



MOTOR TRANSPORT MUSEUM NEWS

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The Motor Transport Museum volunteers spent the summer working on the maintenance of the Museum and its grounds. The wild weeds of Campo came back with a vengeance this year and several months have been spent decreasing their population. Work continued as volunteers have been restoring the missing and damaged flooring inside the Mill. Thanks to the funding of San Diego County's TOT Grant, MTM has installed a new surveillance system and two new handicapped parking zones.

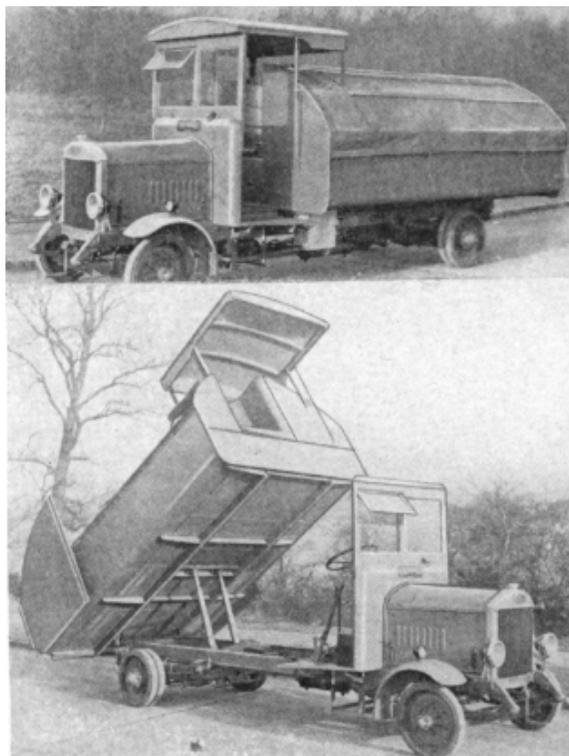
This quarter we have a reprint of a feature article from the Commercial Car Journal Vol. XXXVIII No. 2 of October 2, 1929. This article shows some of the evolution of the familiar refuse truck bodies that we see on the streets of out towns and cities every day. We thank the Commercial Car Journal (now called the Commercial Carrier Journal) for permission to reprint this article.

Closed Bodies Meet Refuse Problems

Refuse and garbage collection is one of the most important of municipal undertakings, constituting one of the biggest items in municipal budgets. Not only does the public demand that the service be rendered at frequent and regular intervals and with the least amount of annoyance, but of still greater importance, that the budget be spent most efficiently. To meet this varied requirement there must be efficiency not only in management, but efficiency in equipment as well.

While enclosed bodies do not seem to have gained favor in the United States to the extent that they have in Europe it is quite likely, in view of their great success in Europe, that the idea, once it becomes rooted in one of our municipalities, will make just as great strides in this country. In anticipation of greater public interest in this type of equipment which, in fact, already has been manifested in several sections, *Commercial Car Journal and Operation & Maintenance* has contracted with several foreign makers for details on their equipment.

European progress has been directed along the line of employing many different types of trucks with special bodies to keep down dust and otherwise permit sanitary collections and at the same time permit economical operation. These bodies are mostly of the closed roof type, providing ample capacity facilitate loading and unloading, prevent spillage and material from being blown around the streets, confine obnoxious odors, etc. While differing in detail most of the Continental vehicles possess the same fundamental characteristics.



Low-loading canvas top refuse collector produced by Dennis Brothers, England. Note small diameter wheels and front end of body incorporating driver's seat and carrying rear end of cab.

Among the low-loading, closed-roof bodies for refuse collection of recent development are three interesting English jobs. They give an excellent conception of how cleaning authorities in England are tackling the refuse collection problem. One employs canvas and the other two metal for covering material.

The canvas-topped job, designed and produced by Dennis Brothers, Ltd., Guildford, England, incorporates a Dennis 30 cwt. chassis and a 7-cu. yd. all-metal body and has a loading height from top of sides to ground of 4 ft. 4 in. The whole of the rear of the vehicle forms the emptying door, which opens in halves, leaving an unobstructed chute. The body itself is 6 in. wider at the rear to facilitate unloading. While canvas covers are standard, steel covers are available. The covers are arranged to allow a small section of the body to be uncovered at a time. For discharging the body is equipped with a hydraulic hoist. It is of the triple telescoping type and has two cylinders fed

with oil from a pump driven from the transmission. Another interesting feature is the way in which accommodation for the driver has been arranged and how equalization of load on front and rear axles to reduce rear-overhang has been accomplished. Space for the driver's seat is formed by a recess in the forward end of the body, which construction extends loading space to each side and underneath the seat and provides 1½ yd. of the total 7-yd. capacity. Overhead is a wooden canopy rigidly attached to the body and overhanging the windshield, of which one section is open. Entrance is effected from either side. The weight of the truck complete with body is under 2 tons.

The second English job mentioned in the preceding paragraph is made by Bean Cars, Ltd., Tipton, near Birmingham, England. The body,



mounted on a 30 Bean chassis, is of all-metal construction, 9 ft. 6 in. long, 5 ft. 9 in. wide and 2 ft. 1 in. high at the sides. The roof shaped like a gable consists of four metal covers hinged along the peak of the gable. So as not to interfere with quick and convenient loading the covers are spring loaded, which cause them to rise automatically to a high angle upon releasing catches on the sides of the body. Loading strips hinged on the sides

All-metal closed roof refuse body designed by Bean Cars, Ltd., England. The roof consists of four spring loaded covers which, when released, raise automatically.

of the body allow the loading line to be lowered several inches. Full width doors at the rear when swung open automatically clamp to the sides and permit uninterrupted discharge when the body is raised. The body is raised and lowered by a hand-operated screw-type hoist. The screw is operated by bevel gears with shaft extending across the chassis and may be cranked from either side of the chassis.

The refuse body built by Morris Commercial Cars, Ltd., Soho, Birmingham, England, is novel in its three-way dumping ability. The body,



This refuse body built by Morris Commercial Cars is equipped with a three-way hand-operated dumping mechanism.

81 cu. ft. The sides of the body are hinged and detachable and the tailboard is designed to swing at the top as well as at the bottom. Mounted above the sides is a metal semi-circular top with covers, which telescope when raised. The floor is lined with 18-gage sheet steel. Hoisting mechanism is hand-operated from either side of the chassis. Two screws mounted on the chassis by means of a stout cradle and attached to a rail running across the center of the body comprise the dumping mechanism. Either side or rear dumping is ac-

complished simply by pin locking the body at the pivoting points. As shown in the accompanying illustration, the body rests on two U-channels, the ends of which turn up and carry the pins which serve as pivots when dumping.

A German development of unusual interest is a special job incorporating a screw conveyor for loading and which has been adopted by more than 80 German cities in dustless refuse collection service. It is a product of the Krupp Company, Essen, Germany.

As may be seen from the accompanying diagrammatic view, a screw conveyor is arranged diagonally inside the body. This screw is driven from the truck transmission through a power takeoff comprising two pairs of bevel gears. The housing for this



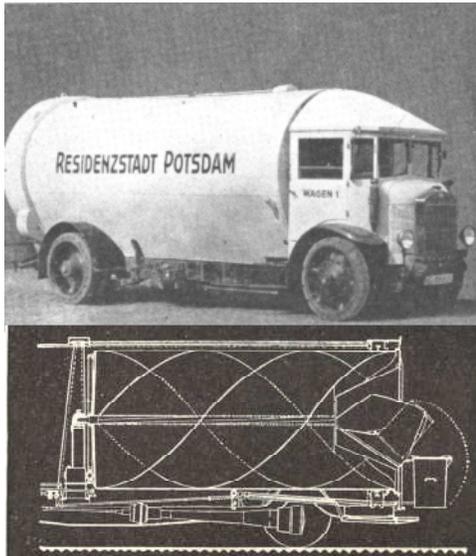
Diagrammatic view of dustless refuse collector made by the Krupp Co. The screw moves refuse forward and occasional hoisting distributes it through the body

screw is made of alloy steel plate and projects from the body at the rear. Its rear end, which is about 3 ft. from the ground, forms the opening through which the truck is loaded. The screw moves refuse to the forward part of the body, and in order to distribute it throughout the body, the latter is tipped either once or several times during the loading operation. The standard capacity of these ash trucks is about 15.6 cu. yd.

Standardized containers, which fit the loading opening of the truck may be used for entirely dustless removal. However, miscellaneous sizes of cans can be used. Unloading is accomplished by rear dumping. The rear wall of the body forms a gate swinging around its top edge which permits uninterrupted egress of material when the body is raised. The hoisting mechanism is hydraulically operated.

A quite different type of ash removal body, which does not require a hoist for loading or unloading, has been developed by Keller & Knappich of Augsburg, Germany. This body consists of a cylindrical steel drum which is supported on the chassis at three points. At the forward end, it is supported at its axis by a ball stud mounted in a spherical bearing on a pedestal on the frame, while at the rear there is a rail running around its circumference which is mounted on rollers on the frame. Within there are helical conveyor "shovels." At the rear the cylinder has a stationary head, which is provided with a central funnel projecting into the body. An opening in the lower side of this funnel forms the loading mouth. This opening is equipped with a hinged gate which opens when cans are emptied into the body and closes automatically when the cans are removed. During loading and unloading operations the body is revolved around its axis by means of a power takeoff. For loading the body is revolved to the right and for

unloading, to the left. Speed of rotation for unloading is about three times as fast as that for loading. Engagement of the power takeoff can be effected either in the cab or at the rear. When unloading, the rear head, which is hinged at the top, is opened by means of a crank. These bodies can be unloaded in about three minutes. Marburg Brothers, Inc., 90 West St., New York City, represent Keller & Knappich in the United States.



A non-hoist ash removal body developed by Keller & Knappich. The body is a revolving drum with helical conveyors inside that work the refuse forward for loading or backward for unloading.

Recent Donations

The following items were donated to the Museum in the last three months:



This 1942 Ford Dump Truck was donated by the AS&SEM Museum



This Marketeer Electric Cart was donated to us by Bob Swaim

2 Cushman Scooters and 2 motors: by Larry Labrack

1,300 Truck Magazines: by R. Don Geeland

Delta Table Saw: by Ross Brock

Assorted machine, automotive and shop tools: Bill West

Crosley car parts: by Betty Zerbe

1947 International Truck parts: by Samjuana Cruz

Historic Campo photos: by Jim Palovchik

Prestolite acetylene auto tank: by Ben Tulloch

MTM thanks these donors for their generosity in helping the Museum attain its goals.

Highway 94 Officially Becomes Historic

On August 28th Highway 94 officially became an Historic Highway and on both Saturday and Sunday hundreds of tourists cruised the Highway to take in its sights. MTM as well as many other participating merchants and museums offered incentives to those who visited.

More than 100 people visited our museum and many enjoyed the refreshing home made ice cream we offered. Carl Calvert whipped up a batch of his famous ice cream utilizing his newly re-conditioned antique motorized ice cream maker.



Attention All Members

You can donate money towards MTM's cause without spending a dime by simply receiving these quarterly issues of the Motor Transport Museum News by e-mail. This way MTM can save mailing costs and use the savings towards operating expenses. Not only will you get instantaneous delivery of your copy, you will get the photographs in glorious living color, a feat that we have not yet accomplished with the printed copy. Please Email us at motortransport@att.net and subscribe.

Volunteer Help Needed

MTM needs people like you to greet and educate our visitors. Being a docent is fun and rewarding.

Anyone interested in helping on any of the Saturdays during 2010 please call John Thomas at (619) 479-4318 or MTM at (619) 478-2492 to volunteer.

Also

We have been contacted by the Campo High School as they have several students who want to work at the museum with hours to be arranged. If anyone would like work with one of them as a mentoring project for a period of time call Carl at (619) 993-1220

Upcoming Events

The **MTM Board of Directors'** meetings for the fall quarter of 2010 will be held at the Horseless Carriage Foundation library at 8186 Center St. La Mesa, CA at 6:30 PM on the following Thursdays: **October 21st, November 18th, and December 16th.** All members are invited to attend.

Hours of Operation

The Museum facility at 31949 Highway 94 in Campo, CA is open to the public every **Saturday** from 9 AM to 5 PM. Admission is free, donations are accepted.

Remember

Good judgment comes from experience and much of that comes from bad judgment.

Author Unknown

MTM Officers and Directors

The officers and directors of the Motor Transport Museum are as follows:

Officers:	Greg Long: President	John W. Thomas: Secretary	Carl E. Calvert: Chief Financial Officer
Directors:	Ed Dilginis, Jim Jensen, Bill Jellyman, John Thomas, Jim Hamilton and Carl Calvert.		



Motor Transport Museum

APPLICATION FOR MEMBERSHIP

New Renewal

Name _____ Spouse _____
Street Address _____ City _____
State _____ Zip _____
Phone _____ E-Mail _____

General Membership	1Yr \$20 _____	2Yr \$40 _____	3Yr \$60 _____
General - International Membership (Non USA Mailing Address)			1Yr \$25 _____
Corporate Membership			1Yr \$75 _____
Life Membership			\$250 _____
Endowing Life Membership			\$1000 _____
Associate Membership - Non Profit organization			1Yr \$35 _____
Jounior Membership - Children under 18 (non-voting)			1Yr \$1 _____
Student Membership - Full time students, 18 - 25			1Yr \$6 _____

I agree to comply strictly with the By Laws of the Motor Transport Museum; to conduct myself at all times in a manner which will support and promote the best interest of the Motor Transport Museum

Signature of Applicant _____ Date _____

PLACE
STAMP
HERE

MOTOR TRANSPORT MUSEUM
31949 HIGHWAY 94
CAMPO, CA 91906