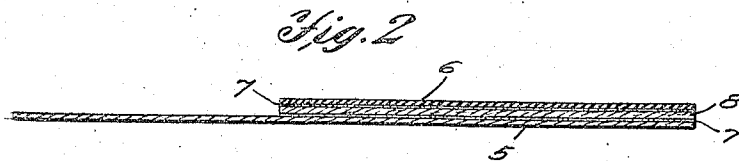
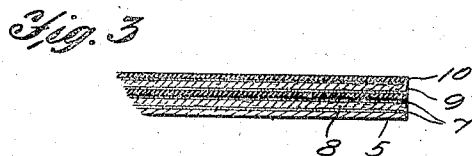
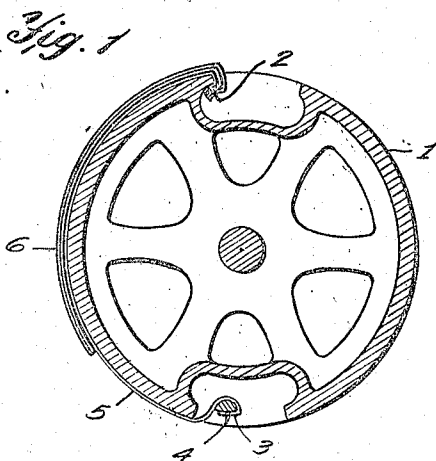


F. A. TESSMER.
BLANKET FOR LITHOGRAPHIC PRESSES.
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924,016.

Patented June 8, 1909.



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BLANKET FOR LITHOGRAPHIC PRESSES.

No. 924,016.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK A. TESSMER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented new and useful Improvements in Blankets for Lithographing-Presses, of which the following is a specification.

This invention relates to a blanket for lithographing presses, and it has for one of its objects to provide a blanket which is economical, possesses comparatively long-life, highly efficient in operation, and capable of producing clearer impressions than is ordinarily possible.

In the common form of printers' blankets for lithographing presses, the rubber pad is coextensive with the canvas backing to which it is attached so that the entire surface of the cylinder is covered. This has been objectionable for the reasons that at the best, the blanket can be used for only two or three months because the rubber is subjected to the action of ink, paint, oil, turpentine, benzine, water and acid on the parts that are not covered by the sheet to be printed, and furthermore, there is considerable waste since the entire surface of the rubber is not employed to form the cushion or printing surface and due to the fact that the blanket or cushion covers the entire surface of the cylinder, it is impossible to obtain a sharp and clear impression.

To overcome the objections above noted by employing a blanket in which the cushion or rubber forming the printing surface is no longer than the sheet to be printed, thereby greatly reducing the cost of the blanket, since there is no superfluous amount of rubber in the blanket, and since the sheet to be printed covers the superficial area of the rubber pad or cushion, no parts of the latter are exposed to the injurious effects of oil, water, acid, turpentine and the like.

A still further advantage accompanying the use of my improved printing blanket is the production of a much sharper impression than usual for the reason that the pad or cushion bears only on the parts to be printed and not upon the entire surface of the stone, as is usually the case with presses now in use.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described here-

inafter and set forth with particularity in the claim appended hereto.

In the accompanying drawing, which illustrates one of the embodiments of the invention, Figure 1 is a transverse section of a cylinder showing the improved blanket applied thereto. Fig. 2 is a transverse section of the blanket removed, drawn on an enlarged scale. Fig. 3 is a fragmentary sectional view of a modified form of blanket showing a double ply cushion or pad.

Similar reference characters are employed to designate corresponding parts throughout the several views.

Referring to the drawing, 1 designates a cylinder of the type usually employed in a Hoe lithograph press which is provided with a longitudinally-extending gripper having teeth or pins 2 to which the blanket is attached at one edge and a stretching rod 3 having teeth or pins 4 and extending longitudinally of the cylinder at a point approximately diametrically opposite from the clipper; said stretcher being provided in the usual manner with a ratchet and pawl mechanism (not shown), whereby the blanket can be tightly stretched. In the present instance, the blanket comprises a canvas backing 5 that has its longitudinal edges attached respectively to the gripper and stretcher. On the canvas is a rubber pad or cushion 6 which is just the size of the sheets to be printed and this rubber pad is secured to the canvas by first applying a coat of rubber cement 7 to the blanket over an area equal to the cushion and placing a sheet of linen gauze 8 to which a coat of rubber cement or the like, is applied for receiving the sheet of rubber 6. Besides serving as a binder, the linen gauze holds the pad a considerable distance above the surface of the canvas and the total thickness of the blanket at the pad or cushion portion is about three times the thickness of the canvas backing. A blanket constructed in this manner is of the single ply type and under some conditions, it may be preferable to increase the number of the plies. In a multiple ply blanket, a sheet of linen gauze 9 is cemented to the first sheet of rubber and a second sheet of rubber 10 is cemented to the gauze 9, as clearly shown in Fig. 3. After the blanket is laid in this manner, it is applied to the cylinder as shown in Fig. 1, and is ready for printing. The printing operation is carried on in the usual manner and

since the pad or cushion of the blanket is only as large as the sheet to be printed, the pad does not come into contact with the stone at all except on the printing surface thereof.
 5 This means that a better impression can be produced.

In order to illustrate the economy of a blanket of the present construction, assume that it is desired to employ the blanket on a
 10 medium sized lithographing press having a cylinder taking an ordinary blanket of thirty-six by forty-two inches, it is well known that the largest sized sheet that can be printed is twenty-eight by forty-two
 15 inches, which leaves a total waste of rubber in the blanket of forty-two inches long and eight inches wide, or three hundred and thirty-six square inches. Besides being unnecessarily expensive, the blanket has a large
 20 area exposed to the deleterious effects of oil, acid, water and the like, and the entire surface of the blanket comes in contact with the stone. With the present form of blanket, however, the cushion will be only twenty-
 25 eight by forty-two inches, which is the size of the sheets printed, thus reducing the cost about one fourth and increasing the life of the blanket from two to three months, as
 30 usual in the ordinary blanket, to five or six months. With still smaller sheets to be printed, the economy would be even greater, as will be readily understood by those familiar with the lithographic printing.

From the foregoing description, taken in connection with the accompanying drawing, 35 the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, 40 together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative and that such changes may be made when desired, as 45 are within the scope of the claim.

Having thus described the invention, what I claim is:—

The herein described blanket for lithographic printing presses consisting of a canvas 50 backing, a piece of fabric secured to the backing by cement, and a rubber impression pad secured to the piece of fabric by cement, said fabric and pad being of substantially the size of the sheet to be printed 55 and the canvas backing being of greater length than the fabric and pad, whereby the backing is adapted to be secured to the blanket attaching devices of the press.

In testimony whereof, I affix my signature 60 in presence of two witnesses.

FRANK A. TESSMER.

Witnesses:

JAS. H. SCHENK,
 EDWD. MORIARTY.