

RECORD OF TWENTY-FOUR PAINTED PLATES.

EXPOSED ON A STEEL RAILROAD BRIDGE OVER AN ARM OF THE SEA, LAT. 45° 56' N., LONG. 60° 59' W.

Mark on Plate.	Kind of Paint.	How Mixed.	No. of Coats.	When Painted.	When exposed on Bridge.	Length of time Exposed.	State when examined by W. B. McK. on Nov. 30th, 1896.
I	Oxide of iron	Boiled linseed oil	2	March, 1895	April 24, '95	1 year & 7 ms.	In good condition.
II	Red lead	Raw linseed oil	2	do	do	do	Discolored and slightly rusted.
III	Graphite paint	Boiled linseed oil (?)	2	do	do	do	Small patches of rust all over.
IV	Oxide of iron	Boiled linseed oil	2	do	do	do	Rusted all over.
V	Anti-corrosion paint	1 raw oil, 1 boiled linseed, 3 turps	2	do	do	do	In good condition.
VI	Black anti-rust paint	Mixed by the manufacturer	2	do	do	do	Very much rusted.
VII	White lead	Half raw and half boiled linseed oil	2	do	do	do	Half the plate rusted and discolored.
VIII	Tar and asphalt coating applied hot	Raw linseed oil (no drier)	1	do	do	do	Considerably rusted.
IX	Red lead 1 lb. and lampblack 1 oz.	Mixed by the manufacturer	2	do	do	do	In fair condition.
X	Oxide of iron	Raw linseed oil	2	do	do	do	Very much rusted.
XI	This painted plate was supplied by a painter for test. The composition of the paint is unknown to me	Mixed by the manufacturer	2	do	do	do	Considerably rusted.
XII	Black bridge paint	Mixed by the manufacturer	2	do	do	do	Very much rusted.
XIII	This painted plate was supplied by a painter for test. The composition of the paint is unknown to me	Mixed by the manufacturer	2	do	do	do	In good condition.
XIV	Asphalt paint	Mixed by the manufacturer	2	do	do	do	Rusted all over.
XV	Carbon paint	Mixed by the manufacturer	2	do	do	do	Rusted in large patches.
XVI	Oxide of iron	Mixed by the manufacturer	2	July 17, 1895	Oct. 31, 1895	1 year & 1 mth	Fairly good condition; a few rust spots.
XVII	Oxide of iron	Mixed by the manufacturer	2	do	do	do	Coated with rust; paint all gone.
XVIII	Graphite paint	Mixed by the manufacturer	2	do	do	do	Fairly good.
XIX	Coal tar coating; plate heated and dipped in hot tar	Mixed by the manufacturer	2	do	do	do	Rust spots all over.
XX	Oxide of iron	Mixed by the manufacturer	1	do	do	do	Fairly good; a few rust spots.
XXI	2 lbs. 7 ozs. yellow ochre and 1 oz. lampblack	Raw linseed oil and Japan	2	do	do	do	Good; a few rust spots on back.
XXVIII	Paint for ironwork (secret process), said to be furnace slag, linseed oil and gun.	Mixed by the manufacturer	2	March, 1896	April 4, 1896	8 months	Very good.
XXIX	Oxide of iron	Mixed by the manufacturer	2	April 1, 1896	April 9, 1896	do	Small rust spots scattered over.

REFERENCES :

- III. The manufacturers say that the pigment is mixed in pure kettle-boiled linseed oil, and direct that in dry weather it be thinned with raw linseed oil, and in damp weather with boiled linseed oil.
- XII. The manufacturers say that the pigment is mixed in linseed oil and turpentine and that it also contains asphaltum and Kauri gum.
- XIV. The manufacturers say that this paint contains no coal tar, and direct that it be thinned with 62 per cent. benzine.
- XVI. The manufacturers say that the mixture of this paint is a secret process and that it contains no oil. It sets too quickly and is difficult to apply for this reason.
- XX. The manufacturers say that the pigment is mixed in pure clarified linseed oil.