124\frac{3}{4}$ $8\frac{1}{2}$ 5 4366 $\frac{1}{4}$

Cross walls to — Do. — 2 $40\frac{3}{4}$ 3 5 1222 $\frac{1}{2}$

End walls of — Do. — 2 $40\frac{3}{4}$ 3 $8\frac{1}{2}$ 853 $\frac{3}{4}$

Partition wall between — 1 $16\frac{3}{4}$ $2\frac{1}{2}$ 1 411 $\frac{1}{8}$

Dressing room and office — 1 17 $2\frac{1}{2}$ $2\frac{1}{2}$ 106 $\frac{1}{4}$

Side walls of Recruits — 4 52 3 $3\frac{1}{2}$ 2184

Drilling room & school of arms — 4 52 3 $3\frac{1}{2}$ 2184

Front and rear walls Do. — 2 29 3 $3\frac{1}{2}$ 609

Steps — 10 $8\frac{1}{2}$ 5 1 765

Pillars for supporting wooden flooring in the Recruits — 90 2 2 3 1080

Drill room & school of arms — 90 2 2 3 1080

Total cft. of foundation stone in sockets 11230 $\frac{5}{8}$

Pavement

Long walls of Gymnasium 2 $124\frac{3}{4}$ $2\frac{3}{4}$ 3 2046

Cross walls of — Do. — 2 $41\frac{1}{2}$ $2\frac{1}{4}$ 3 560 $\frac{1}{4}$

End walls — Do. — 2 $41\frac{1}{2}$ $2\frac{1}{2}$ 3 622 $\frac{1}{2}$

Partition wall between — 2 $41\frac{1}{2}$ $2\frac{1}{2}$ 3 622 $\frac{1}{2}$

Dressing room & office — 1 $17\frac{1}{2}$ 2 3 105

Brought Over 3333 $\frac{3}{4}$

Particulars of work ^{Measurement} sq. ft. cubic ft. Total

Brought Over 3333 $\frac{3}{4}$

Side walls of Recruits Drill room and school of arms — 4 $52\frac{1}{4}$ $2\frac{1}{2}$ 3 1560

Side wall of steps — 36 5 1 3 540

Steps — 18 6 5 $\frac{1}{2}$ 810

Pillars for supporting wooden flooring — 90 $1\frac{1}{2}$ $1\frac{1}{2}$ $2\frac{1}{2}$ 506 $\frac{1}{4}$

Total cft. of Pavement stone in sockets 6750

Superstructure

Long walls of Gymnasium 2 $83\frac{1}{2}$ $2\frac{1}{4}$ 25 937 $\frac{3}{4}$

Cross walls to — Do. — 2 $42\frac{1}{4}$ $2\frac{1}{4}$ 25 36 $\frac{1}{5}$

Gable ends for — Do. — 2 $42\frac{1}{4}$ 8 1176

Winding wall over gable ends — Do. — 2 $54\frac{1}{4}$ 1 135

Front and rear walls of — 4 20 $2\frac{1}{4}$ 18 3240

Dressing rooms and office — 2 $42\frac{1}{4}$ 2 18 8024

End walls of — Do. — Do. — 2 $42\frac{1}{4}$ 2 8 1344

Gable ends over walls Do. Do. — 2 $42\frac{1}{4}$ 2 8 1344

Winding wall over gable ends — 2 $54\frac{1}{4}$ 1 135

Partition wall between offices and officers Dressing room — 1 18 $1\frac{1}{2}$ 18 4186

Side walls of Recruits Drill room and school of arms — 4 52 2 18 7488

Front and rear of — Do. — 2 30 2 18 2160

Gable ends over — Do. — Do. — 2 30 2 $5\frac{1}{2}$ 660

— Do. — on the main walls — 2 12 $2\frac{1}{4}$ 2 108

Winding wall over gable ends — 2 $40\frac{1}{4}$ 1 100

Projection of quoin stones around the Doors — 12 19 $1\frac{1}{4}$ 8 35 $\frac{1}{8}$

Brought Over 33160 $\frac{3}{4}$

Particulars of work	Measure-ment	etc.	of	to	of	Contents	Total
Brought Over						33160 $\frac{3}{8}$	
Projection of quoin stone ^{can} around the Doors	6	19	1 $\frac{1}{4}$	$\frac{1}{8}$		17 $\frac{13}{16}$	
Do. Do. to windows	26	12	1 $\frac{1}{4}$	$\frac{1}{8}$		48 $\frac{3}{4}$	
Do. Do. ventilating swing windows	32	6	1 $\frac{1}{4}$	$\frac{1}{8}$		30	
Do. Do. Do. large	8	8	1 $\frac{1}{4}$	$\frac{1}{8}$		10	
Do. Do. corner of the building	8	2 $\frac{1}{2}$	$\frac{1}{8}$		17	42 $\frac{1}{2}$	
Do. Do. main Do.	4	2 $\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{2}$		9 $\frac{3}{8}$	
Total cft. of Superstructure						33388 $\frac{13}{16}$	
Deduction							
Archways to Gymnasium							
Rectangular	2	20	2 $\frac{1}{4}$	10		900	
Semi-oval portion	2	17	area 2 $\frac{1}{4}$			52 $\frac{1}{2}$	
Arch work	2	32	2 $\frac{1}{4}$	2		288	
Doors to Gymnasium							
Semi-circular portion	12	12	area 2 $\frac{1}{4}$			324	
Rectangular portion	12	5 $\frac{1}{2}$	2 $\frac{1}{4}$	9 $\frac{1}{2}$		1410 $\frac{3}{4}$	
Arch work	12	10 $\frac{1}{2}$	2 $\frac{1}{4}$	1 $\frac{1}{4}$		354 $\frac{3}{8}$	
Doors to Dr. cruits Drill room & school of arms							
Rectangular portion	6	5 $\frac{1}{2}$	2	7 $\frac{1}{2}$		627	
Stone lintel	6	7	2	2 $\frac{2}{3}$		56	
Doors to officers & dressing room between							
Rectangular portion	3	4	1 $\frac{3}{4}$	8		160	
Stone lintel	3	6	1 $\frac{3}{4}$	$\frac{1}{2}$		15 $\frac{3}{4}$	
Doors to office and Dressing rooms							
Rectangular portion	1	4	1 $\frac{1}{2}$	8		48	
Lintel stone	1	6	1 $\frac{1}{2}$	$\frac{1}{2}$		4 $\frac{1}{2}$	
Carried Over						4722 $\frac{1}{8}$	

Particulars of work	Measure-ment	etc.	of	to	of	Contents	Total
Brought Over						4722 $\frac{1}{8}$	
Windows							
Rectangular portion	26	4	2	6		1248	
Lintel stones	26	6	2	$\frac{2}{3}$		208	
Sill stones	26	6	2	$\frac{1}{2}$		156	
Ventilating swing windows glazed							
Rectangular portion	32	4	2	1		256	
Semi-circular portion	32	6 $\frac{1}{4}$	area 2			400	
Arch work	32	8 $\frac{1}{4}$	2	1 $\frac{1}{4}$		660	
Sill stone	32	6	2	$\frac{1}{2}$		192	
Do. Large							
Rectangular portion	8	4	2 $\frac{1}{4}$	2		144	
Semi-circular portion	8	6 $\frac{1}{4}$	area 2 $\frac{1}{4}$			112 $\frac{1}{2}$	
Arch work	8	8 $\frac{1}{4}$	2 $\frac{1}{4}$	1 $\frac{1}{4}$		185 $\frac{5}{8}$	
Sill stones	8	6	2 $\frac{1}{4}$	$\frac{1}{2}$		54	
Semi-circular portion	4	28	area 2			224	
Arch work	4	23	2	1 $\frac{1}{4}$		230	
Total Deduction						8793	
Total left of Superstructure stone in chunam						24625 $\frac{1}{16}$	
Arch work							
Archways to Gymnasium	2	32	2 $\frac{1}{4}$	2		288	
Doors	12	10 $\frac{1}{2}$	2 $\frac{3}{8}$	1 $\frac{1}{4}$		374 $\frac{1}{16}$	
Ventilating swing windows	32	8 $\frac{1}{4}$	2 $\frac{1}{8}$	1 $\frac{1}{4}$		701 $\frac{1}{4}$	
Do. Do. large	8	8 $\frac{1}{4}$	2 $\frac{1}{8}$	1 $\frac{1}{4}$		195 $\frac{1}{16}$	
Semi-circular swing windows in the gable ends	4	23	2 $\frac{1}{8}$	1 $\frac{1}{4}$		244 $\frac{3}{8}$	
Total left of arch work stone in chunam						1803 $\frac{5}{8}$	
Stone lintel over doors	6	(7 $\times$ 2 $\frac{1}{2}$ $\times$ 8)				6	6
Do. Do. Do.	3	(6 $\times$ 1 $\frac{3}{4}$ $\times$ $\frac{1}{2}$)				3	3
Do. Do. Do.	1	(6 $\times$ 1 $\frac{1}{2}$ $\times$ $\frac{1}{2}$)				1	1

Particulars of work	Measure- ment sq L ft D	Contents	Total
Lintel stones over windows	26 (6x2 1/2 x 3)	26	26
Sill stones to — Do. —	26 (6x2 1/2 x 3)	26	26
— Do — for ventilating swing windows	32 (7x2 1/2 x 1/2)	32	32
Do — Do — Do —	8 (7x2 1/2 x 1/2)	8	8

Cornice work

Front and rear of Gymnasium	2 7 1/2	11 1/2	
Gable ends to — Do. —	2 5 1/2	11 1/2	
Front and rear of Dressing room and office	4 20 1/2	82	
Gable ends to — Do. —	2 5 1/2	11 1/2	
Sides of Recruits Drill room and school of arms	4 52 1/2	210	
Gable to — Do. —	2 42	84	

Total Rft of Cornice work 445

Steps	18 6 5	540	
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Total Rft of stone slabs for steps 540

Plastering

Around the office room	1 70	18	1260
Do Officers Dressing room	1 88	18	1494
Gables to — Do. —	2 42	8	672
Mens Dressing room	1 120	18	2160
Gables to — Do. —	2 42	8	672
Binding wall over main roof	4 54	8 1/4	702
Do — Do — End rooms	2 40	8 1/4	260
Total sq ft of Plastering with chunam two coats			7220
Do whitewashing two coats			7220

Particulars of work	Measure- ment sq L ft D	Contents	Total
<u>Painting</u>			
Gymnasium inside	1 24 1/4	25	6100
Gables to Do inside	2 42	8	672
Recruits Drill room and school of arms inside	2 160	18	5160
Gable ends inside	4 30	5 1/2	660
Front and rear of Gymnasium wall out side	4 24 1/4	24 1/2	2425 1/2
Do above roof	4 7	3	84
Gable ends to — Do. —	2 5 1/2	4 1/2	406
Front and rear of office and dressing rooms	4 20	17	1360
End walls to Do. —	2 46 1/2	17	1581
Gables over end walls Do. —	2 46 1/2	8	744
Side walls of Recruits Drill room school of arms	4 52	17	3536
Front walls of — Do. —	2 34	17	1156
Gables over — Do. —	2 34	5 1/2	374
Basement front and rear of Gymnasium	4 44 1/4	3	537
Do — Ends —	2 47	3	282
Do sides of Recruits Drill room school of arms	4 52 1/4	3	627
Do front & rear of Do. —	2 34 1/2	3	207
Arch ways jambs & soffits	2 19 1/2	2 1/4	222 3/4
Jambs and soffits of doorways	8 2 1/2	2 1/4	195
Carried Over			27309 1/4

Particulars of work

measure-
ment
No. L P Q Content Total

Brought Over

Jambes & soffits of doorways	8	19	2 1/2	228
Do Do windows	20	12	2	480
Do Ventilating swing windows	26	12 1/4	2	637
Do Do	8	14 1/4	2 1/4	256 1/2
Do Circular windows in gables	4	19	2	152
Side walls of steps	36	5	5 1/2	990
Total				3005 2 3/4

Deduction

Archways } Rectangular portion	2	20	2	10	800
to Gymnasium } Semi-oval portion	2	11 1/4	area	2	468
Doorways both sides } Rectangular portion	20	5 1/2	"	9 1/2	1015
Do } Semicircular portion	20	12	area		240
Do	6	5 1/2	2	9 1/2	637
Windows both sides	46	4	"	6	1104
Ventilating swing windows	58	4	"	1	232
Semi-circular portion	58	6 1/4	area		362 1/2
Do } Rectangular portion	8	4	2	2	128
Do } Semi-circular portion	8	6 1/4	area	2	100
Circular windows in gables					
both sides	6	28	area		168

Total Deduction

Total sqrs of Painting with chisnam	52 1/4
Dressing	24 1/2

Quoin stones at corner of

building	8	2 1/2	17	340
Do Do for main building	4	5	7	70
Carried Over				410

Particulars of work

measure-
ment
No. L P Q Content Total

Brought Over

Jambes and soffits of archways	2	19 1/2	2 1/4	222 3/4
Sides of arch stones for the	2	180	2 1/4	1 3/4
above semi-oval arches	2	180	2 1/4	1 3/4
Jambes and soffits of doors	12	2 1/2	2 1/4	142 1/2
Quoins to Do	12	29	"	1 1/4
Sides of arch stones for the doors	12	38	2 1/4	1 1/4
Jambes and soffits of doors	6	19	"	2
Quoins to Do in front	6	19	"	1 1/4
Jambes and soffits of doors	3	16	"	1 3/4
inside	1	16	"	1 1/2
Do Do	1	16	"	1 1/2
Windows jambes & soffits	26	12	"	2
Quoins to Do	26	12	"	1 1/4
Jambes and soffits of Ventilating swing windows	32	8 1/4	"	2
Do	32	10	"	1 1/4
Stee to Do	32	30	2 1/4	1 1/4
Sides of arch stones to Do	32	30	2 1/4	1 1/4
Jambes and soffits of large Ventilating swing	8	10 1/4	2 1/4	18 1/2
Windows	8	12	1 1/4	120
Stee to Do	8	30	2 1/4	1 1/4
Sides of arch stones	8	30	2 1/4	1 1/4
Soffits of circular windows in the gable	4	19	2	152
Carried Over				10 1/2

Particulars of work ^{measure} ^{ment} L P D Contents Total

Brought Over 10,762 1/4

Surface of Lanoins for circular windows in the gable } 4 22 0 1 1/4 110
Sides of arch stones to Dc. 4 7 6 2 1/4 1 1/4 853
Total sqft of Dressing 1172 1/4

Wood work

Purlins and ridge pole for Gymnasium } 11 8 1/2 4 1/2 9 261-5 3/4
Brackets for supporting purlins } 48 3/4 6 6 9 4
Common rafters over purlins 108 2 6 3 1/4 231 1/4
Purlins and ridge pole to office and Dressing rooms } 22 20 4 1/2 9 129-9 1/4
Brackets to Dc. 16 3/4 6 6 3 1/4
Common rafters 52 2 6 3 1/4 112-8 1/4
Purlins & ridge pole to Recruits Drill room & school of arms } 18 53 1/2 3 7 140-5 1/2
Brackets to Dc. 48 3/4 6 6 9 4
Common Rafters to Dc. 136 19 3 1/4 215-4 1/4
Total cft of Oak wood wrought and put up 1108 7 3/4

Nails

Nails for Rafters 6 inches 1640 " " 1640 1640
Nails for Brackets 7 long 112 " " 112 112
Dc. for purlins 10 long 144 " " 144 144

Roofing

Over Gymnasium 1 105 27 2 4590
Carried Over 4590

Particulars of work ^{measure} ^{ment} L P D Contents Total

Brought Over 4590

Office and Dressing rooms 2 20 3/4 28 1/2 2 2365 1/2
Recruits Drill room & school of arms } 2 52 3/4 21 2 4431
Total sqft of Roofing with teak, pappas, nails flat and painted and chunam borders complete 113.86 1/2

Ridge Ventilators

Over main roof for Gymnasium 1 80 " " 80
Recruits Drill room and school of arms } 2 80 " " 60
Total Rft of Ridge Ventilators with teak rafters, pappas, nails flat & painted and chunam borders 140

Trusses 42 feet span with iron fittings complete } 8 " " 8 8
Dc. 30 feet span Dc. 4 2 " " 8 8

Details for a Truss of 42 feet span

Wood work 1 44 1/2 6 1/2 12 24-1-3
Tie beam } 1 18 6 1/2 3 1/2 2-10-1 1/4
Uprights or Queen posts 1st pair 4 7 1/2 6 11 6-4-0
Queen posts 2nd pair 2 5 3/4 6 1/2 11 1-4-3
Struts to Dc. 2 6 3 6 1/2 1-7-6
Collar beam 1 18 1/2 6 1/2 7 1/2 7-11-2 3/8
King posts 1 6 1/2 6 1/2 5 1-5-7 1/4
Carried Over 45-7 11 1/8

Particulars of work ^{measuring} L B D contents Total

Brought Over

45-7-11-8

Struts 2 4 1/2 4 1/2 3/4 0 - 11-9 1/4

Principal rafters 1st pair 2 11 6 5/8 9 11-4-6

Do Do 2nd pair 2 11 3 1/2 5 1/2 2-11-3 1/2

Total cft of Teakwood wrought and put up } 60-11-6 3/8

Brought iron work for a Truss of 42 ft. Span

Iron plates to tie beams
5 feet long 6" wide and 1/4 thick each } 2.25 50.00

Bolts 3/4 dr. with heads & nuts 1 1/2 feet long each } 6 1/4 9.96

Shoe for holding tie rods 2 1/2 feet long by 8" each } 2 120.00 240.00

Tie rods 1 1/4 dr. and 1 1/2 feet long } 1 45 4 09 184.05

Heads to Do } 2 1.00 2.00

Plates or washer under the head Do 12" x 6" x 1/4 each } 2 5.00 10.00

Stirrups at lower ends of principal rafters 1st pair 4 1/2 feet long 2" wide 1/4 thick each } 2 7.51 15.02

Bolts 3/8 dr. with head & nuts to Do 3/4 feet long each } 4 65 2.60

Carried Over 513.63

Particulars of work ^{measuring} L B D contents Total

Brought Over

513-63

Straps at foot of Queen posts 2nd pair 4 1/2 feet long 2" wide and 1/4 thick each } 2 7.51 15.02

Bolts 3/8 dr. 3/4 ft. long with head and nuts each } 4 36 1.44

Bolts 3/4 dr. with heads and nuts 1 1/4 feet long to Queen posts 1st pair each } 8 2.39 19.12

Stirrups at lower ends of principal rafters 2nd pair 4 feet long 2" wide 1/4 thick each } 2 6.68 13.36

Bolts to Do 1/2 dr. 3/4 long with head & nuts } 4 65 2.60

Straps at foot of King posts 4 1/2 x 2 x 1/4 } 1 75 75

Bolts 3/8 dr. 7/8 feet long with head and nuts } 2 36 72

Total wrought iron in lbs } 366.64

Details for a Truss of 30 feet span

Woodwork

Tie beam 3 1 32 5 9 10 1-4-3

Queen posts 4 1 1/2 5 8 3-1-6

Struts 2 1 1/2 5 3 2-11-3

Carried Over 15-5-0

Particulars of work etc ^{measure} ^{-ment} L P D contents of flat

Brought Over					15-5-0
collar beam	1	10 1/2	5	7	3-3-1 1/2
King posts	1	5	5	5	-10-5
Struts	2	3	4	3	0-6-0
Principal rafters 1 st pair	2	10 1/4	5	7	4-11-9 1/2
Do 2 nd pair	2	8	5	3	1-0-0

Total left of Oakwood wrought & put up 26-8-7

Wrought iron work for a Truss of 30 ft span

Iron plates to tie beams 5 feet long 6 wide & 1/4 thick each	2	25 00			50.00
--	---	-------	--	--	-------

Bolts 1/4 dr with head and nuts 1 1/2 ft long each	4	1 66			6.64
---	---	------	--	--	------

Struts at lower ends of principal rafters 1 st pair 4 1/2 x 2 x 1/4 each	2	7 51			15.02
---	---	------	--	--	-------

Bolts 1/2 dr with head and nuts 1/4 ft long	4	.65			2.60
--	---	-----	--	--	------

Bolts 1/4 dr with head and nuts	8	2.39			19.12
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Struts at lower end of principal rafters 2 nd pair 4 x 2 x 1/4	2	6.68			13.36
---	---	------	--	--	-------

Bolts to Do 1/2 dr 4 3/4 long head & nuts	4	.65			2.60
Carried Over					109.34

Particulars of work etc ^{measure} ^{-ment} L P D contents of flat

Brought Over					109.34
Traps at foot of King posts	1	75			.75
1/2 x 2 x 1/4					
Bolts 3/4 dr & 3/4 ft long with head and nuts	2	.36			.72
Total wrought iron in lbs					110.81

Wooden flooring					
Recruits Drill room and School of arms	2	50 30			50.00
Total sq ft of wooden flooring					30.00

Flooring					
Gymnasium	1	79 1/2	11 1/2	3	98 7 1/4
Men's Dressing room	1	17 1/2	11 1/2	2 1/2	18 5 3/8
Officers Dressing room	1	17 1/2	23	2 1/2	10 6 1/4
Office	1	17 1/2	16 1/2	2 1/2	7 21 1/8
Recruits Drill room and School of arms	2	49 1/2	29 1/2	2 1/2	730 1/4
Total					207 42 1/4

duct pillars under flooring	1 1/2	1 1/2	2 1/2		50 6 1/4
Total cft of filling in basement with earth					202 36 1/2

Stone flooring					
Men's Dressing room	1	17 1/2	4 1/2		72 6 1/4
Officers	1	17 1/2	23		402 1/2
Office	1	17 1/2	16 1/2		288 3/4
Total sq ft of stone flooring					14.17 1/2

Levelling course of concrete under stone flooring					
do to Gymnasium	1	80	42		3360
Total sq ft of concrete					33.60

Particulars of work measure
-ment Contents Total

Wood oiling

Purlins and ridge pole	11	70	1 1/2	1090 1/2
Common rafters	108	23 1/2	4 1/2	2326 1/4
Purlins & ridge pole	22	17 1/2	1 1/2	545 1/2
Common rafters	52	23 1/2	4 1/2	1120 1/4
Purlins and ridge pole	18	48	1 1/2	1224
Common rafters	136	17	1 1/2	2119 1/3
<u>Trusses 30 feet span</u>				
Tie beams	1	13	8 2 1/2	260
Queen posts	2	8 1/2	8 2	272
Struts	4	7	8 1	224
Collar beams	2	4	8 1	64
King posts	1	13	8 1 1/2	164 3/4
Struts	1	4 1/2	8 1 3/4	60
Principal rafters 1st pair	2	3	8 1 1/2	114
Do 2nd pair	2	10	8 1 1/2	253 1/2
Trusses 42 feet span	2	8	8 1 1/2	138 3/4
<u>Tie beams</u>				
Queen posts 1st pair	3	1	18 8 3	1182
Do 2nd pair	4	7	8 1 1/2	336
Struts	2	8 1/2	8 1 1/4	98
Collar beams	2	6	8 1	96
King posts	1	18	8 2 1/2	306
Struts	1	6	8 2	96
	2	4 1/2	8 1	72

Carried Over 11822 1/2

Particulars of work measure
-ment Contents Total

Brought Over 11822 1/2

Principal rafters 1st pair	2	14	8 2	448
Do 2nd pair	2	11	8 1 1/2	205 1/2
Inside Doors	14	4 1/2	2 8 1/2	306
Glazed shutters to windows	26	4	6	624
<u>Total of wood oiling two coats</u>				
<u>Pairs of strong battened doors with frames including glazed fan light & fittings complete</u>				
	12	6	12 1/2	12
<u>Pairs of strong battened doors with frames and fittings complete</u>				
	6	6	9 1/2	6
<u>Pairs of pannelled doors with frames & iron fittings complete</u>				
	4	4	8	4
<u>Pairs of venetian windows with glazed & shutters inside frames and iron fittings complete</u>				
	26	4	6	26
<u>Glazed ventilating swing windows with frames & fittings complete</u>				
	32	4	3	32
Do Do Do	8	4	4	8

Carried Over

Particulars of work	Measurement	Rate	Amount
Brought Over			
Glazed circular windows with frames and fittings complete in the gable ends	11. 6 feet diameter	11	126
Painting			
Painted doors with circular fan light	12 6 2 2	12	1950
Do without fan light	6 6 2 2	10	780
Venetian windows	26 11 2 2 2	6 2	1950
Glazed ventilating swing windows	32 11 0 3	2 3	234
Do Do	8 8 0 1	120	
Glazed circular windows	14 28 1/2 area	113	
Total sq. ft. of painting with fresco of chocolate color			113

Dist Engr's Office
Bengalore
24th March 1876

Imperial	Military	Original works
Abstract Estimate No. 228 of 1875/76		
District Bangalore		
Work Constructing 4 th class Gymnasium at Bangalore		
Vide App'tt. L ^{ts} Mr. General M. D. dt 20 th July 1875		
Quantity	Description of work	Rate Per Amount Total
1744 1/2	Left of Excavation	2 1 cft 91
2967	Concrete	3 3 603
11231	Foundation stone in	3 0 2106
6750	Chamam	3 0 1266
24526	Superstructure stone in	4 0 6132
1804	Chamam	6 3 705
6	Arch wood	10 8 63
3	Lintel stone over door	5 0 15
1	Do (6x1 1/4 x 6)	5 0 5
26	Do over windows (6x2 1/2 x 6)	9 0 234
26	Sill stones to Do (6x2 1/2 x 6)	5 0 130
32	Do to Ventilating swing windows (6x2 1/2 x 6)	5 0 160
Carried Over		11,570

Quant- -ity	Description of work	Rate	Per Amount	Total
	Brought Over			11510
8	Sill stones to ventilating			
	swing windows (6x2 3/4 x 6)	5 d. each	44	
745	Plf. of cornice work			
	stone in chunam	1 40	plf. 931	
540	Stone slabs for steps	4 "	" 135	
11727	Plf. of Dressing	3 "	plf. 2199	
7220	Spr. of Plastering with			
	2 coats of chunam	2 d. "	plf. 181	
7220	White washing 2 coats	2 "	" 9	
247.79	Pointing with chunam	1 d. "	" 3 1/2	
1108-7/4	Plf. of Teakwood wrought			
	*put up for common	3 d. "	plf. 3080	
	rafters & Purlins			
1640	Nails 6" long for Rafters	" " 6 each	51	
112	Do. 7" long for Purlins	" " 7 "	11	
114	Do. 10" long for purlins	" " 10 "	8	
113.87	Spr. of Roofing with teak			
	peepers nails flat pan tiles	22 "	plf. 2505	
	and chunam borders			
1240	Plf. of Ridge ventilator with			
	teak rafters, peepers, nails	4 "	plf. 560	
	flat pan tiles & chunam border			
	Carried Over			22389

Quant- -ity	Description of work	Rate	Per Amount	Total
	Brought Over			22389
	Trusses 42 feet			
61	Plf. of Teakwood wrought			
	*put up @ 1 1/2 per plf.	241	---	
566.64	Lbs of wrought iron	@ 4 1/2 lb	114	---
	Total for one		386	---
8	Trusses 42 feet span with			
	iron fittings complete	386	"	3080
	Trusses 30 feet			
26 3/4	Plf. of Teakwood @ 4 1/2	107	---	
110.81	Lbs of wrought iron @ 4 1/2	28	---	
	Total for one truss		135	---
8	Trusses of 30 feet span with			
	iron fittings complete	135	"	1080
20237	Plf. of Filling in base-			
	ment with earth	3	plf. 316	
33.60	Spr. of flooring to Gymnasium			
	with	12	"	403
30.00	Wooden flooring to Re-			
	cruits & Drill room & school of arms	77	"	2310
14.18	Stone flooring to office			
	and Dressing room	12 d	"	177
14.18	Levelling course of con-			
	crete under stone floor	5	"	71
	Carried Over			29834

Quantity	Description of work	Rate	Amount
	Brought Over		33,994
134.06	Spr of wood oiling two coats	2	268
12	Pairs of strong batten doors 6x12 with glazed fan light & frames and iron fittings complete	100	1200
6	Pairs of strong batten door (6x9 1/2) with frames and iron fittings complete	81	486
4	Pairs of panelled door 4x8 with frames and fittings complete	40	160
26	Pairs of venetian windows with glazed shutters inside (4x6) with frames and fittings complete	51	1326
32	Glazed ventilating swing windows 4x3 with frames & fittings complete	13	416
8	D ^o D ^o 4x4 D ^o	17	136
4	Glazed circular windows 6 feet diameter with frames and fittings complete	42	168
	Carried Over		33,994

Quantity	Description of work	Rate	Amount
	Brought Over		33,994
52.56	Spr of Painting with two coats of chocolate color	5	263
655	Off of V shaped drain around the building	6	246
			34,503
	Surandies at 10 Per cent		3497
	Apparatus and fittings		7500
	Total Estimate Papers		45,500

Distt. Engr's Office
 Bangalore
 24 March 1876

Major R.E.
 District Engineer
 By order
 M. S. S.

22

DISTRICT ENGINEER'S OFFICE,
BANGALORE

1876

No 43.

31 May

From

THE DISTRICT ENGINEER,

BANGALORE

To

Chief Engineer
D. G. W.
Madras.

Sir -

S. 2391/11

Encls: 4.

1. Plan.

2. Estimates

1. Data

In returning herewith the plan and Estimate duly corrected as requested in your Memo. No. 7/1 dated 27 May 1876 I have the honor to state that the Ornamental work in the standard plan being too expensive to build in stone, is omitted in the plan now submitted.

The height allowed for the basement in excess of that in the standard plan is owing to the unevenness of the site on which the building is to be built.

The rate - 8-6 for stone in chunam shown in the District Schedule is only up to 12 feet high and for every 6 feet additional height 3 pice are added to the rate. The walls for Gymnasium being 25 feet high

a rate of ~~4~~ annas is allowed in the Estimate.

1. The rate Rs 15 in the District schedule is for rough stone flooring laid on concrete, but the rate now allowed in the Estimate is for neat stone flooring, arrived at according to the rates in the District schedule thus. 100 sqft of flooring stone at 12-0-0. Concrete under stone flooring 3 inches thick at 0-3-3 per cft Rs 5 = Total Rs 17-0-0 as per details herewith enclosed. The higher

The higher rate for Pat-
ten doors allowed in the Estimate is
on account of the doors being
made of two thicknesses strong
Diagonal planks $\frac{3}{4}$ thick the
total thickness of the doors being
 $1\frac{1}{2}$ as per details herewith enclosed-
the rate in the District Schedule
is only for ordinary battened door.
The lump

The lump sum of Rs 4500 allowed for in the Estimate for Apparatus and fittings has been reduced by Rs 900 according to the abstract. Estimate now submitted.

I have

I have the honor to be
Sir
your most Obedt³⁷ servant
Wm. Thompson Major R.E.
Offg. Dist. Engr.

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1876 Department
 808/19

Chas 2571

M. 2/101
 Memo.

Letter No. 4 of 8 April 1876 from
 the St. Eng. Bangalore.

The Plan and Estimate for con-
 structing a Gymnasium at Bangalore
 submitted by the St. Eng. and approved
 of by the Milly. Departt. and countersigned
 by the Head of that Departt. are returned
 with the remarks noted below to which
 the District Engineer's attention is called
 and he is requested to re-submit the
 papers as early as possible.

The Plan is prepared in accordance
 with the standard design, vide letter
 2420 of 29 July 1868 so far as the ar-
 rangements and dimensions of the rooms
 are concerned, but the features of the
 design in elevation differ from the
 standard. The basement in District
 plan is 3 feet but in standard an
 average of 1 1/2 feet is allowed. The reason
 for this extra work should be
 given

Superintendent
 of Bangalore
 District Engineer
 D. H. D.

Date 3/12/75
 Recd. 2. 12. 1876

Chas 4.3.
 Encl. 1. 4. 3.

Gymnasium at
 Bangalore -
 Return Plan &
 Estimate for contract
 - say 2 - with enclav.
 enclosure.

Recd. 14. 6. 96 P.M. 21. 6. 76
 Recd. 26. 4. 13-6-76

given or if there be none, the estimate should be reduced accordingly.

In comparing the estimate and plan, a few items are found to have been omitted, also some miscalculations exist, these have been noted in pencil. The rates in the estimate compared with those of the District schedule exceed the latter in the following items, which should be reported on.

Superstructure stone in Channarayana	6 per cubic ft
Stone flooring laid on concrete	2.8 per square
Batten doors &c	6 per each

Apparatus and fittings are charged for in lump sum Rs 500 a detailed estimate should be supplied.

By Order/
Signed H. Farewell
6th May 1876. offg. Dy. Chief Engineer

To
The Dy. Engineer
Bangalore with plan & estimate

Specification to accompany Plan and Estimate for constructing 4th class Gymnasium at Bangalore

Amount of Estimate Rs 41,600-0-0
Excavation for foundation to be taken down to such a depth as the District Engineer may consider necessary and the bottom taken out perfectly level, any superfluous excavation to be filled in with concrete.

Concrete The lower steps of foundation to be built with concrete. The portion of the concrete will be as follows:-
5 parabs of good gneiss broken into cubes of 1 to 2 inches free of quarry sweepings, 1 parab of good unslaked lime, 2 parabs of ground bricks. The lime to be slaked while mixing the concrete.

Foundation The foundation to be laid with stone in mortar stones laid closely fitted with good bond and well flushed up with mortar. Every sixth stone at least to be a through header. The mortar to be composed of two parts of soorkee to one of fresh and well burnt lime to be ground before slaked.

The basement to consist of stone in ^{Pavement} mortar properly bonded and raised throughout 3 feet above the foundations and to have a step of 8 inches on both sides. The interior of the building to be filled in with good dry materials properly consolidated and brought to a level within 6 inches of the ^{top} of the basement.

Superstructure is to be of hammer ^{Superstructure} dressed stone in mortar laid in even courses not less than 6 inches deep and level beds closely fitted with good bond every sixth stone at least to be a through header and well flushed up with mortar consisting of two parts of ^{brick} to one of lime.

Display - Window openings will have ^{Display} displayed edges measuring 6 inches on the face of the displays.

The arches to be neatly turned ^{Arch work} with well dressed stone in mortar. All the joints to radiate correctly according to the nature of the arches. Stones to be well dressed to the required shape and the key stone to be well driven home. Joints not to exceed 1/4 inch.

Cornice

The description of the cornice should be of the pattern supplied by the District Engineer. Cornice stone to have proper bearing and set with strong lime.

Steps

Stone slabs for steps to be of one stone of the required dimensions according to the nature and size of the steps, having the outer sides and edges dressed square and upper surface as dressed.

Dressing

The sides and soffits of doors and windows ways and surface of ^{Doors} to be well dressed.

Pointing

Pointing the joints of the outer walls to be scraped out and filled with fine mortar and left as neat ruled flat joints.

Plastering

The rooms to be plastered after the joints have been scraped out with two coats of chunam. First coat to consist of one part of lime to 1 1/2 of river sand well ground together and the 2nd coat to be of 3 parts of lime to one of white sand well smoothened off.

Whitewashing

The rooms to be whitewashed with two coats of chunam.

Timber

The whole of the timber to be of

well seasoned and sound teak free from all shakes and knots and neatly finished off. The timber to be put up until passed by the District Engineer.

The roof to be joint supported on trusses as shown on the plan. Each truss to bear on stone plates not less than $(2 \times 2 \times 6)$. The common rafters to be $1\frac{1}{2}$ ft. apart from centre to centre well secured with proper nails. The whole to be nailed with teak ripers, $(2\frac{1}{2} \times 3\frac{3}{4})$ and to be covered with flat and pan tiles with chunam borders and ridge ventilators to be provided as shown on the plan.

The various parts of the trusses to be fixed together to the joints by means of iron clamps $(2 \times \frac{1}{2})$ bolts $\frac{3}{4}$ diameter with ~~brass~~ ^{crimp} heads and nuts $\frac{3}{4}$.

Under the floors of Recruits Drill room and school of arms 18" square pillars shall be built at 5 feet apart from centre to centre. The rise of the pillars shall be $2\frac{1}{2}$ ft. ^{on} top of each pillar a wooden brick shall be fixed for the joints (8×6) to nailed on

Roof

Stone flooring.

on. Over which boarding planks of $2\frac{1}{2}$ thick and $5\frac{1}{2}$ broad shall be screwed on. The joints between boarding planks shall be closely and neatly morticed. The surface on top shall be smooth - by planed.

Office and Dressing rooms to be floored with stone slabs having a smooth surface not less than 14×14 thick with the edges dressed square to be laid on a layer of concrete 3 thick. joints scraped out and pointed with strong lime.

Room for Gymnasium to be floored with 6 saw dust covered with stretched canvas.

Wood piling.

The wood works of the roofs and inside Doors to be coated with two coats of wood oil.

Doors

18 Pairs of strong batten doors $6 \times 12\frac{1}{2}$ of which will have glazed semi-circular fan lights and the other 12 without fan light frames (4×8) planks $1\frac{1}{4}$ with strong hinges, bolts, brass locks &c. to be provided and fixed to the position shown on the plan, and 4 Pairs of pannelled doors 4×8

framed ($4\frac{1}{2} \times 3\frac{1}{2}$) door plank $1\frac{1}{4}$ thick with strong hinges, bolts, locks &c. to be provided and fixed to the Dressing rooms and office.

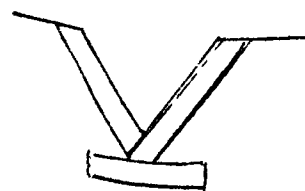
26 Pairs of venetian windows Windows
(4×6) with glazed shutters inside frames ($4\frac{1}{2} \times 3\frac{1}{2}$) and venetian planks $\frac{1}{2}$ thick venetian bar $1 \times 1\frac{1}{4}$ with strong 4 brass plate hinges strong hooks and eyes, brass rings, buttons, brackets and other fittings complete to be provided and fixed to the position shown on the plan.

40 Ventilating glazed swing windows Ventilating Windows
32 of which will be (4×3) and the other 8 will be (4×4) frames ($3\frac{1}{2} \times 2\frac{1}{2}$) and other fittings complete are to be provided and fixed over the exterior doors and windows of the building.

4 Circular glazed windows 6 feet diameter with frames (4×3) and other fittings complete to be provided and fixed to the gable ends.

The doors and windows ~~are~~ to be painted with two coats of chocolate color. Painting

V Drain



A stone drain of V shaped to be constructed around the building and the same extended for 100 feet in a direction to be pointed out by the District Engineer for carrying off the water. The stone for V Drain to be made and fitted as ^{per} margin. One stone over lap the other at the bottom. All will rest on a flat stone at least one foot, broad joints will be neatly cut and no feather edged stones will be admitted. All stones will be of equal thickness and not less than five feet

The joints will be pointed with Portland cement.

Lele
Distt Engr's Office
Bangalore
24th March 1876

Herbert Major P.E.
District Engineer

Pr. 253/98

No 1560

Public Works Department

PROCEEDINGS of the MADRAS GOVERNMENT.

UNDER date the 21 June 76

Read the following.—

From the District Engineer, 2 H.R. No. 1. to S. H. 1. 1876

(a) Heads of Service—*Supervisors*

Fund. *Ordinary*

Class. *Signal No. 2*

Main head. *Alu*

Main head. *Naval*
Sub-head *Miscellaneous* *Military*
7 clubs

Sub-head *Aluminium*
Name of Work *Construction of fourth class
Gymnasium at Bangalore -*

Amount. *4400*

To be carried out by the Public Department.

To be carried out by the 1st Exp
 Unit in the margin of a: 4/15600 of 2-6-76

to the sanction of the Govern-
ment, be transferred from
Item No. 1 of that Budget.

3 The above sanction has been registered as Imperial No 38 Pt of 1876-77

28 Bangalore ✓
 29 ^{Bangalore} Mr. A. ✓
 30 Depo ✓

Sept 15/10

From
 The District Engineer
 Bangalore
 To
 Mr. Chief Engineer
 Madras
 Subject,
 And } April 1876.
 Forwarding Estimate
 of the Provision for
 constructing 4 "Alago
 Gymnasium at Bangalore
 amounting to Rs. 15,500-0-0

Feb 20 2 08

M. 2591/90

No 1560

Public Works Department

PROCEEDINGS of the MADRAS GOVERNMENT.

UNDER date the 21 June 76
READ the following —

From the District Engineer, Bangalore - 3 R.R. No. 4 of 8th April 1876/

do do [— 43 of 31 May "]

His Grace the Governor
in Council sanctions the
plan and estimate of Rs. 44,000
for constructing a Fourth
Class Gymnasium at
Bangalore

2. A sum of Rs. 10,000 has
been provided for the work
in the Imperial Budget
of 1876-77 and a further
sum of Rs. 15,000 will, subject
to the sanction of the Govern-
ment, be transferred from
Item No 1 of that Budget

3 The above sanction has
been registered as Imperial
No 38 of 1876-77.

At Bangalore
Examined, M. A. S.
Only Dept
Attd.

Sept 1876

3949
259/11

CHIEF OF WORKS DEPT.

PUBLIC WORKS.

To

The H. E. Bangalore

Date

In

By

10/11/1915

142-44

Sanitary Class
in Bangalore

Plan & Estimate
for constructing
connections with

H. E. Bangalore
10-11-15