

UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN GUIDE-ROLLERS FOR WEB-PRINTING PRESSES.

Specification forming part of Letters Patent No. **163,207**, dated May 11, 1875; application filed July 22, 1874.

To all whom it may concern:

Be it known that I, JOHN W. KELLBERG, of Philadelphia, county of Philadelphia and State of Pennsylvania, have invented certain Improvements in Guide-Rollers for Web-Printing Presses, of which the following is a specification:

My invention relates to the mounting of a tension or spreading roller, over which the printing-paper is fed to a rotary printing-press from the spool, in such a manner that either end of such roller may yield vertically as and when required. Such yielding is necessary when the two opposite edges of the paper are of unequal length, and, in such case, prevents either the wrinkling or tearing of the same.

In the accompanying drawings, Figure 1 represents a side perspective view of such a part of such a printing-press, as before mentioned, as will illustrate and embrace my said improvement; Fig. 2, an end view of the frame in which such roller is mounted, and a portion of the frame of the printing-press; and Fig. 3, a side view of the same, illustrating the manner of pivoting the same upon the frame of the machine in order to secure the yielding motion before mentioned.

D is the spool, from which the paper is fed,

and B is the yielding roller described. A, A, A', and A' is the roller-frame in the tops of the uprights A' A', of which the journals of the roller B have their bearings, and that frame is pivoted upon the pin *e*, which extends from the main frame, as shown.

In order that the vertical action of the ends of the roller B may be gradual and regular, the frame of the roller may be provided at each end with friction-rollers *a a*, which may travel up and down against uprights C C of the main frame, as shown.

D' D' indicate the web of paper stretched over the said roller B in the act of being fed to the printing-cylinder E'.

What I claim as new, and desire to secure by Letters Patent, is—

In a rotary printing-press, the roller B, mounted in a frame, A, A, A', and A', and that frame pivoted at *e* on the frame C and C, in such a manner that its ends will yield vertically, substantially as and for the purpose described and set forth.

JOHN W. KELLBERG.

Witnesses:

OLIVER K. LEECH,
P. O'DONNELL.