

GERMANY LEADS IN AIR, SAYS J. S. 'ACE'

Rickenbacker Testifies to House Committee.

RESULTS HERE CRITICISED

Most of Fliers Have Quit Because Government Isn't Encouraging Aviation, Is Declaration.

WASHINGTON, Jan. 17.—"Germany leads the world in aerial navigation today," declared Captain Eddie Rickenbacker of Columbus, in his testimony before the house committee on accounts, which is investigating expenditures in the war department.

"We have spent a billion dollars on aviation and what have we to show for it?" he continued. "Our organization of 15,000 men in one, and we have only a few obsolete planes left. Unless the government encourages aviation we are not encouraging aviation."

"We ought to have the world buying airplanes at our backdoor now, instead of having to go to Europe to buy the latest type planes at Europe's backdoor. During the war we never took a step in advance in airplane construction that was not forced on us."

Rickenbacker, as America's ace of aces in the war with Germany, told the committee of some of his combat, which gave him an official record of 28 German planes shot down.

Rickenbacker said that he and most of the other American aces developed in the war have left flying and gone into other pursuits because the government is not encouraging aviation.

Future Wars in Air.
"What are your ideas with reference to the desirability of establishing a new governmental department, dealing exclusively with aviation?" asked Representative James A. Fear of Wisconsin, chairman of the committee.

"I think it is absolutely essential to the maintenance and development of the air service, and future wars are going to be won or lost in the air," said Rickenbacker.

"There must be a man at the head of aviation who is in sympathy with its development, who is willing to test out new ideas, and who will encourage American genius along that line."

"Americans have been inventing new devices for airplanes for years without encouragement at home. They have taken their ideas abroad, sold them there and during this war we have brought back these same ideas at great cost to the United States."

"Now the navy is subordinating aviation to the fleet; the army is subordinating aviation to the infantry and artillery; and the postoffice department and forest service are utilizing it but little."

"One department should handle aviation for all governmental activities, and there should be an alert man put at the head of that department. During times of peace flying should be developed, principally through the postal and forest services."

Fire Fighting From the Air.

"Pilots developed in civilian flying will be 70 per cent efficient as military fliers in time of war. The forests of the United States can not only be better patrolled by aviators than by rangers on horseback, but the forests can actually be fought more successfully from the air. Mail carrying by airplane should be greatly expanded."

Rickenbacker told the committee "there never was a time in the war that the Germans were not ahead of the allies in aviation."

"I believe in giving the devil his due," he said.

"We are prone to believe we are the best in everything. We should be broadminded enough to admit mistakes when we make them."

When asked by the committee to point out some of the things American aviators, of which the Germans had, Rickenbacker declared that parachutes would have saved the lives of some of America's best-known aviators, including Major Raoul Lufberry and Captain Coolidge.

"I have seen German pilots and observers step out of their planes when they were disabled in the air and go sailing off in their little parachutes," said Rickenbacker. "It was an unwritten law of the skies, at least so far as the Americans were concerned, that a man should not be shot down after he had left his plane that way."

War Department Blamed.
"The Germans usually landed in their territory because we were fighting to their territory, but some of them fell inside our lines."

"Why were not the Americans provided with parachutes?" Rickenbacker was asked.

"I do not know."

"Parachutes have been in use for years," was suggested.

"Yes, the first balloon ascension I ever saw at a county fair ended with the balloonist coming to the ground safely in a parachute."

Rickenbacker said he made two trips to Paris in an effort to get parachutes furnished, but didn't succeed.

He told the senate committee that in his judgment the war department had made a grave mistake in not encouraging professional automobile drivers to go into flying. He said when he tried to get into the air service in this country he was told that professionals would pay too much attention to the motor and not enough to flying.

"I got 120 hours of flying out of my motor, where the average was nine hours," he said. "I could save my motor. A motorist can tell by the pulse of a motor whether it is in proper working order, just as a doctor by feeling a man's pulse can tell whether he is in good condition."

"I would not go into combat unless my motor was working properly and I think that is one reason I am here today. Of course I realize that there was a lot of good luck in it."

SOFT TIRES PICK UP NAILS

The Moral Obviously Is to Keep the Tire Inflation Up.

There came to the writer recently an owner who stated that it was his misfortune to have more tire trouble per week than any six tires in his neighborhood, that if there were a tack or nail on the road one of his tires was sure to pick it up and puncture the tube, says a writer in Motor.

This owner gave very little attention to his tires and tried to combat the nuisance by getting more tires, and those of better make.

The high-price ones seemed no better than the cheaper with respect to their puncturing properties. The owner's trouble, when investigated, proved to be caused by underinflation. By running the tires so soft that they easily "picked up" such objects as nails, tacks and small, sharp

stones. After the subject of proper inflation was explained the jinx apparently disappeared.

During the warm weather watch the tire pressures, see that the tires are inflated to recommended pressures and get a tire caliper which measures the bulge of the side walls. If the car is heavily loaded on a long run the pressure might be slightly higher than usual—perhaps three pounds—the exact figure depending upon the added load. That is why it is so important to get not only the proper pressure but the proper wall shape with that pressure. It is possible to partly flatten a 4-inch tire with 80 pounds of air by overloading it sufficiently.

MOTORISTS VERY WASTEFUL

Waste in Tires Alone Estimated at \$225,000,000 in Year.

WASHINGTON, Jan. 17.—An automobile expert has figured out that over \$225,000,000 will be wasted by motorists this year due to ignorance and negligence in the care and use of tires. The following hints on caring for tires are offered for the careful consideration of motorists:

"Slamming on the brakes is perhaps responsible for more tire trouble than anything else. The motorist should always apply his brakes gently, for everytime they are jammed on

LET THE WINDS BLOW, THE RAINS DESCEND AND COLD FOGS SETTLE OVER THE LAND—THE OWNER OF AN ESSEX SEDAN SHOULD WORRY.

During the prevailing cold weather, truck drivers will obtain a considerably higher efficiency from their motors if they will drain the crank case frequently, and, using about two

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear axle at all times. If the load consists of some bulky, light commodity and something heavy, the light goods should be placed forward on the body and the heavy material as far back as possible. If the whole load is heavy, as soon as a portion is removed should be moved back if it has to be carried further before being unloaded.

Overloading is another abuse that should be avoided except in emergencies. All trucks, while given a rated capacity, are so constructed as to provide for this being exceeded at times but it is by no means intended that because a 3½-ton truck can carry a load of 4½ tons it should be persistently loaded to that capacity.

The safest and surest way is to estimate carefully beforehand the average weight of the loads to be hauled and select a truck with a greater carrying capacity. That is, if the average load to be hauled is estimated at three tons, it will prove the better investment, in the long run, to buy a 3½-ton truck.

Probably the greatest errors are committed in building dump bodies on trucks. It is the practice generally to put a three-yard body on a 3½-ton truck. For this very reason trucks used on road-building work cost more to maintain and depreciate faster than in any other line of work. No more than 2½ yards of gravel, sand or crushed rock should be hauled on a 3½-ton truck. A five-ton truck with a three-yard body will prove by far the cheapest in the long run. It will cost less to maintain, will stay on the job more consistently and will last about twice as long.

Proper lubrication is another important feature affecting the efficiency of a truck. Sixty per cent of the maintenance labor on a locomotive goes for cleaning and inspecting. The average locomotive is thoroughly cleaned and inspected at the end of about every 150 miles. It is rarely an engineer is seen standing beside his engine without an oil can in his hand. The best of workmanship and highest grade materials may be put into a truck, yet it will fail to give its owner the service he has a right to expect from it if the lubrication is neglected. The best of materials will not lubricate a bearing and the finest workmanship will not keep a truck out of the scrap heap if wearing surfaces are not lubricated regularly.

The slightest neglect, while not retarding the truck immediately, will have a damaging effect, and will cause not only increased depreciation but

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear axle at all times. If the load consists of some bulky, light commodity and something heavy, the light goods should be placed forward on the body and the heavy material as far back as possible. If the whole load is heavy, as soon as a portion is removed should be moved back if it has to be carried further before being unloaded.

Overloading is another abuse that should be avoided except in emergencies. All trucks, while given a rated capacity, are so constructed as to provide for this being exceeded at times but it is by no means intended that because a 3½-ton truck can carry a load of 4½ tons it should be persistently loaded to that capacity.

The safest and surest way is to estimate carefully beforehand the average weight of the loads to be hauled and select a truck with a greater carrying capacity. That is, if the average load to be hauled is estimated at three tons, it will prove the better investment, in the long run, to buy a 3½-ton truck.

Probably the greatest errors are

committed in building dump bodies on trucks. It is the practice generally to put a three-yard body on a 3½-ton truck. For this very reason trucks used on road-building work cost more to maintain and depreciate faster than in any other line of work. No more than 2½ yards of gravel, sand or crushed rock should be hauled on a 3½-ton truck. A five-ton truck with a three-yard body will prove by far the cheapest in the long run. It will cost less to maintain, will stay on the job more consistently and will last about twice as long.

Proper lubrication is another important feature affecting the efficiency of a truck. Sixty per cent of the maintenance labor on a locomotive goes for cleaning and inspecting. The average locomotive is thoroughly cleaned and inspected at the end of about every 150 miles. It is rarely an engineer is seen standing beside his engine without an oil can in his hand. The best of workmanship and highest grade materials may be put into a truck, yet it will fail to give its owner the service he has a right to expect from it if the lubrication is neglected. The best of materials will not lubricate a bearing and the finest workmanship will not keep a truck out of the scrap heap if wearing surfaces are not lubricated regularly.

The slightest neglect, while not retarding the truck immediately, will have a damaging effect, and will cause not only increased depreciation but

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear axle at all times. If the load consists of some bulky, light commodity and something heavy, the light goods should be placed forward on the body and the heavy material as far back as possible. If the whole load is heavy, as soon as a portion is removed should be moved back if it has to be carried further before being unloaded.

Overloading is another abuse that should be avoided except in emergencies. All trucks, while given a rated capacity, are so constructed as to provide for this being exceeded at times but it is by no means intended that because a 3½-ton truck can carry a load of 4½ tons it should be persistently loaded to that capacity.

The safest and surest way is to estimate carefully beforehand the average weight of the loads to be hauled and select a truck with a greater carrying capacity. That is, if the average load to be hauled is estimated at three tons, it will prove the better investment, in the long run, to buy a 3½-ton truck.

Probably the greatest errors are

committed in building dump bodies on trucks. It is the practice generally to put a three-yard body on a 3½-ton truck. For this very reason trucks used on road-building work cost more to maintain and depreciate faster than in any other line of work. No more than 2½ yards of gravel, sand or crushed rock should be hauled on a 3½-ton truck. A five-ton truck with a three-yard body will prove by far the cheapest in the long run. It will cost less to maintain, will stay on the job more consistently and will last about twice as long.

Proper lubrication is another important feature affecting the efficiency of a truck. Sixty per cent of the maintenance labor on a locomotive goes for cleaning and inspecting. The average locomotive is thoroughly cleaned and inspected at the end of about every 150 miles. It is rarely an engineer is seen standing beside his engine without an oil can in his hand. The best of workmanship and highest grade materials may be put into a truck, yet it will fail to give its owner the service he has a right to expect from it if the lubrication is neglected. The best of materials will not lubricate a bearing and the finest workmanship will not keep a truck out of the scrap heap if wearing surfaces are not lubricated regularly.

The slightest neglect, while not retarding the truck immediately, will have a damaging effect, and will cause not only increased depreciation but

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear axle at all times. If the load consists of some bulky, light commodity and something heavy, the light goods should be placed forward on the body and the heavy material as far back as possible. If the whole load is heavy, as soon as a portion is removed should be moved back if it has to be carried further before being unloaded.

Overloading is another abuse that should be avoided except in emergencies. All trucks, while given a rated capacity, are so constructed as to provide for this being exceeded at times but it is by no means intended that because a 3½-ton truck can carry a load of 4½ tons it should be persistently loaded to that capacity.

The safest and surest way is to estimate carefully beforehand the average weight of the loads to be hauled and select a truck with a greater carrying capacity. That is, if the average load to be hauled is estimated at three tons, it will prove the better investment, in the long run, to buy a 3½-ton truck.

Probably the greatest errors are

committed in building dump bodies on trucks. It is the practice generally to put a three-yard body on a 3½-ton truck. For this very reason trucks used on road-building work cost more to maintain and depreciate faster than in any other line of work. No more than 2½ yards of gravel, sand or crushed rock should be hauled on a 3½-ton truck. A five-ton truck with a three-yard body will prove by far the cheapest in the long run. It will cost less to maintain, will stay on the job more consistently and will last about twice as long.

Proper lubrication is another important feature affecting the efficiency of a truck. Sixty per cent of the maintenance labor on a locomotive goes for cleaning and inspecting. The average locomotive is thoroughly cleaned and inspected at the end of about every 150 miles. It is rarely an engineer is seen standing beside his engine without an oil can in his hand. The best of workmanship and highest grade materials may be put into a truck, yet it will fail to give its owner the service he has a right to expect from it if the lubrication is neglected. The best of materials will not lubricate a bearing and the finest workmanship will not keep a truck out of the scrap heap if wearing surfaces are not lubricated regularly.

The slightest neglect, while not retarding the truck immediately, will have a damaging effect, and will cause not only increased depreciation but

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear axle at all times. If the load consists of some bulky, light commodity and something heavy, the light goods should be placed forward on the body and the heavy material as far back as possible. If the whole load is heavy, as soon as a portion is removed should be moved back if it has to be carried further before being unloaded.

Overloading is another abuse that should be avoided except in emergencies. All trucks, while given a rated capacity, are so constructed as to provide for this being exceeded at times but it is by no means intended that because a 3½-ton truck can carry a load of 4½ tons it should be persistently loaded to that capacity.

The safest and surest way is to estimate carefully beforehand the average weight of the loads to be hauled and select a truck with a greater carrying capacity. That is, if the average load to be hauled is estimated at three tons, it will prove the better investment, in the long run, to buy a 3½-ton truck.

GOOD LUBRICATION ADDS TRUCK LIFE

Overloading Is One Evil That Should Be Avoided.

STRAINS CUT SERVICE

Heavy Work Should Be Provided For by Purchase of Truck That Is Big Enough, Says Expert.

During the prevailing cold weather, truck drivers will obtain a considerably higher efficiency from their motors if they will drain the crank case frequently, and, using about two

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear axle at all times. If the load consists of some bulky, light commodity and something heavy, the light goods should be placed forward on the body and the heavy material as far back as possible. If the whole load is heavy, as soon as a portion is removed should be moved back if it has to be carried further before being unloaded.

Overloading is another abuse that should be avoided except in emergencies. All trucks, while given a rated capacity, are so constructed as to provide for this being exceeded at times but it is by no means intended that because a 3½-ton truck can carry a load of 4½ tons it should be persistently loaded to that capacity.

The safest and surest way is to estimate carefully beforehand the average weight of the loads to be hauled and select a truck with a greater carrying capacity. That is, if the average load to be hauled is estimated at three tons, it will prove the better investment, in the long run, to buy a 3½-ton truck.

Probably the greatest errors are

committed in building dump bodies on trucks. It is the practice generally to put a three-yard body on a 3½-ton truck. For this very reason trucks used on road-building work cost more to maintain and depreciate faster than in any other line of work. No more than 2½ yards of gravel, sand or crushed rock should be hauled on a 3½-ton truck. A five-ton truck with a three-yard body will prove by far the cheapest in the long run. It will cost less to maintain, will stay on the job more consistently and will last about twice as long.

Proper lubrication is another important feature affecting the efficiency of a truck. Sixty per cent of the maintenance labor on a locomotive goes for cleaning and inspecting. The average locomotive is thoroughly cleaned and inspected at the end of about every 150 miles. It is rarely an engineer is seen standing beside his engine without an oil can in his hand. The best of workmanship and highest grade materials may be put into a truck, yet it will fail to give its owner the service he has a right to expect from it if the lubrication is neglected. The best of materials will not lubricate a bearing and the finest workmanship will not keep a truck out of the scrap heap if wearing surfaces are not lubricated regularly.

The slightest neglect, while not retarding the truck immediately, will have a damaging effect, and will cause not only increased depreciation but

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear axle at all times. If the load consists of some bulky, light commodity and something heavy, the light goods should be placed forward on the body and the heavy material as far back as possible. If the whole load is heavy, as soon as a portion is removed should be moved back if it has to be carried further before being unloaded.

Overloading is another abuse that should be avoided except in emergencies. All trucks, while given a rated capacity, are so constructed as to provide for this being exceeded at times but it is by no means intended that because a 3½-ton truck can carry a load of 4½ tons it should be persistently loaded to that capacity.

The safest and surest way is to estimate carefully beforehand the average weight of the loads to be hauled and select a truck with a greater carrying capacity. That is, if the average load to be hauled is estimated at three tons, it will prove the better investment, in the long run, to buy a 3½-ton truck.

Probably the greatest errors are

committed in building dump bodies on trucks. It is the practice generally to put a three-yard body on a 3½-ton truck. For this very reason trucks used on road-building work cost more to maintain and depreciate faster than in any other line of work. No more than 2½ yards of gravel, sand or crushed rock should be hauled on a 3½-ton truck. A five-ton truck with a three-yard body will prove by far the cheapest in the long run. It will cost less to maintain, will stay on the job more consistently and will last about twice as long.

Proper lubrication is another important feature affecting the efficiency of a truck. Sixty per cent of the maintenance labor on a locomotive goes for cleaning and inspecting. The average locomotive is thoroughly cleaned and inspected at the end of about every 150 miles. It is rarely an engineer is seen standing beside his engine without an oil can in his hand. The best of workmanship and highest grade materials may be put into a truck, yet it will fail to give its owner the service he has a right to expect from it if the lubrication is neglected. The best of materials will not lubricate a bearing and the finest workmanship will not keep a truck out of the scrap heap if wearing surfaces are not lubricated regularly.

The slightest neglect, while not retarding the truck immediately, will have a damaging effect, and will cause not only increased depreciation but

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear axle at all times. If the load consists of some bulky, light commodity and something heavy, the light goods should be placed forward on the body and the heavy material as far back as possible. If the whole load is heavy, as soon as a portion is removed should be moved back if it has to be carried further before being unloaded.

Overloading is another abuse that should be avoided except in emergencies. All trucks, while given a rated capacity, are so constructed as to provide for this being exceeded at times but it is by no means intended that because a 3½-ton truck can carry a load of 4½ tons it should be persistently loaded to that capacity.

The safest and surest way is to estimate carefully beforehand the average weight of the loads to be hauled and select a truck with a greater carrying capacity. That is, if the average load to be hauled is estimated at three tons, it will prove the better investment, in the long run, to buy a 3½-ton truck.

Probably the greatest errors are

committed in building dump bodies on trucks. It is the practice generally to put a three-yard body on a 3½-ton truck. For this very reason trucks used on road-building work cost more to maintain and depreciate faster than in any other line of work. No more than 2½ yards of gravel, sand or crushed rock should be hauled on a 3½-ton truck. A five-ton truck with a three-yard body will prove by far the cheapest in the long run. It will cost less to maintain, will stay on the job more consistently and will last about twice as long.

Proper lubrication is another important feature affecting the efficiency of a truck. Sixty per cent of the maintenance labor on a locomotive goes for cleaning and inspecting. The average locomotive is thoroughly cleaned and inspected at the end of about every 150 miles. It is rarely an engineer is seen standing beside his engine without an oil can in his hand. The best of workmanship and highest grade materials may be put into a truck, yet it will fail to give its owner the service he has a right to expect from it if the lubrication is neglected. The best of materials will not lubricate a bearing and the finest workmanship will not keep a truck out of the scrap heap if wearing surfaces are not lubricated regularly.

The slightest neglect, while not retarding the truck immediately, will have a damaging effect, and will cause not only increased depreciation but

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear axle at all times. If the load consists of some bulky, light commodity and something heavy, the light goods should be placed forward on the body and the heavy material as far back as possible. If the whole load is heavy, as soon as a portion is removed should be moved back if it has to be carried further before being unloaded.

Overloading is another abuse that should be avoided except in emergencies. All trucks, while given a rated capacity, are so constructed as to provide for this being exceeded at times but it is by no means intended that because a 3½-ton truck can carry a load of 4½ tons it should be persistently loaded to that capacity.

The safest and surest way is to estimate carefully beforehand the average weight of the loads to be hauled and select a truck with a greater carrying capacity. That is, if the average load to be hauled is estimated at three tons, it will prove the better investment, in the long run, to buy a 3½-ton truck.

Probably the greatest errors are

committed in building dump bodies on trucks. It is the practice generally to put a three-yard body on a 3½-ton truck. For this very reason trucks used on road-building work cost more to maintain and depreciate faster than in any other line of work. No more than 2½ yards of gravel, sand or crushed rock should be hauled on a 3½-ton truck. A five-ton truck with a three-yard body will prove by far the cheapest in the long run. It will cost less to maintain, will stay on the job more consistently and will last about twice as long.

Proper lubrication is another important feature affecting the efficiency of a truck. Sixty per cent of the maintenance labor on a locomotive goes for cleaning and inspecting. The average locomotive is thoroughly cleaned and inspected at the end of about every 150 miles. It is rarely an engineer is seen standing beside his engine without an oil can in his hand. The best of workmanship and highest grade materials may be put into a truck, yet it will fail to give its owner the service he has a right to expect from it if the lubrication is neglected. The best of materials will not lubricate a bearing and the finest workmanship will not keep a truck out of the scrap heap if wearing surfaces are not lubricated regularly.

The slightest neglect, while not retarding the truck immediately, will have a damaging effect, and will cause not only increased depreciation but

quarts of kerosene for a bath, turn the motor over a few times, then drain out the kerosene and refill with new oil.

The reason for this, as explained by W. J. McCallum, manager of the Northwest Auto company, distributors of Bethlehem trucks, is that perfect carburetion is impossible until the motor warms up, resulting in considerable gasoline finding its way into the oil reservoir, which gradually thins the oil until it ceases to be a perfect lubricant.

Loading Can Save Truck.
There are many other ways, too, by which greater efficiency and longer life can be obtained from a truck if the driver will give it the care it should have. Loading and unloading can be handled in such a way as to exert the minimum strain on the chassis. Eighty to 90 per cent of the load should be carried on the rear