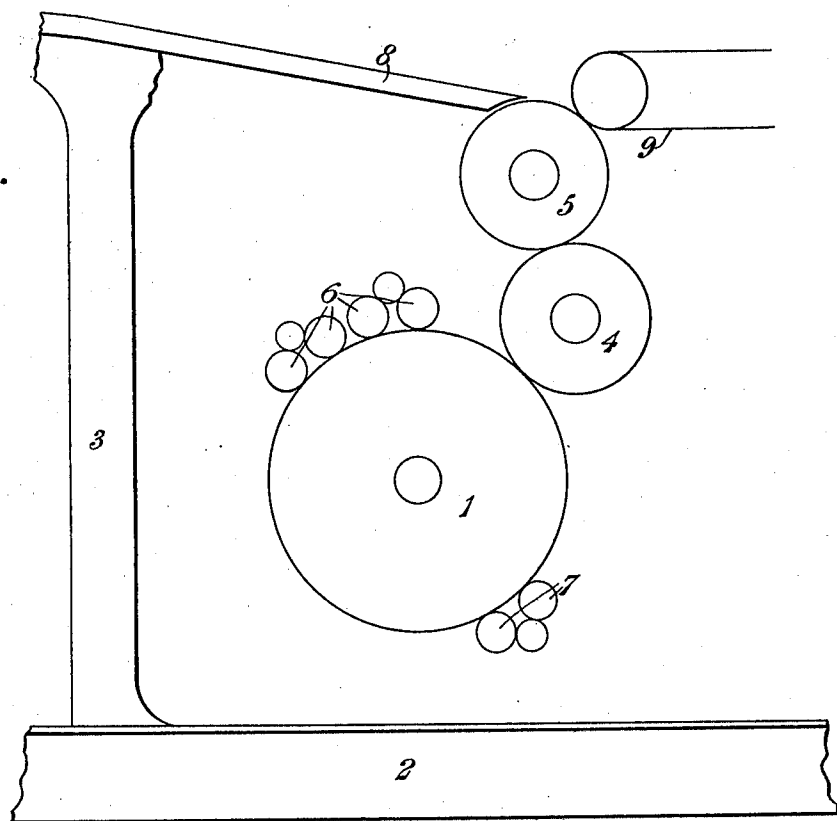


H. PEARCE & T. R. G. PARKER.
 ROTARY OFFSET PRINTING PRESS.
 APPLICATION FILED APR. 17, 1911.

1,031,288.

Patented July 2, 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

HERBERT PEARCE AND THOMAS ROBERT GILLETT PARKER, OF BROADHEATH, ENGLAND, ASSIGNORS TO LINOTYPE AND MACHINERY LIMITED, OF LONDON, ENGLAND.

ROTARY OFFSET PRINTING-PRESS.

1,031,288.

Specification of Letters Patent.

Patented July 2, 1912.

Application filed April 17, 1911. Serial No. 621,446.

To all whom it may concern:

Be it known that we, HERBERT PEARCE and THOMAS ROBERT GILLETT PARKER, subjects of the King of the United Kingdom of Great Britain and Ireland, residing at Linotype and Machinery Works, Broadheath, in the county of Chester, England, have invented new and useful Improvements in Rotary Offset Printing-Presses, of which the following is a specification.

This invention relates to improvements in rotary offset printing presses of the two-revolution type, the said improvements consisting essentially in the offset and impression cylinders being both of the same diameter and of half the diameter of the plate cylinder, with the three cylinders arranged with their axes in different vertical and horizontal planes, the vertical plane containing the axis of the impression cylinder being between those containing the axes of the plate and offset cylinders; and the horizontal planes containing the axes of the plate and impression cylinders being respectively below and above that containing the axis of the offset cylinder, this construction serving to provide better access to the front and rear sides of the plate cylinder for inspection and cleaning purposes than has with other constructions heretofore been possible.

The invention will be best understood by reference to the accompanying diagrammatic side elevation of a press constructed according to the said invention.

1 is the form or plate cylinder rotating in bearings above the base 2 of the frame 3.

4 is the rubber or equivalently covered offset cylinder which receives the impression from the plate cylinder 1 and transfers it to the paper carried around by the impression cylinder 5, which latter, for this purpose, is provided with the usual grippers, not shown in the diagram.

6 are the inking rollers, 7 the damping rollers, 8 the feed board and 9 a part of the delivery mechanism, all of which may be of ordinary construction.

Concerning especially the cylinders 1, 4 and 5, it is to be particularly observed that the two last-mentioned cylinders are both of

the same diameter and that each is of half the diameter of the plate cylinder 1, and further that the axes of the said three cylinders are situated in three different vertical planes, the vertical plane containing the axis of the impression cylinder 5, being between those containing the axes of the cylinders 1 and 4 respectively.

The plate cylinder 1 has attached to it the usual aluminium or other lithographic plate, which extends around practically one half of its circumference, and, for each sheet printed, it makes one complete revolution, while the cylinders 4 and 5 make two complete revolutions each.

The offset cylinder 4 is capable of being "tripped" or moved out of printing contact with the plate cylinder 1 and impression cylinder 5 during substantially one half revolution of the former and the corresponding revolution of the latter; the means for effecting this tripping, however, constitute no part of the present invention.

Having described our invention, we declare that what we claim and desire to secure by Letters Patent is:—

In a rotary offset printing press, the combination of a form or plate cylinder, an offset cylinder, and an impression cylinder, the offset cylinder and the impression cylinder being both of the same diameter and one-half the diameter of the plate cylinder, and the axes of the three cylinders being situated in three different vertical and horizontal planes, the vertical plane containing the axis of the impression cylinder being between those containing the axes of the plate and offset cylinders, and the horizontal planes containing the axes of the plate and impression cylinders being respectively below and above that containing the axis of the offset cylinder.

In witness whereof we have hereunto set our hands in the presence of two witnesses.

HERBERT PEARCE.

THOMAS ROBERT GILLETT PARKER.

Witnesses:

EWALD SIMPSON MOSELEY,
MALCOLM SMETHURST.