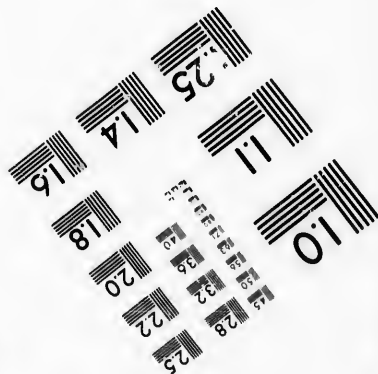
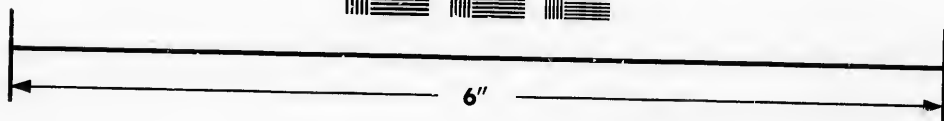
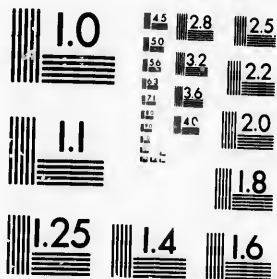


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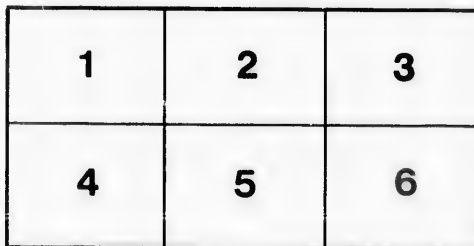
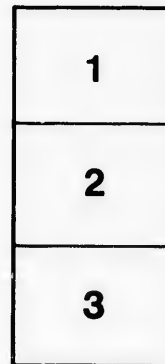
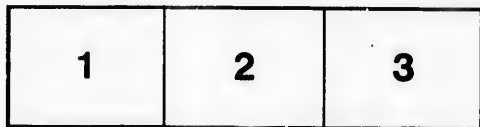
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ANGUS SINCLAIR,
Secretary.

175 DEARB

Traction increasers in connect

1. Can the defect of an over
(a) By the application of a T
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(c) That additional dead wei
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(d) That a lower boiler pres
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2. If you approve of use of a
American engine, would you also re
Consolidation and Decapod engines
application to four-wheel-coupled en
3. Having equipped an engine
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4. (a) In your opinion does a T
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curves?

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Secretary } 21/5/87

American Railway Master Mechanics' Association.

OFFICE OF THE SECRETARY.

CLAIR,
Secretary.

J. H. SETCHEL,
President.

175 DEARBORN STREET,

CHICAGO, October 13th, 1887.

Traction Increasesers in connection with Over-Cylindereed Engines.

Can the defect of an over-cylindereed engine be best remedied—
By the application of a Traction Increaseser ; or
Would you in preference recommend that the cylinders be lined
with a bush (a practice common in marine service) ; or
That additional dead weight be judiciously distributed over all
wheels ; or
That a lower boiler pressure be used with an altered ratio of
expansion ?

If you approve of use of a Traction Increasesers on the standard
engine, would you also recommend their application to Mogul,
Six and Decapod engines ? If not, why would you restrict their
use to four-wheel-coupled engines ?

If having equipped an engine with Traction Increaseser would you
use it with sand and sand box ?

In your opinion does a Traction Increaseser practically lengthen
the wheel base, thereby increasing the locomotive resistance on

1000

(b) Can you quote an experiment showing the difference in haulage capacity of an engine so equipped—first on tangent and then on curve?

(c) If you have an engine equipped, will you try this experiment, and communicate the results?

5. If Traction Increases are of acknowledged use in case of emergency, is there any reason why they should not be used continuously, and thus utilize each trip the advantage of the increased haulage capacity (this being the service for which patentees claim that Traction Increases were designed)?

6. If they are useful at low speeds, is there any reason why they cannot be made just as useful at high speeds?

7. (a) Are you familiar with any schemes for increasing traction other than those known as Dees, Purves, Craven (automatic traction draw bar), and The Locomotive Improvement Company's?

(b) Would not the simple application of screw and lever (as used in European practice to increase the weight on a single driving axle), accomplish the desired end as effectively as the above mentioned designs?

8. Have engines, regularly using Traction Increaser, developed any special failures in springs, spring gear, side rods, cylinders, loose tire or special wear on tires, or in cracks in frame, horns and horn stays?

9. Give any information possible as to first cost, cost of application and cost of repairs to Traction Increaser, also additional outlay or estimated saving in the cost of general repairs of engines fitted with the Traction Increaser?

This Committee would like to have their report in the hands of the Executive not later than the last day of April, 1888.

COMMITTEE : { J. DAVIS BARNETT,
F. L. WANKLYN,
T. J. HATSWELL.

Replies to be addressed to J. DAVIS BARNETT, Mechanical Superintendent, Grand Trunk Railway, PORT HOPE, ONT.

ANGUS SINCLAIR, Secretary.

