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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	571	Press
B.P. No.		Mis.
Dated	23 - 2	C8 75 -195-

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
23rd February 1875.*

No. 545. Read the following Proceedings of the Government of India in the Public Works Department, (Railway,) dated Fort William, 23rd January 1875, Nos. 204—10 R. :—

Registration of Axle Mileages.

Read again—

Despatch to Secretary of State, No. 55 R, of 27th March 1874.

Read also—

From the Secretary of State for India, to the Government of India, dated 10th December 1874, No. 183 R.

WITH reference to your Excellency's letter of the 27th March last, No. 55, herewith is transmitted, for your information,

* Dated 27th November 1874.

a copy of a memorandum* by the

Inspecting Engineer relative to the mileage run by axles on the Railways in this country and in Europe.

Memorandum by Major-General R. STRACHEY, R.E., Inspecting Engineer, dated 27th November 1874.

HAVING made such inquiry as I have been able on the subject of this Despatch, I have to state that in England no attempt is made to register the mileage run by carriage or wagon wheels and axles. The transfer of vehicles from one line to another is so frequent that it would be impracticable to register their mileage. In these cases, the axles are allowed to run until the actual wear seems in the judgment of the Locomotive Department to require renewal.

2. The precise history of every locomotive is, however, carefully recorded, and the distances run can be calculated. But so far as I can learn, there is no definite custom as to replacing axles, etc., after certain distances have been run, and the data are recorded rather as an indication based on experience of what should be expected from a well constructed engine, than as a standard from which to determine where the working parts should be renewed. As in the case of the carriage and wagon stock, the actual condition of the parts is the test which regulates the renewals.

3. I have not been able to ascertain that any more definite system is followed on Railways on the Continent of Europe in these respects than in Great Britain.

4. I may add that there is still considerable difference of opinion as to the best material for axles, and that, while some exclusively adopt steel in one of its forms, others as exclusively use iron. There is no doubt a tendency for defects of a peculiar sort to occur in Bessemer steel axles; but the process of manufacture of this material is, so far as I can judge, still conducted in so empirical a manner, that it is not easy to say what Bessemer steel, in the ordinary acceptation of the term, really is. The same remark applies to cast steel, and the conditions under which it becomes brittle or can be kept tough are very imperfectly appreciated or controlled in the course of actual manufacture.

RESOLUTION.—In view to the removal of axles of Railway vehicles when they have run a certain distance, it has been proposed that their mileages should be systematically registered, and the Government of India are of opinion that the adoption of this proposal would tend to reduce the number of cases of axles breaking in running trains. But wherever the vehicles of one Company run over the lines of other Companies, there are difficulties in the way of registration. These difficulties, as pointed out by General Strachey, are almost insuperable in England,

W. 187. Departure
 Recd of 800 for February
 No 755.

To

Dated January 23, 1875.

Received 3^d February/75.

(Signed) H. DRUMMOND, Colonel, R.E.,
Deputy Secretary.

ORDER THEREON, 23rd February 1875, No. 511.

COMMUNICATED to the Consulting Engineer for Railways for information and guidance.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Consulting Engineer for Railways

Exd. W. J. Lewis.

Spare Copies

Registration of Axle Mileages.

P. W. D. Press—23-1-75—182.

Guthrie Order

755
Govt. of Madras.
PUBLIC WORKS.

To
The Amalgamated

Dated

Recd.

Encl.

G. O. 23rd Feb 1875, No. 511

Nos. 545-546.

Ayle mileages (Ry). Resolution
of the Govt. of India desiring
that experiment should be
made on the S-I Ry of the
registration of Ayle mileages
in view to its extension hereafter
to other lines, if proved desirable,
Cmnd to the Ry for information
& guidance -