No. 752,329. PATENTED FEB. 16, 1904.

G. E. CLEGG.

PAPER REELER BAR.

APPLICATION FILED JULY 7, 1902.

NO MODEL.

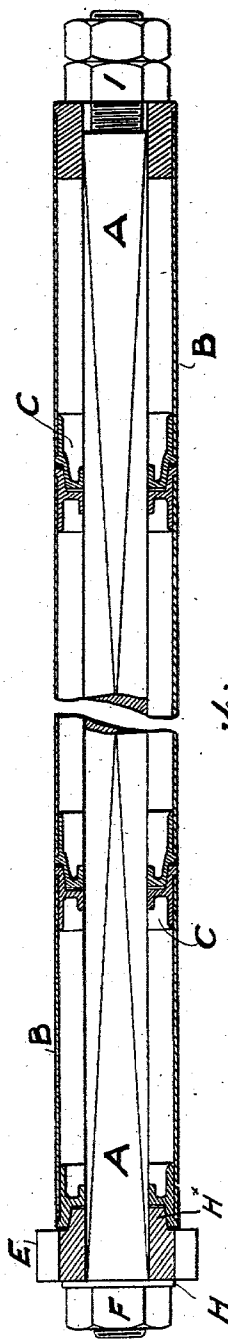


Fig. 1.

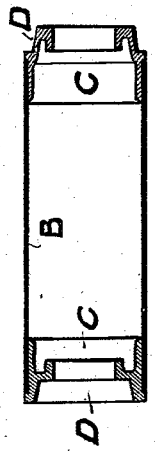


Fig. 2.

Witnesses:
William Eastwood.
John Camp.

Inventor:
George Edward Clegg
Walter Gunn

By his Attorney:

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 752,329. Patented February 16, 1904.

UNITED STATES PATENT OFFICE.

GEORGE EDWARD CLEGG, OF IRLAMS O' TH HEIGHT, NEAR MANCHESTER, ENGLAND.

PAPER-REELER BAR.

SPECIFICATION forming part of Letters Patent No. 752,329, dated February 16, 1904.

Application filed July 7, 1902. Serial No. 114,635. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EDWARD CLEGG, a subject of the King of Great Britain and Ireland, and a resident of Irlams o' th Height, near Manchester, England, have invented a new or Improved Construction of Paper-Reeler Bar, of which the following is a specification.

This invention refers to paper-reeler bars as used in paper-making machines; and its object is to provide a bar which will bear a greater weight of paper and be less liable to buckle or bend with the tension of the paper than reeler-bars as heretofore made.

A further object is to prevent the great waste of paper now prevalent with the ordinary bars.

Figure 1 on the accompanying drawings illustrates a longitudinal section of the complete bar, and Fig. 2 illustrates a section thereof.

According to my invention I employ a bar A of rectangular or like cross-section and of any of the usual lengths, and upon such bar I arrange a series of thin metal sleeves B, each having at their respective extremities a bush or liner C, by which they are held on and concentric to the bar A. Each bush is formed with a conical preparation D, either internal or external, and when on the bar the bushes of each sleeve are adapted to fit or engage the conical preparations on the bushes of the next adjoining sleeve or sleeves, as illustrated.

At one end of the bar I fit the usual gear-pinion E, and adjacent to such pinion I provide a flange, collar, or nut F, also a washer and cone H $H^{\times}$. At the opposite end of the bar I provide a nut or set of nuts I, by which when the several sleeves are mounted on the bar they and their conical bushes are tightly clamped with the endwise force against each other and against the said cone and washer, thereby completing the improved bar and imparting a rigidity thereto not afforded by the ordinary bar. Due to its stiffness the bar allows of the paper being reeled parallel and without any spring or torsional disturbance common with the ordinary wooden reeler-bar. The sleeves being made to standard lengths they may be used with bars of the various standard lengths. The manner in which the cones engage is such as to leave only a very small clearance between the rectangular face of the cones when tightened up.

While chiefly for paper-reeling, the improved bar may be used for other and like purposes.

What I claim is—

The combination in a reeler-bar of a shaft of square cross-section throughout except at its extreme ends which are round and screw-threaded, a series of thin metal sleeves thereon arranged end to end, a tightly-fitting bush in the opposite ends of each sleeve and one bush of each sleeve having a conical depression and the other a conical projection, a washer with like projection and a gear-wheel and nut also on the shaft at one end, and a set of nuts at the opposite end which on being tightened up cause the several bushes to be held tightly against each other and the end bush against the washer, as set forth.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

GEORGE EDWARD CLEGG.

Witnesses:
J. CAMP,
WILLIAM EASTWOOD.