



The sprocket chains are of heavy steel links, cold-rolled steel pins and anti-friction, drop forged steel rollers. Their strength far exceeds any demand which will be made upon them.

A powerful brake operates on a band wheel on the main driving shaft.

*Engines:* The McGiffert Loader is equipped with a double cylinder horizontal engine of guaranteed Clyde Grade, provided with link-motion in order that the loader may move in either direction under its own power.

This engine is designed for a working pressure of 200 pounds, and is provided with extra heavy shafting, with cut tooth steel gears, steel ratchet rings and clutches, bronze bushed drums, and is especially designed throughout to withstand the heaviest work and roughest usage to which it may be subjected.

Frictions are of the double V-type and are thoroughly efficient both in raising and lowering the load.

A single heavy bed casting furnishes a base for both engine and boiler.

This casting is entirely independent of the loader-frame, thus permitting sufficient elasticity to offset shocks, while preventing the working parts from being thrown out of alignment.

*Boilers:* Full-length tube vertical boilers are furnished unless otherwise specified.

All boilers are built after the most approved design and to meet all requirements of the insurance companies and of the laws of the place where intended to be used.

Boilers for 100 lbs., 150 lbs. or 200 lbs. may be furnished as specified.

*The Swinging Boom:* The Clyde form of swing boom possesses the advantages of the rigid type, while overcoming the difficulties incident to it.

Made of steel throughout, in the form of an A, the lower ends of the legs hinge on an oscillating cross-beam.

This cross beam swings horizontally at its center on a heavy cast steel jaw secured to the girder extending across the front of the loader-frame.

A U-shaped steel casting of sufficient length to give the required swing is secured with heavy pins to each end of this oscillating beam, embracing both the beam and the front girder.

Lugs are provided on the right-hand U-shaped casting, forming a cross-head and engaging steel guides secured to the upper surface of the two right-hand deck-beams.

This casting is directly connected with the piston rod of the steam cylinder which actuates the boom.



Clyde Loading block with cast steel housing and cast steel sheave with oil cellar for self lubrication.

The lever controlling the valve of the swinging cylinder is so placed that it may readily be worked by the operator's knee.

