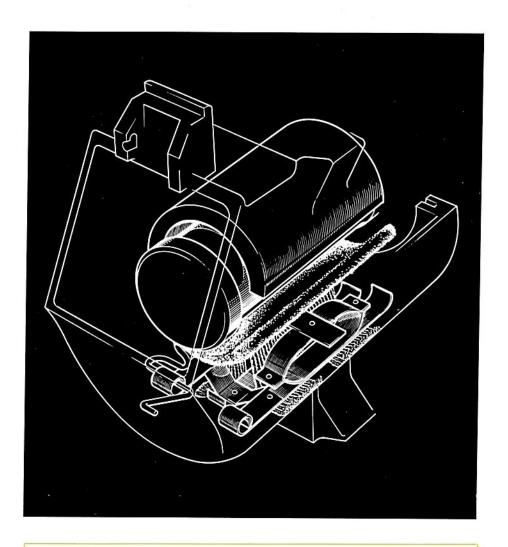


ARMSTRONG OILERS for trouble free lubrication

As freight lines all over the world seek to tighten schedules and expand use of stock, efficient lubrication becomes increasingly important. The Armstrong Oiler Company can proudly claim that it solved the problem of lubricating all plain bearing rolling stock including loco, wagon, carriage, rail borne crane axles, as well as suspension bearings, over sixty years ago, and that its system has never been bettered. Our oiler takes simplicity as its keynote, for we are convinced that simple systems are reliable systems.

A 60% wool, 40% cotton mixture is woven into a cotton backed pad, supported against the journal by resilient steel springs, and cotton feeders woven into the pad, are allowed to hang suspended in the well of the axlebox.

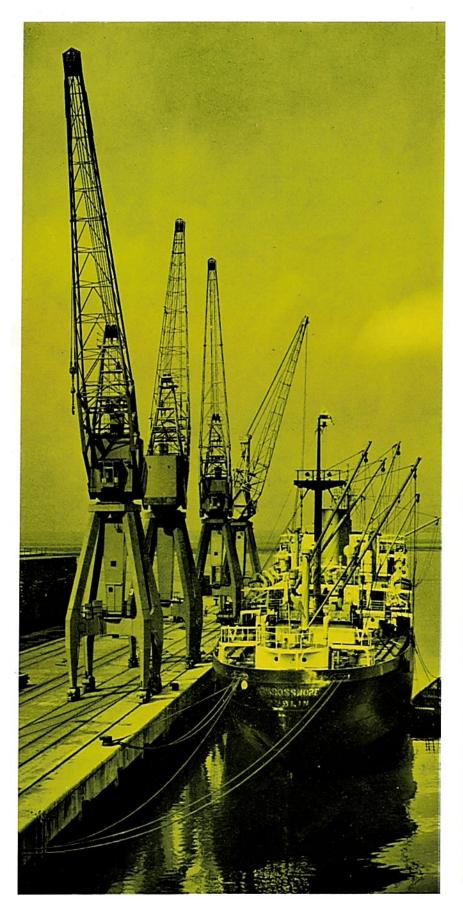
This system was introduced in Great Britain in 1903 and has been working successfully all over the world ever since; so successfully, that in some cases an oiler has been working up to twenty years without replacement.



If you have Rolling Stock of any sort with troublesome axle boxes, send us details of inside dimensions, with journal in position. We will make up and send a sample set of oilers to you completely free of charge.

Make sure they are dry when you get them, then soak them in oil for 48 hours before fitting. A minimum of half an inch of oil maintained in the bottom of the well, will then ensure at least 100,000 miles of absolutely trouble free running.

TYPICAL OILER APPLICATIONS



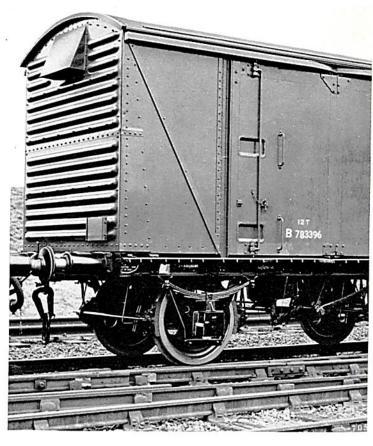
Photographs right by courtesy of British Rail

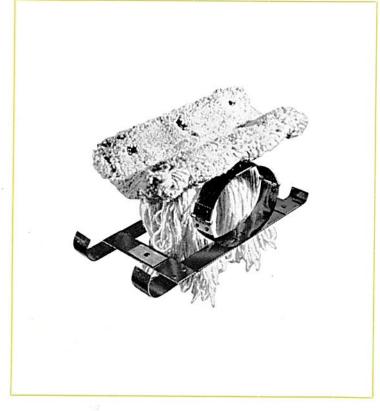
Photograph left by courtesy of Clyde Crane & Booth Limited

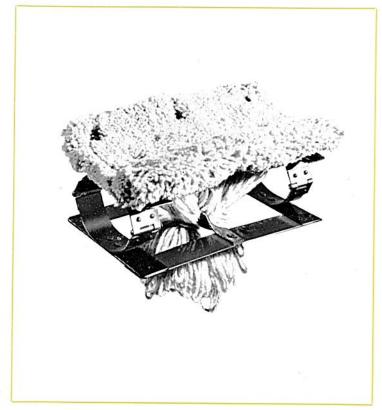


TYPICAL OILER APPLICATIONS





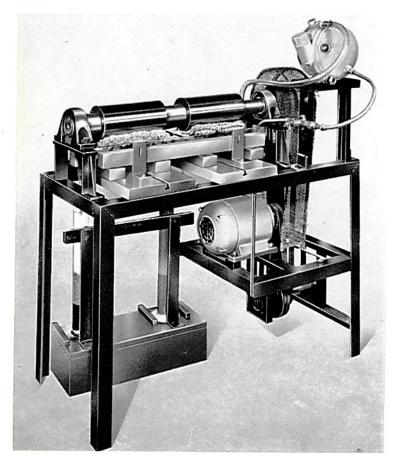




TYPICAL OILER APPLICATIONS







This machine for testing the oil flow through a lubricating pad from the reservoir of the journal, was designed by this Company, to test to U.I.C. requirements and approved by the British Rail research department.

All models of Armstrong Oilers are tested on this machine.

Photograph above left by courtesy of Ruston Hornsby Ltd.

Pads are woven with cut pile to ensure free oil bleeding at pile points, and pad feeders are woven into the base of the pile at predetermined intervals that ensure adequate supply of oil. Cotton is chosen for feeders and pad base because of its high oil absorption and transference rating. Pad pile is a mixture of cotton and wool because this has a sponge like capacity to retain oil after its speedy transference through the cotton.

A flexible spring steel frame and cradle, which ensures continuous contact between pad and journal, is chosen to apply a pressure suited to the type of axle box. The pressure selected is such that oil and dirt accumulation in the pad will not prevent it pressing firmly against the journal.

Pad size is such that the pad follows journal curvature and overlaps its cradle without cramping cradle flexibility. Brass eyelets are fitted through holes in the metal springs, and pushed through the pad towards the journal face. Bonded graphite buttons are then placed over the eyelets and spun onto them to ensure that each button is seated against the pad base and buried in its pile.

Buttons are sunk approximately $\frac{1}{4}$ " below pad surface, and when wear brings them in contact with the journal they act as lubricating bearings which prevent further wear on the pad which might cause glazing.

Sole Manufacturers

ARMSTRONG OILER COLTD LENDAL BRIDGE YORK ENGLAND

Telephone 22946

Telegraphic Address 'OILER YORK'