

rough surfaces, rubbing together, produce friction, which reduces the efficiency of any machine. Roller or ball bearings overcome friction to a considerable extent, but there are places where they cannot be used. In these cases oil takes their place. Oil actually works very much like ball bearings, the two sliding surfaces rolling over little globules of oil.

Just as in the case of ball bearings, the little globules of oil finally become "chipped" so that they no longer roll easily. When this time comes it must be renewed. Oil that has become black from use has left only a small percentage of its lubricating qualities.

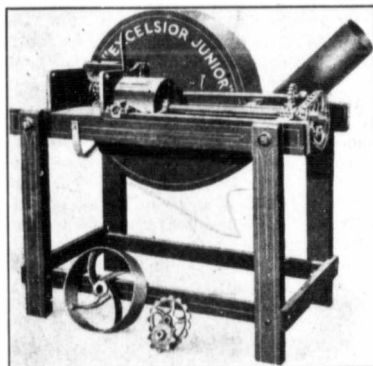
The best grades of oil are most resistant to the destructive agents, heat, friction and wear, which causes it to deteriorate. For most uses, a cheap grade of oil costs more in the end than a good grade. Even the best grade must occasionally be replaced. Probably the hardest task oil is called upon to perform is to lubricate the piston and cylinder of an engine which are exposed to the intense heat of burning gases. For this purpose the oil cannot be too good.

How Much Waste in Meat?

Meat as bought on the market contains bones or other waste. From this it is plain that the price per pound does not really tell the real cost of the edible meat.

L. D. Hall and E. D. Emmett, made a study of this problem at the University of Illinois. They found that round steak had the least waste. It averaged three-fourths lean meat, rump roast averaged one-half lean meat, rib roast a little over one-half lean meat; sirloin steak about two-thirds lean meat; porterhouse steak slightly over one-half lean; pot roast two-thirds to three-fourths lean. It has also been proved that meat from these different cuts is equally nutritious. From the standpoint of nutrition and economy it will pay to use the cheaper cuts and to select the ones that have the largest proportion of lean meat.

What is the value of a pine tree? The answer depends upon how it is treated. Prof. Duncan declares that a pine tree when standing is worth ten dollars a ton; if cut in strips its value is increased to fifteen dollars a ton; when boiled into pulp it may be sold for forty dollars a ton or more and when bleached another fifteen dollars must be added. But this is not all that may be done. If turned into viscose and spun into silk its value becomes five thousand dollars a ton.



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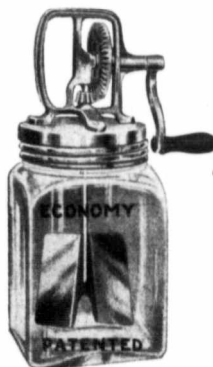
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