

(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.	1640	Press
307-308		Mis.
Dated	19-6-18	7/.

Not to be folded or roughly handled

No. 307. Read the following despatch from the Right Honourable the Secretary of State for India, (Public Works,) to His Excellency the Right Honourable the Governor in Council, Fort St. George, dated India Office, London, 18th May 1871, No 9 —

I HAVE received your Excellency's telegram of 21st April, stating that the sea dredger boilers demanded in Indent No. 1,037, of 15th December last, are to work up to 120 lbs pressure.

2 I am informed that an error appears to have been made either in the drawing which accompanied your requisition, or in the amount of pressure stated

in your telegram, and I enclose, for
* Dated 5th May 1871 your information, a copy of a report* by the Surveyor of Shipping on the subject, and request an early reply, furnishing the particulars and the working drawing to which he refers.

3. The tracing received with your indent for the boilers is enclosed, and I request that it may be returned with your reply.

From the Surveyor of Shipping, to the Under Secretary of State for India, dated 5th May 1871

With reference to the Madras telegram stating that the dredger boiler is to work at 120 lbs per square inch, I think that there must be some error either in the drawing forwarded, or the telegram which states so high a pressure for a sea dredger.

2] The form of boiler is very unusual for such pressure both in the shell and flues, and from the arrangement of the latter it is next to impossible to efficiently stay the same so as to perfectly ensure its safety and allow of its being cleaned. A boiler to carry 120 lbs per square inch and work in salt water should be perfectly round in all parts. Should a boiler of the form shown on the drawing be at work at the pressure named (120 lbs per square inch), and it is essentially necessary that that form should be preserved, I would suggest that a working drawing be sent home from Madras, showing the thickness of plates and the mode of staying and rivetting, with size of same

No. 308 ORDER THEREON, 19th June 1871, No. 1,640.

CIVIL WORKS No. 15.

COMMUNICATED to the Superintending Engineer of the 1st Division with reference to his telegram to the General Superintendent of Public Works Stores and Workshops dated 19th April 1871. Major Fischer will furnish the information called for as early as practicable with the working drawing referred to by the Surveyor of Shipping if one is necessary; but it is concluded that there is an error in the belief that the boiler is required to work to 120 lbs. pressure which is probably the highest reading on the gauge, while the working pressure would perhaps never exceed 50 lbs.

(True Extract.)

(Signed) J. CARPENDALE, Colonel, R. E.,

Secretary to Government.

To the Acting Superintending Engineer, 1st Division, with 2 Enclosures Sketch to be returned.
" General Superintendent of Public Works Stores and Workshops.

Exd S. T. Augusta

5283
May 3
3
1
With reference to the Madras Telegram stating that the Dredger Boiler is to work at 120 lbs per square inch, I think that there must be some error either in the Drawing forwarded, or the Telegram which states so high a pressure for a Sea Dredger.

The form of Boiler is very unusual for such pressure both in the shell and flues and from the arrangement of the latter it is next to impossible to efficiently stay the same so as to perfectly ensure its safety and allow of its being cleaned. A Boiler to carry 120 lbs per square inch and work in Salt Water should be perfectly round in all parts. Should a Boiler of the form shown on the Drawing be at work at the pressure named (120 lbs per square inch) and it is essentially necessary that that form should be preserved I would suggest that a working drawing be sent home from Madras showing the thickness of plates and the mode of staying and rivetting with size of same.

S^d
Ed Rutherford

5 May 1871

35-41

The first of these is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.
 The second is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.
 The third is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.
 The fourth is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.
 The fifth is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.
 The sixth is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.
 The seventh is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.
 The eighth is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.
 The ninth is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.
 The tenth is the
 fact that the British
 have been able to
 maintain a large
 and powerful navy
 for many years
 and this has been
 one of the main
 reasons for their
 success in the world.

151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534
 535
 536
 537
 538
 539
 540
 541
 542
 543
 544
 545
 546
 547
 548
 549
 550
 551
 552
 553
 554
 555
 556
 557
 558
 559
 560
 561
 562
 563
 564
 565
 566
 567
 568
 569
 570
 571
 572
 573
 574
 575
 576
 577
 578
 579
 580
 581
 582
 583
 584
 585
 586
 587
 588
 589
 590
 591
 592
 593
 594
 595
 596
 597
 598
 599
 600
 601
 602
 603
 604
 605
 606
 607
 608
 609
 610
 611
 612
 613
 614
 615
 616
 617
 618
 619
 620
 621
 622
 623
 624
 625
 626
 627
 628
 629
 630
 631
 632
 633
 634
 635
 636
 637
 638
 639
 640
 641
 642
 643
 644
 645
 646
 647
 648
 649
 650
 651
 652
 653
 654
 655
 656
 657
 658
 659
 660
 661
 662

Public Works.
No. 9.

P. W. 9/71.
Sess. 1871-72 L. 307

His Excellency,
The Right Honorable,
The Governor in Council,
Fort St. George.

India Office,
London 18th May 1871.
My Lord,
I have received your
Excellency's Telegram of 21st
April, stating that the
Sea Drifter Boilers
demanded in Inspect. No.
1037, of 15th December last,
are to work up to 120 lbs.
pressure.
I am informed
that an error appears
to have been made either
in the drawing which
accompanied your requisition
or in the amount of pressure
stated in your Telegram,
and I enclose for your
information, a copy of a

* - Dated 5th May 1871

I have the honor to be,
My Lord,
Your Honors most obedient,
humble servant,

[Handwritten signature]

100-0-11-111

1. The first part of the paper is devoted to a general
 discussion of the problem. It is shown that the
 problem is of great importance and that it has
 not been completely solved. The author then
 proceeds to a detailed analysis of the problem.
 In the second part of the paper, the author
 presents a new method for solving the problem.
 This method is based on the use of the
 Fourier transform and is very simple and
 efficient. The author then applies this method
 to the solution of the problem and obtains
 the following result:

[The page contains several lines of extremely faint, illegible handwriting.]

P. W. 1871 Sept 2

Public Works

18th May 1871

Recd. 14th June 1871

The
Letter to Fort St George
No. 9.

Enc. Two

No 1640

Requesting
further information
regarding the sea boiler
Dredge demanded on
incident No 1037 of the
15th December 1870 and
forwarding a report by
the Surveyor of Shipping
on the subject.

No 1640-19 Dec 1871.

Received on the 11th June
1871 via Prindia & Pouchasi

Communicated to the Department of Marine of the 1st Division with reference

to his telegram to the General Secretary of 10th March 1871 dated 1st April 1871.

Major Tucker will furnish the information called for as early as practicable with the

writing drawing beyond to by the Surveyor of Shipping if one is necessary; but it is one

should that there is an error in the belief that the boiler is required to assist to

120 tons pressure which is probably the highest. Working on the engine, while the working

with 2 1/2 lbs. of steam is pressure would perhaps more exceed 50 tons.

M. J. de la Cruz 19-6-71

19th June 71

18

April 11 11 328 A 328 1/2

Recd April 11 1871 No 328 A 3

Govt of 1871 Mar 5.

PUBLIC WORKS.

To *Wm H. Suprintending Engr*
St. Vincent

Dated

Recd

G O 19th June 1871 No 1640.

Nos. 207 & 208

San Juan de los Rios
to the ...
then ...
...
...
...
...
...
...
...