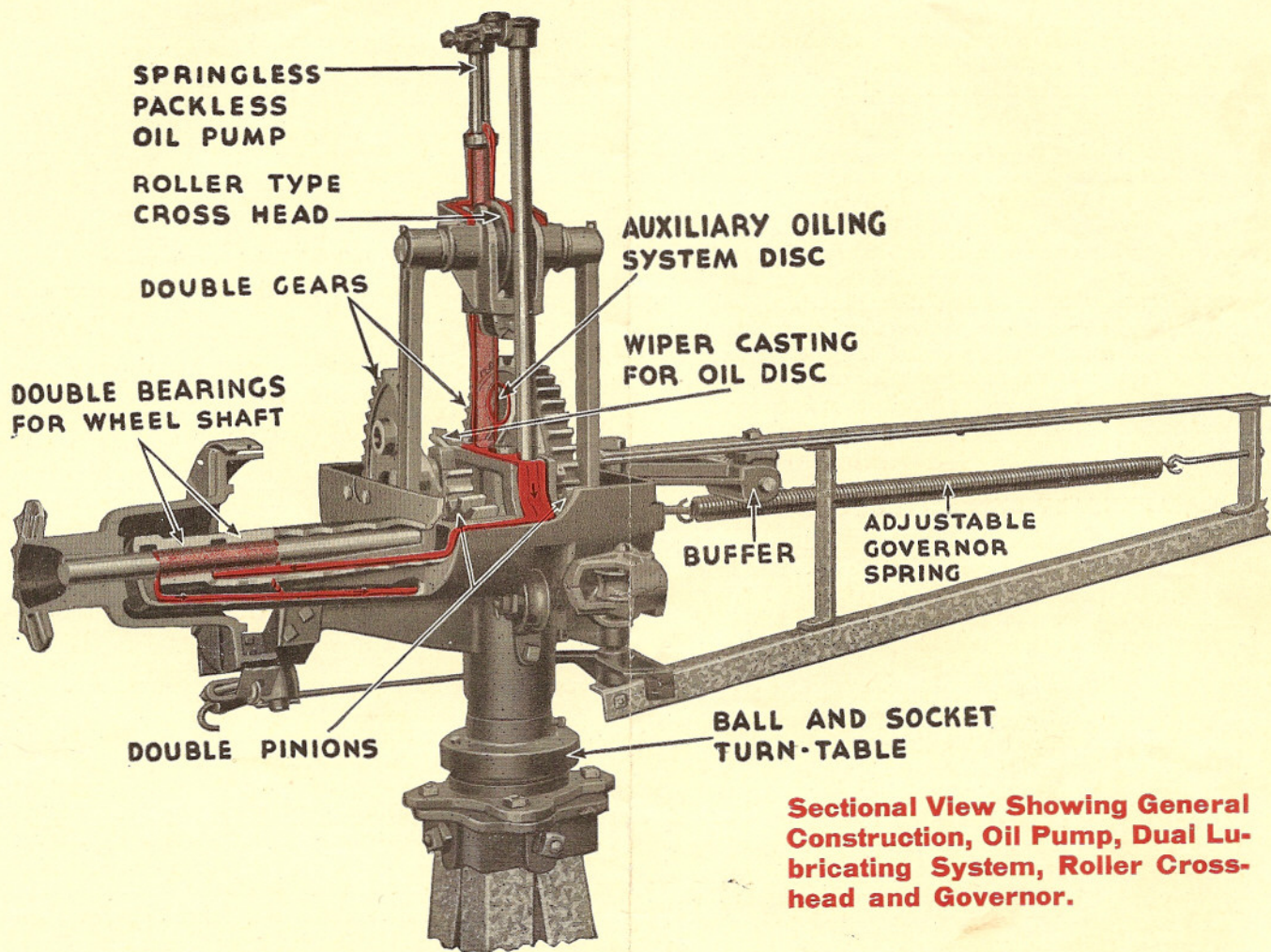


SAMSON OIL-RITE - MODEL M



Sectional View Showing General Construction, Oil Pump, Dual Lubricating System, Roller Cross-head and Governor.

AUTOMATIC LUBRICATION

Since the principal mechanism is located high in the air and out of easy observation, a Windmill with a positive and dependable automatic oiling system is an important factor.

The main frame forms a reservoir that holds a sufficient amount of oil to lubricate the Mill for one year. A hot galvanized sheet metal helmet completely encloses the reservoir and covers all working parts, making it dirt, rain, sleet and snow proof. No water can creep in to dilute the oil, no dust can blow in to grind out the bearings.

The automatic lubricating system starts to function as soon as the Mill is placed in operation and continues until the Mill is stopped. There is a constant and positive supply of oil flooding every movable part at all times. The oil after being delivered to the desired parts of the Mill returns to the reservoir to be re-circulated.

THE PRINCIPLE OF LUBRICATION

The lubrication of the various parts is accomplished as follows: The oil is poured into the gear case, which submerges the lower part of the double gears, including the wrist pin when at the bottom of stroke. The rotation of the gears carries the oil upward and floods the pinions.

One of the outstanding features of the SAMSON Model "M" is the extreme simplicity, efficiency and practicability of the oil pump.

One of the guide rods consists of a hollow steel tube which forms a pump cylinder. The pump plunger is equipped with a pin that travels in a slot in the top of the steel tube and the plunger is raised by the pin in the plunger coming in contact with the crosshead upon the up stroke.

The collar attached to the pump plunger is of the correct weight to carry the plunger downward fast enough to force the oil out of both sides of the slot in the top of the pump cylinder.