Sept. 19, 1933. H. F. SCHMIDT ET AL 1,927,049

BLANKET STRETCHER

Original Filed March 14, 1929

Fig. 1.

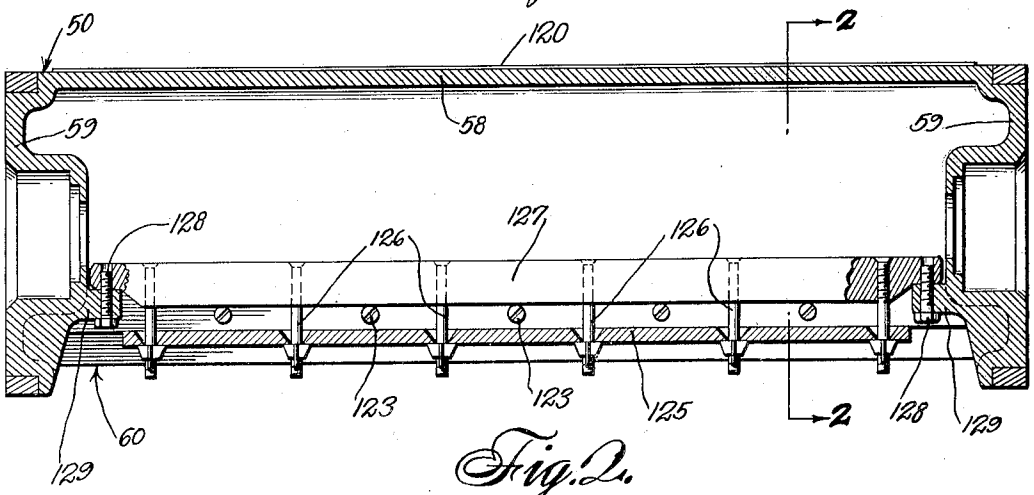
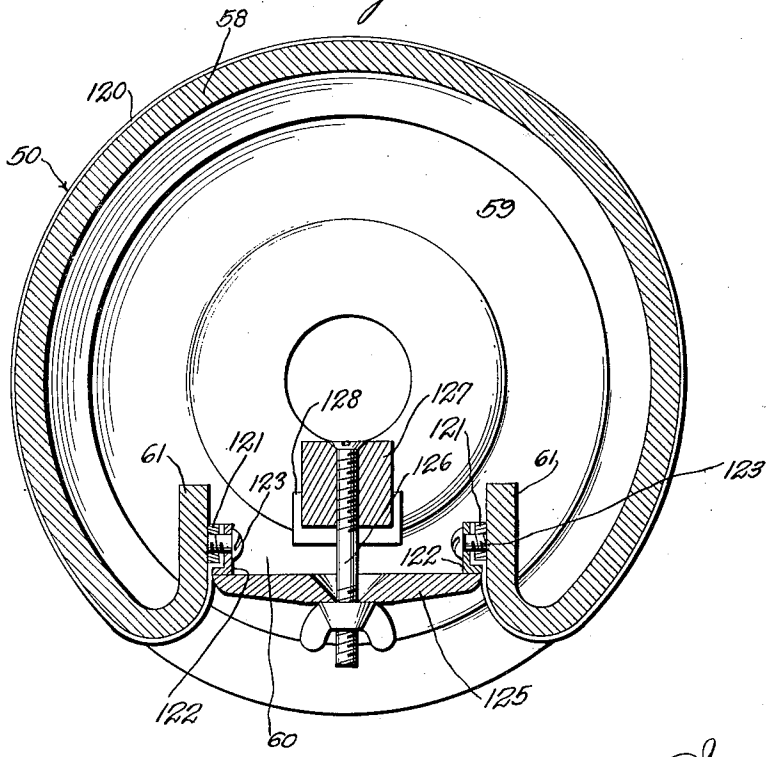


Fig. 2.



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BLANKET STRETCHER

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Original application March 14, 1929, Serial No. 346,841. Divided and this application September 2, 1930. Serial No. 479,374

4 Claims. (Cl. 101—415.1)

This invention relates to a blanket stretcher for use on the printing cylinder of presses as for example an offset proof press.

The present application is a division of our pending application for offset proof press filed March 14, 1929, Serial No. 346,841.

One of the principal objects of the present invention is to provide a novel blanket stretcher which is incorporated in the printing cylinder and which facilitates the placing of a uniform tension on the blanket thereby improving its capacity to effect the transfer printing operation in a superior manner. The tension is applied to the blanket stretcher through a plurality of adjusting devices such as thumb screws which permits the operator to sense or feel the tension applied to different portions of the blanket thereby insuring the placing of such tensioning force on the different parts of the blanket as is necessary to uniformly and properly tension the same.

Other objects and advantages reside in certain novel features of the construction, arrangement and combination of parts which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawing forming a part of this specification, and in which:

Figure 1 is a view partly in longitudinal diametrical section showing a printing cylinder equipped with a blanket stretcher embodying the present invention; and

Figure 2 is a view in transverse section on line 2—2 of Figure 1.

Referring to the drawing, the numeral 50 designates a printing or transfer cylinder. As to the manner of mounting and driving the transfer or printing cylinder and for an understanding of the instrumentalities with which it coacts, reference is made to the copending application above referred to.

The cylinder 50 includes an approximately cylindrical body portion 58 and integral end plates 59. The body 58 of the printing cylinder is formed with a gap or opening 60 flanked with inturned flanges 61 integral with the body of the cylinder. This provides a flat on the surface of the cylinder and also is adapted for organization with the novel form of blanket stretcher to be hereinafter more fully described.

In accordance with the usual practice, a blanket 120 is wrapped around the periphery of the cylinder 50 and is secured and properly and uniformly tensioned on the cylinder 50 by means of a novel form of blanket stretcher embodying the present invention.

Each end of the blanket is clamped between an elongated bar 121 of rectangular cross section and an elongated bar 122 of L-shaped cross section by means of clamping screws 123 extending through openings provided in one flange of the L-shaped bar 122 and through openings in the end of the blanket and threaded into openings found in the bar 121. The clamping bars 121 and 122 extend across the ends of the blanket for substantially the full width thereof and develop a high degree of friction with the ends of the blanket as they reversely bend the blanket between themselves.

An elongated clamping and equalizing plate 125 extends between or straddles and engages the L-shaped bars 122 for approximately their full length and has flaring openings loosely receiving screws 126 anchored in a carrier bar 127 secured by stud bolts 128 to bracket lugs 129 formed on the ends of the cylinder inwardly of the gap or opening 60 thereof. Wing nuts 130 are threaded on the screws 126 and bear against the plate 125 so that when the wing nuts are tightened up the plate 125 and both sets of clamping bars 121 and 122 are forced inwardly, the clamping bars 121 sliding along the inturned flanges 61. The clamping and equalizing action of the plate 125 serves to tighten up both ends of the blanket and to uniformly stretch and tension the same. Moreover, as the clamping plate bears against the angular clamping bar 122 adjacent the reverse bends of the blanket ends, the blanket ends are more firmly gripped between the bars 121 and 122 by the pressures exerted by the clamping plate 125.

The invention claimed is:

1. In combination, a printing cylinder formed with a gap and also having a blanket wrapped around the cylinder, clamping bars embracing and frictionally engaging both ends of the blanket and extending for substantially the full width of the blanket ends in the gap, a clamping and equalizing plate extending between and engaged with adjacent bars at the opposite ends of the blanket for approximately the full length of said bars, and means including a plurality of independently adjustable fastening devices coacting with spaced portions of the plate for forcing the plate inwardly in such manner as to cause it to apply uniform tensioning force to both ends of the blanket.

2. In combination, a printing cylinder formed with a gap and also having a blanket wrapped around the cylinder, clamping bars embracing

and frictionally engaging both ends of the blanket and extending for substantially the full width of the blanket ends in the gap, a clamping and equalizing plate extending between and engaged with adjacent bars at the opposite ends of the blanket for approximately the full length of said bars, and screws anchored within the cylinder and projecting outwardly through the gap at longitudinally spaced points thereof, said plate having spaced inwardly flaring openings receiving said screws and wing nuts threaded on said screws and engaging said plate.

3. In combination, a printing cylinder formed with a gap and also having a blanket wrapped around the cylinder, clamping bars embracing and frictionally engaging both ends of the blanket within the gap, a clamping and equalizing plate extending between and engaged with adjacent bars at the opposite ends of the blanket for approximately the full length of said bars, and screws anchored within the cylinder and projecting outwardly through the gap, said plate having openings receiving said screws and nuts threaded on said screws and engaging said plate.

4. In combination with a printing cylinder and a blanket wrapped therearound, a set of clamping bars embracing each end of the blanket and reversely bending the associated end of the blanket between them, at least one of the bars of each set being an angle bar and having a flange overlapping the edge of its cooperable bar, means for forcing the bars of each set into frictional engagement with the blanket and means connected to the cylinder and coacting with said flanges of the angle bars of each set for applying a tensioning force to both ends of the blanket.

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