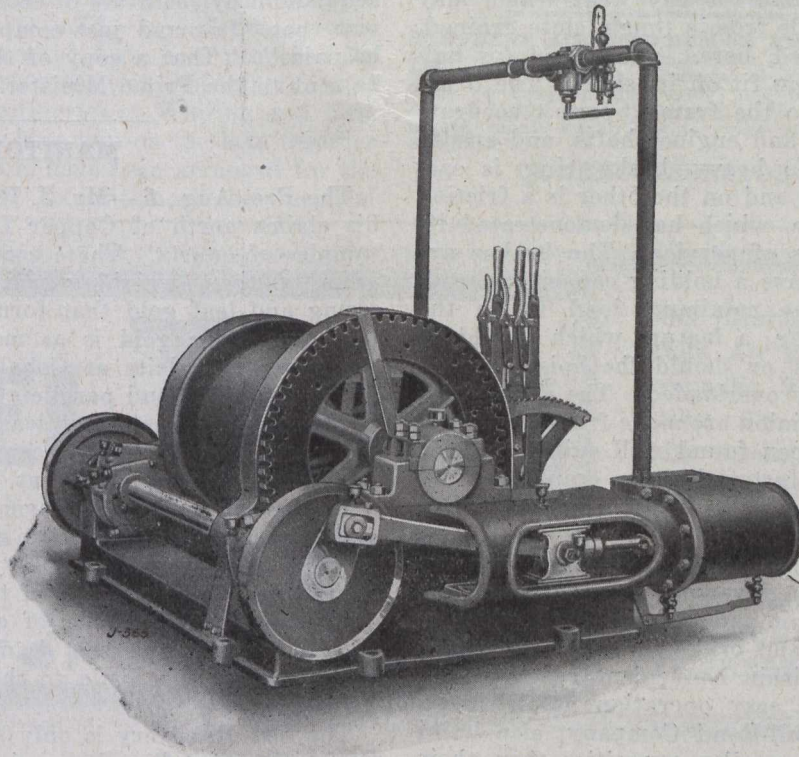


The ease with which the cylinders may be changed is characteristic of the entire machine, all parts being made to close limits and of the best materials obtainable, thoroughly inspected throughout the successive steps of manufacture. The ease with which these hoists may be taken down should make them of special value for use in isolated mines where the machinery

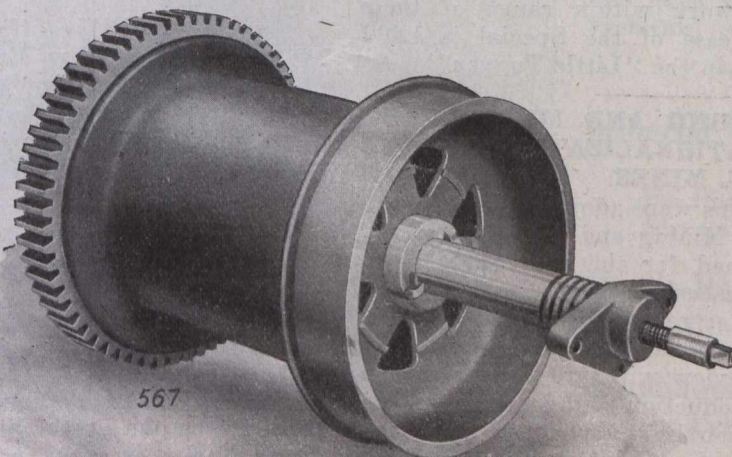
Eccentrics of the locomotive type are used having deep flat rods bolted to the eccentric straps by lathe turned bolts in holes reamed after the valves have been set, thus preserving the accuracy of the original setting. The eccentrics have large bearing surfaces and are adjustable for wear at the pins. Connecting rods are of steel of the solid end type with bronze boxes



View from Right Hand Crank End, Single Drum 7x10" Hoist

has to be taken apart and transported long distances by horses or mules. The valves used are of the plain slide type fitted with an adjusting device which compensates automatically for wear without changing the original alignment of the valve rods. The valve guide blocks are of finished cast iron accurately fitted to babbitted guides cast on the side frames.

in both crank and crosshead ends which are adjustable for wear by means of screws and wedges. The screws are adjustable in opposite directions so as to insure approximately the same length in each rod. The crank pins and crankshaft are made of the highest grade of open hearth hammered steel fitted to cranks of the counter-balanced disc type by hydraulic pres-



Drum, Drumshaft and Friction Device