

- 1) number of pages. 8 ⁴⁰
2) Date of Receipt 2-5-88
3) Initials of the Referee

B

P. W. D.

Geo. no. 63 - W

Date 9-1-1888

W.D.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following letter from A. A. JOPP, Esq., Director-General of Stores, to the Secretary to Government, Public Works Department, Madras, dated India Office, Whitehall, 16th December 1887, No. 13020 S. :—

With reference to your letter of the 25th October 1887 (No. 2865 W.), requesting information as to a machine for testing cast-iron columns by compression, I am advised that no such machine is in use in this country.

2. I enclose a copy of a letter addressed to Sir A. Rendel, on the subject, by Messrs. J. Butler and Company, who are well-known founders of columns. The letter describes the method adopted by the firm for determining the thickness of metal and in testing for strength; and to elucidate the latter point, a sketch has been furnished by the firm, which is enclosed. The information given by Messrs. Butler and Company, with the sketch, will, it is hoped, enable you to arrange for the testing of any columns cast in Madras.

ENCLOSURE.

From Messrs. JOHN BUTLER AND COMPANY, to Sir A. M. RENDEL, C.E., 3 Westminster Chambers, S.W., dated Sharncliffe Iron Works, N. Leeds, 2nd December 1887.

In further reply to your favor of the 17th, we have made inquiries, but cannot hear of any special method of testing cast-iron columns as to thickness of metal, except that usually adopted, viz., drilling a small hole on each side and inserting a piece of wire to ascertain the thickness, or by arriving at the inside and outside diameters by means of callipers, the difference being the thickness.

2. We have frequently used tackle, as shown on enclosed sketch, for testing columns, by pressing from a ram at the ends, and also water-pressure applied inside. This is a very sure way of ascertaining any flaw in the casting, which would be detected immediately pressure is applied; on the other hand, if the casting is sound, 100 lb. to the square inch may be reached without fear.

3. We think you should have a set of rods for each length of column (unless you like to have the rods screwed to vary the length) but one of each of the other parts would do.

ORDER—dated 9th January 1888, No. 63 W., Public Works.

Communicated to the General Superintendent, Public Works Workshops, through the Superintending Engineer, V Circle.

(True Extract.)

Captain, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, V Circle, with sketch.

Exd. E. Fernandez.
Spare Copies.

GENERAL.
ACCOUNT.

Gobt. of (1888) Madras
PUBLIC WORKS.

Dated January, 9th.

Recd.

Encl.

G.O., 9th Jan. 1888, No. 63 W.

JANUARY.

Cast-iron Columns

Letter from the Director-General of Stores forwarding a letter, with sketch, from Messrs. Butler and Company, describing the method adopted for testing —, communicated to the General Superintendent, Public Works Stores and Workshops, through the Superintending Engineer.

S. 13020.

To, A.M. Rendel Esq. &c.

Westminster Chambers S.W.

Dear Sir,

In further reply to your favour of the 17th we have made enquiries but cannot hear of any special method of testing cast iron columns as to thickness of metal, except that usually adopted viz:—drilling a small hole in each side and inserting a piece of wire to ascertain the thickness, or by arriving at the inside and outside diameters by means of callipers the difference being the thickness.

We have frequently used tackle as shown on enclosed sketch for testing columns, by pressing from a ram at the end, and also water pressure applied inside, this is a very sure way of ascertaining any flaw in the casting which would be detected immediately pressure is applied, on the other hand, if the casting is sound 100 lbs to the square inch may be reached without fear.

We think you should have a set of rods for each length of column (unless you like to have the rods screwed to vary the length) 1/2" one of each of the other parts would do.

(Sd) John Butler Esq.

Director General of Public Works

7/3 6232

India Office, Whitehall,

16th December 1887.



It is requested that in any further communication on this subject the under-mentioned letters and number may be quoted, and the reply addressed to
The Director General of Stores,
India Office,
Whitehall,
S.W.

S 13020.

Sir,

With reference to your letter of the 25th October 1887 (N. 2865 10) requesting information as to a machine for testing cast iron columns by compression. I am advised that no such machine is in use in this country.

I enclose a copy of a letter, addressed to Sir A Rendel on the subject, by Messrs J. Butler & Co. who are well known founders of columns. The letter describes the method adopted by the firm for determining the thickness of metal and in testing for strength, and to elucidate the letter, point a sketch has been furnished by the firm, which is enclosed. The information given by Messrs Butler & Co. with the sketch, will it is hoped, enable you to arrange for the testing of any columns cast in Madras.

Yours obedient servant,
AA JPP

The Secretary to Government,
Public Works Department,
Madras.

Director General of Stores

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Govt. of (1888) Madras
PUBLIC WORKS.

10/11/88

Date

Re

20.9 Jan 1888 No. 63 d.

Cast iron columns

Letter from the Director
General of Stores forwarding
a letter with sketch form
Super Butler No. describing
the method adopted for
testing —, and
to the Genl. Supt. Messrs.
& Workshops, Thos. the Engrg
Supt.

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