

No. 846,040.

PATENTED MAR. 5, 1907.

G. W. MASCORD.
CYLINDER OF PRINTING PRESSES.
APPLICATION FILED DEC. 18, 1906.



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UNITED STATES PATENT OFFICE.

GEORGE WILLIAM MASCORD, OF BARNES, LONDON, ENGLAND.

CYLINDER OF PRINTING-PRESSES.

No. 846,040.

Specification of Letters Patent.

Patented March 5, 1907.

Application filed December 18, 1906. Serial No. 348,483.

To all whom it may concern:

Be it known that I, GEORGE WILLIAM MASCORD, a subject of the King of Great Britain and Ireland, residing at 5 "The Crescent," Church Road, Barnes, London, England, have invented certain new and useful Improvements Relating to the Cylinders of Printing-Presses, of which the following is a specification.

This invention relates to the cylinders of printing-presses, and has for its object to provide a covering therefor.

Hitherto it has been usual to provide the impression-cylinders of newspaper and other printing-presses with a thick woollen-blanket covering and with a layer of india-rubber beneath the blanket, by which a resilient bed is formed upon which the impression can take place. It has also been usual to employ blankets consisting of alternate layers of rubber and cotton or woollen material. Such a covering is open to the disadvantage that by reason of the offset upon the blanket the blanket, which is relatively expensive, has frequently to be changed for cleaning and renewal, while, furthermore, if the blanket is kept in use without changing the ink passing through the blanket has a deleterious effect upon the rubber which impairs its elasticity. Furthermore, in the employment of such a covering and under such conditions it is necessary to prepare or make ready or frequently to use overlays, and especially is this the case when printing pictorial work and in the use of half-tone blocks or in work of a high-class character. Moreover, such a covering has the disadvantage, owing to imperfect resilience, as the effect of ink impregnation and that of cleaning, of retaining permanent indentation after printing for a considerable time from the same forms or plates.

The invention has for its object to produce a covering to overcome these disadvantages, whereby the preparation of the covering for particular work or "make-ready" may be minimized or wholly avoided, and whereby a firm covering is produced that shall not lose its resilience and in which the rubber or other similar material that may be protected and used shall not be impaired in its elasticity while in use, and in which, moreover, the back of the rubber layer may be protected against the lubricating-oil which usually works through from the ends of the cylinder and destroys the rubber. According to the

invention in the provision of such a covering for impression-cylinders I provide a covering for the rubber layer of a grease-proof character which shall also be elastic, and I provide such a combination of layers that will be practically perfectly elastic, "lively," or resilient and which shall not readily be indented or permanently impressed in use, while, furthermore, I provide a covering of cotton fabric on the outer face of which a nap is raised.

The invention is diagrammatically illustrated in the accompanying drawing, which is a sectional elevation, on an enlarged scale, of a cylinder-covering provided according to the invention.

In carrying the invention into effect in the provision of a covering for an impression-cylinder I provide the cylinder first of all with a covering of leather-cloth *a*, (cloth treated with a waterproof varnish,) in which the special face is preferably next the cylinder, and over this I arrange the rubber layer *b*, covering the latter with the fine woollen blanket *c*, and over the blanket *c* I provide another layer of leather-cloth *a'*, with the prepared face next the blanket, while over the topmost layer of leather-cloth I provide a layer of cotton fabric *d*, having a nap on the exterior face by which the ink may be more readily absorbed and which presents a soft ungrained face for the impression. Such cotton fabric, it will be understood, is a relatively inexpensive material and may be readily renewed, while the lower layers constitute a more or less perfect covering to the cylinder which it is unnecessary to renew except after long periods of use.

It will be understood that the invention is not confined to the use of leather-cloth, as hereinbefore described, as any other suitable grease-resisting and elastic material which in use will not crack may be used, while similarly the invention is not confined to the outer layer of cotton or flannelet, as any other covering capable of absorption of ink, with a face similarly prepared and being relatively inexpensive, may be used. Similarly the leather-cloth layer next the cylinder may be replaced by some other bedding.

It will be understood that where overlays are used these may be applied upon the first layer of leather-cloth next the impression-cylinder, the same forming a foundation upon which said overlays may be properly

secured for working and afterward readily removed; but it will be understood that an important feature and advantage of the invention consists in avoiding the use of over-
5 lays and making ready for half-tone or "process" blocks.

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

A covering for impression-cylinders consisting of superposed layers of leather-cloth,
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rubber, wool, leather-cloth, and cotton substantially as described.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

GEORGE WILLIAM MASCORD.

Witnesses:

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