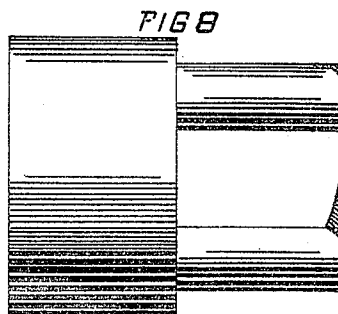
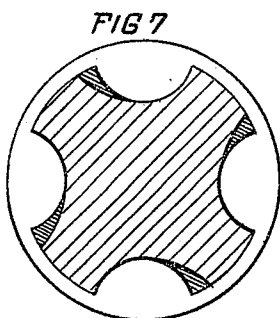
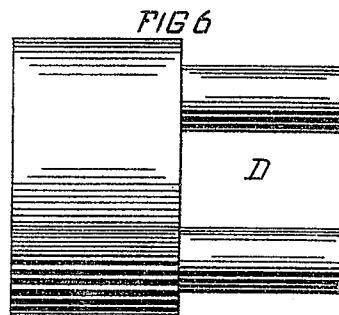
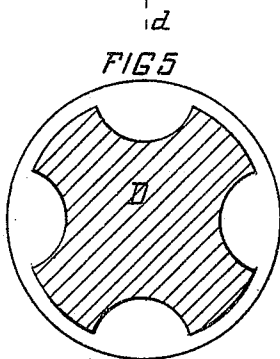
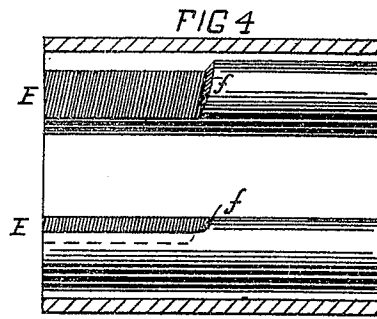
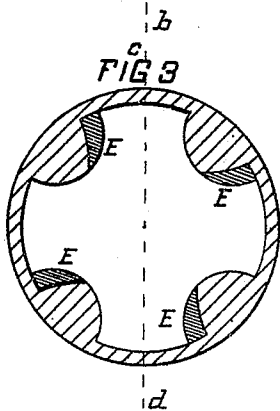
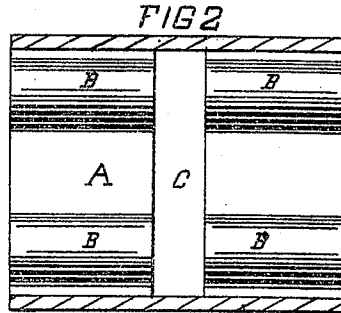
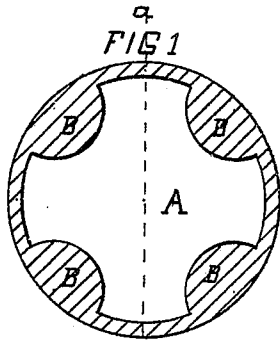


C. F. JOHNSON.

COUPLING BOXES FOR ROLLS.

No. 177,337.

Patented May 16, 1876.



WITNESSES  
*Chas F. Lawton*  
*A. P. Burleigh*

INVENTOR  
*Clayton F. Johnson*  
by *Francis D. Pastorius*  
*Atty*

# UNITED STATES PATENT OFFICE.

CLAYTON F. JOHNSON, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN COUPLING-BOXES FOR ROLLS.

Specification forming part of Letters Patent No. 177,337, dated May 16, 1876; application filed October 13, 1875.

*To all whom it may concern:*

Be it known that I, CLAYTON F. JOHNSON, of the city of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Rolling-Mill Coupling-Boxes, which improvement is fully set forth in the following specification:

The invention consists in transversely dividing the lugs of a rolling-mill coupling-box to prevent the roll-wabblers and the connecting-spindle from wearing the lugs and forming a shoulder.

The accompanying drawings only show the effect produced on a mill-coupling and its inserted roll-wabblers or end of the roll-shaft.

Figure 1 is an end view of a rolling-mill coupling-box having the lugs divided transversely. Fig. 2 is a longitudinal section through the line *a b*, Fig. 1. Fig. 3 is an end view of a rolling-mill coupling-box, showing the wearing of the lugs when they are not divided transversely. Fig. 4 is a longitudinal section through the line *c d*, Fig. 3, the wearing by the roll-wabblers only being shown. Fig. 5 is an end view of a roll-wabblers after being used with a coupling-box having divided lugs. Fig. 6 is a side view of Fig. 5. Fig. 7

is an end view of a roll-wabblers after being used with a coupling-box without divided lugs. Fig. 8 is a side view of Fig. 7.

A is a rolling-mill coupling-box, the lugs B of which are divided transversely by a groove, C.

The intention of the transverse grooving of the lugs is to prevent the roll wabblers D, when working, from wearing the lugs, as shown at E, and forming a shoulder, *f*, against which the end of the wabblers works, and thus either pushes back on the mill or forward on the engine. The part cut away by the groove should be wider than the shoulder, which would be formed if the groove had not been made.

I claim as my invention—

In a rolling-mill coupling, A, the lugs B, divided by a transverse groove, C, for the purpose shown and described.

In testimony whereof I hereunto sign my name in the presence of two subscribing witnesses.

CLAYTON F. JOHNSON.

Witnesses:

FRANCIS D. PASTORIUS,  
GEO. C. SHELMEKDINE.