

one man, although two are frequently used—one to operate the crane, and the other as helper in the coal car to clear the corners and guide the bucket.

The following figures represent the coal handling capacity of this crane:

a. Average number of locomotives fueled per day..	25
b. Average tonnage per 12 hours..	168
c. Maximum actual tonnage per 12 hours..	180
d. Total tonnage for year 1906..	60,500

The initial cost of the crane was \$7,400, and the cost of bucket, pits, etc., is estimated at \$4,500. The handling costs, per ton, are made up as follows:

Average tons handled per day..	166
Fixed charges, per ton..	2 cents
Operating charges, labour..	2 "
Operating charges, power and supplies..	3.5 "
Maintenance charges..	0.3 "
Pro-rata charges..	0.4 "
Total cost per ton..	8.2 "

(N.B. No ash handling costs were available for this plant.)

Other locomotive crane plants show the following costs:

COAL HANDLING.

LOCATION	Buffalo	Leipsic	Bellevue	Ft. Wayne	Conneaut	Stoney Pt.	Cleveland	Mina
Year.....	1905	1905	1905	1905	1905	1905	1906	1906
Aver. tons per day.....	176	116	230	153	106	45	166	218
Fixed charges.....	1.9	1.7	1.8	1.8	3.7	7.9	2.	1.5 cents
Operating charges.....	4.7	6.1	3.6	5.1	3.0	5.5	5.5	3.5 "
Maintenance charges.....	0.5	0.2	0.7	0.5	0.4	0.2	0.3	0.1 "
Pro-rata charges.....	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4 "
Total charge per ton.....	7.5	8.4	6.5	7.8	7.5	14.0	8.2	5.5 "

ASH HANDLING.

No. of locos. cleaned per day..	20	13	26	17	12	5	19	25
Cost per loco. cleaned.....	4.8	...	3.8	22.4	3.3	4.7