

# GREY Charles McRae

(1877 - 1955)

New Jersey (USA)

## Patents (details)

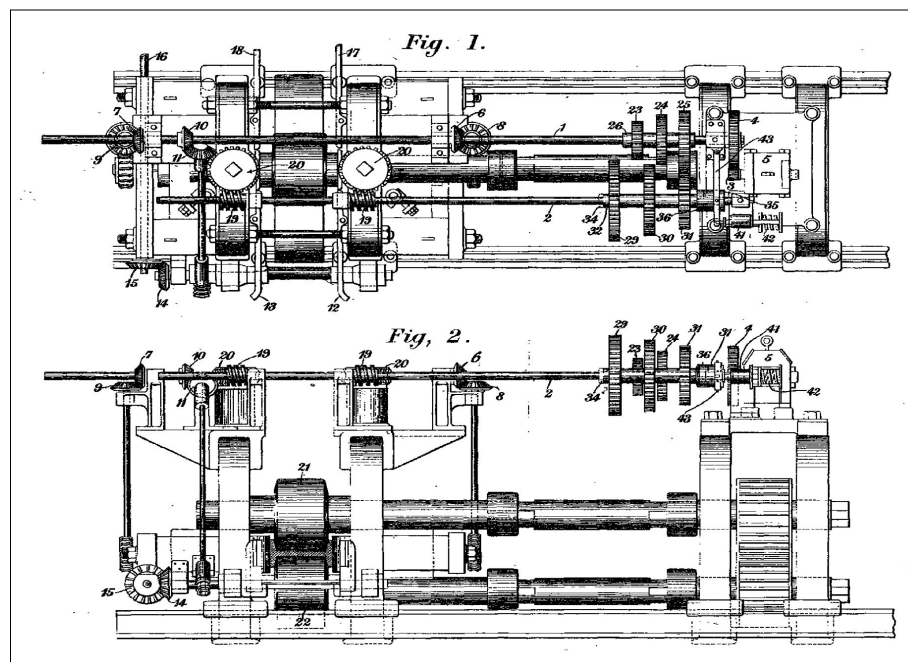
### 1 - Improvements in rolling mills

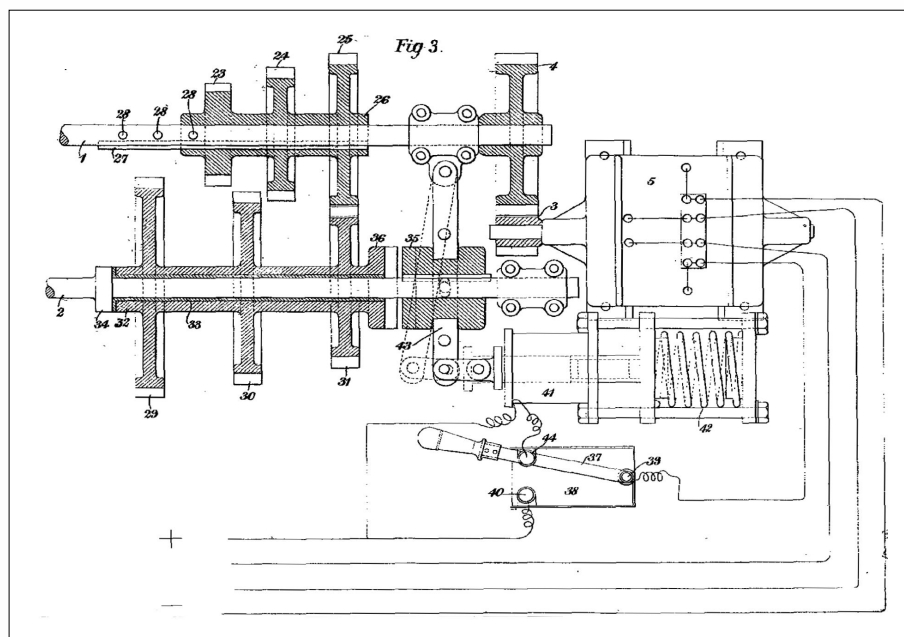
GB patent 1902/2405  
Application date 29 November 1902

*This invention pertains in application more especially to a mill that comprises,*

- *firstly, two horizontal rolls arranged the one above the other in the same vertical plane and in position to operate upon the web of the blank or rough shape and upon the inner sides of the heads or flanges of the blank, and having the upper horizontal roll adjustable vertically ;*
- *secondly, two vertical rolls arranged at opposite ends, respectively, of the horizontal rolls, and in position to operate upon the outer sides of the blank's heads or flanges;*
- *thirdly, two straightening bars arranged at opposite sides, respectively, of the works path, and operated as required to gradually effect the straightening of the blank or bar ;*
- *fourthly, two side guards arranged between the roll systems at opposite sides, respectively, of the works path, and*
- *fifthly of two parallel shafts mounted and arranged on the top of the roll housings and operatively connected with each other, one of which is driven, preferably by an electric motor but with either this or a steam engine, belt or other suitable mechanism and is connected by gears with either the vertical screws governing the travel of the top horizontal roll towards the bottom horizontal roll, or, by gears with the mechanism which governs the travel of the vertical side rolls, the straightening bars and side guards towards or away from each other.*

*In this case the directly driven shaft is connected with the latter.*





### Corresponding patents

AT, DE, FR, CA, LU, US