

## THE CROSBY INDICATOR.

The piston, 8, is formed of tool steel. Its shell is made as thin as possible consistent with proper strength. Hollow channels in its outer surface provide a steam packing, and the moisture and oil which they retain act as lubricants.

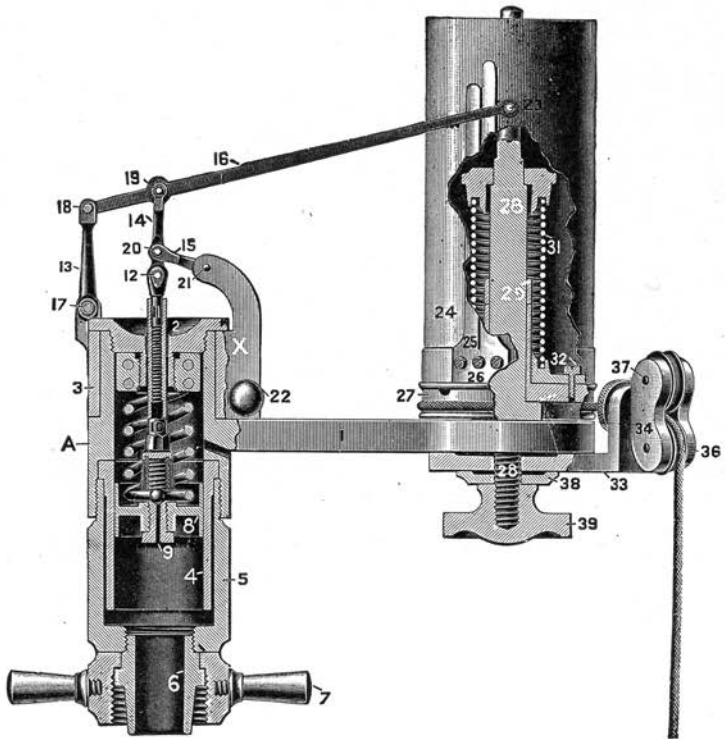


Fig. 82. CROSBY INDICATOR. (Sectional View.)

The transverse web near its center supports a central socket, which projects both upward and downward; the upper part is threaded inside to receive the lower end of the piston rod.

The upper edge of this socket is formed to fit into a circular channel in the under side of the shoulder of the

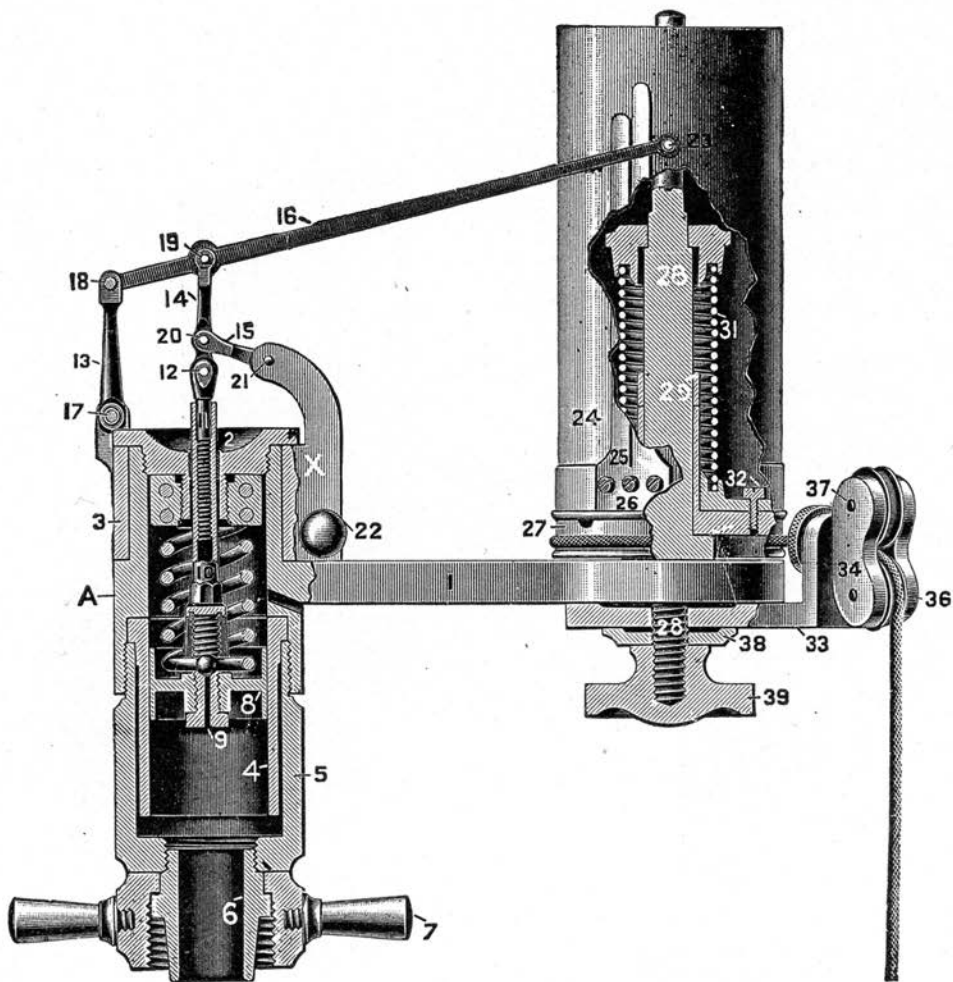


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piston rod, when it is properly connected. It has a longitudinal slot, which permits the ball bearing on the end of the spring to drop to a concave bearing in the upper end of the piston screw 9, which is closely threaded into the lower part of the socket.

The piston rod, 10, is of tool steel, and made hollow for lightness.

When connecting the piston rod to the piston it should be screwed into the socket as far as it will go; that is, until the upper edge of the socket is brought firmly against the bottom of the channel in the piston rod.

The swivel head, 11, is threaded on its lower half to screw into the piston rod, more or less, according to the required height of the atmospheric line on the diagram.

The cap, 2, screws into the top of the cylinder, and holds the sleeve and all connected parts in place.

Its central hole is furnished with a hardened steel bushing, which forms a guide for the piston rod.

The sleeve, 3, surrounds the upper part of the cylinder, and supports the pencil mechanism.

The plate, 1, supports the paper drum, 24.

The drum spring, 31, is a short spiral spring.