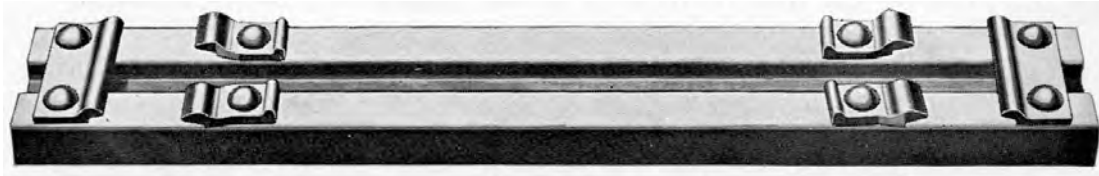


# STEEL MINE TIES

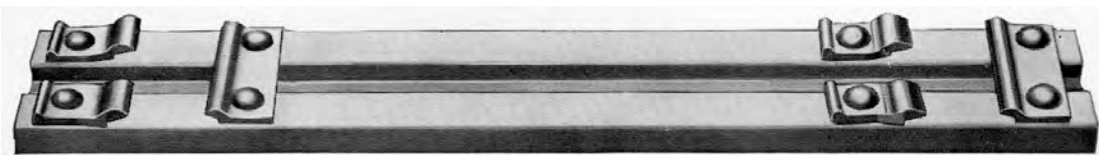


## Steel Ties with Outside Stationary Clips



In all sections the most widely used tie is the **outside stationary clip tie**. It is equipped with four rolled-steel movable clips, and two stationary clips placed on the outside ends, as illustrated. The clips are spaced to fit one particular rail section.

## Steel Ties with Staggered Clips



Also available is the **staggered clip tie**, which is equipped with four rolled-steel movable clips and two stationary clips, with a stationary clip on the inside at one end, and on the outside at the other end. This feature is especially useful when it is desired to insert or remove a tie without disturbing the track gage. The clips are spaced to fit one particular rail section.

## Tunnel Ties



**Tunnel Ties** are specifically designed for use in tunneling projects where the bottom surface is not flat. These ties can be used without blocking and will maintain proper track gage. Each tie is designed specifically to meet the requirements for a particular job. Customers should specify the tunnel diameter, wheel load, and tie spacing. The design specifications are reviewed by an engineer to ensure tie construction will support the wheel loads required for a given project. Axle loads of 45,000 lbs on 30" tie spacing have been successfully implemented.