

**TYRES.**

Of Krupp crucible steel, flanged. For driving wheels, 3 in. thick by  $5\frac{1}{2}$  in. wide, finished. For truck wheels,  $2\frac{1}{2}$  in. thick by 5 in. wide, finished.

**TRUCK WHEELS.**

Engine truck wheels, 28 in. diameter; centres, 23 in. diameter.

**AXLES.**

All axles to be made of steel. Driving axles to finish 7 in. diameter, journals 7 in. diameter by 8 in. long. Engine truck axle journals to finish 5 in. diameter by  $8\frac{1}{2}$  in. long, wheel fit 5 in. diameter, distance between hubs of wheels, 52 inches. Cast iron clamp collars on each axle.

**CRANK PINS.**

Pins to be made of wrought iron (see drawing), case-hardened, and ground up true and accurate.

**CONNECTING AND SIDE RODS AND STRAPS.**

Made from best hammered iron forged from No. 1 scrap, solid. See drawing.

**DRIVING BOX.**

Made of cast iron, and bushes pressed in. See drawing.

**FRAMES.**

Made of best hammered iron forged in two sections, each section being solid, and firmly bolted together and keyed forward of forward driving box pedestal. Pedestal jaws fitted with cast iron thimbles at bottom, secured with one  $1\frac{1}{2}$  in. bolt passing through jaws and thimble with jam nuts. Pedestal jaws eased with cast iron shoes and wedges.

**ENGINE TRUCK.**

See drawing. Swing beam.

**FEED WATER.**

Boiler supplied with water by two Gresham non-lifting injectors, class W. F., one No. 8, placed on right hand side of engine, and one No. 7 on left hand side, with feed cocks coupled on bottom of injectors. The supply pipes to have intermediate checks and pet cocks. Injector throttles in cab to have dry pipe connected extended up in dome of boiler. All arranged to be operated from deck of engine.

**CAB.**

Built of hard wood well fitted and braced, with angle irons in corners and bolted through. One of the sashes on each side to slide. Doors in front to open out, arranged with guide and thumb-screw so as to be held in any position desired.

**PILOT.**

Made of hard wood, firmly braced and bolted together, bottom of frame of pilot banded with wrought iron, and secured by means of lag screws, and secured and banded to front of engine with push bar, etc.

**FURNITURE AND TOOLS.**

Engine to be furnished with one alarm bell placed forward of the dome on top of cylinder part of boiler, arranged so as to be rung from cab. One signal bell in cab. Sand box placed back of dome. Steam gauge. Gauge cocks and dripper. Water gauge. Lamps and stands for steam and glass gauges. Two signal lamps. Head lamp, with brackets and lamp board. Full set of wrenches to fit all nuts and bolts, including one 15-in. and one 12-in. monkey wrench, one hard and one soft hammer, two screw jacks and levers, one pinch bar and other tools that may be necessary, with substantial boxes made of hard wood to hold the same. Boxes to be supplied with substantial locks. One 10-lb. tallow can and one hand can for oiling.