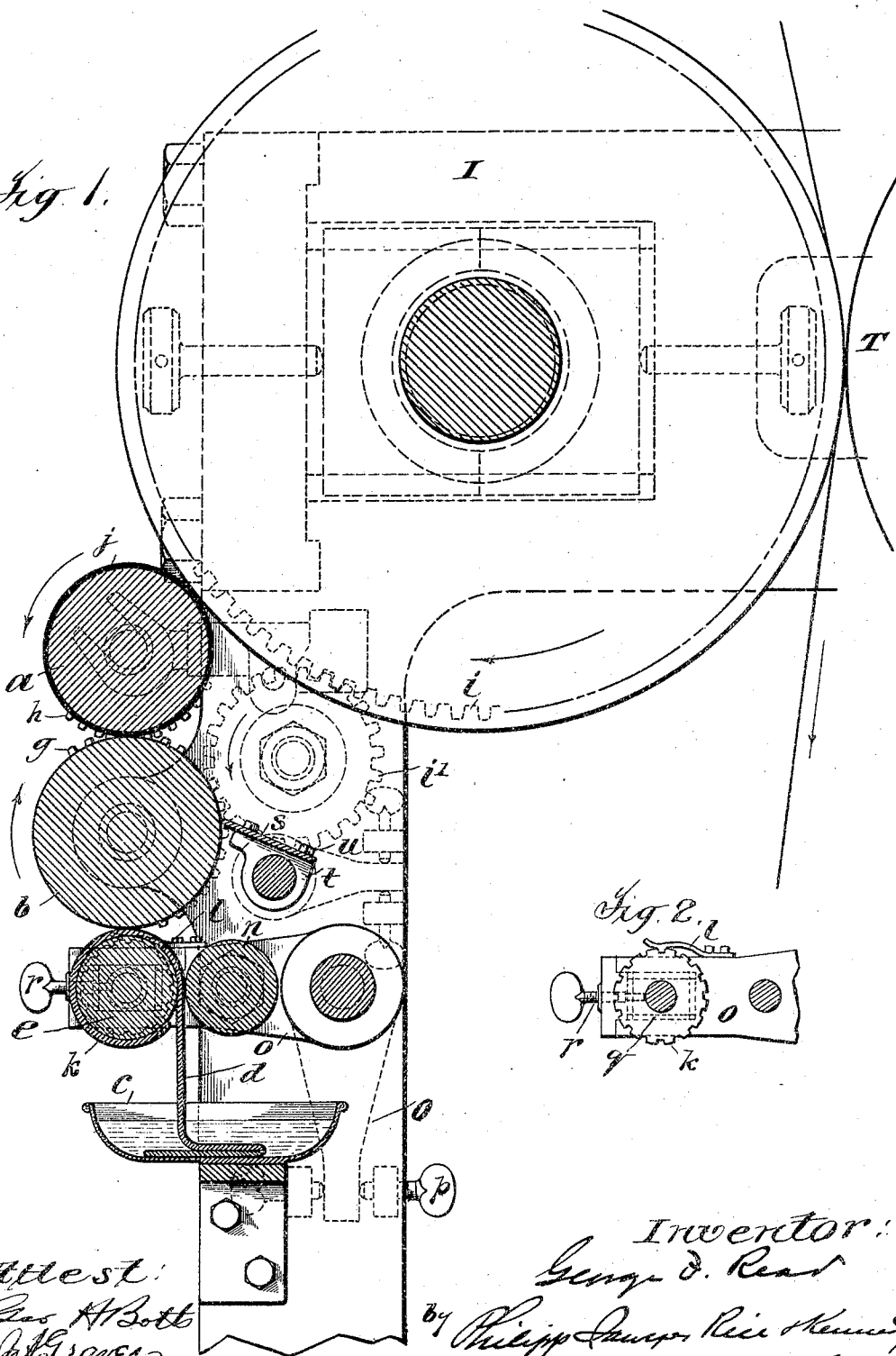


No. 778,892.

PATENTED JAN. 3, 1905.

G. F. READ.
ANTI-OFFSET MECHANISM.
APPLICATION FILED MAR. 24, 1902.

Fig. 1.



Attest:
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UNITED STATES PATENT OFFICE.

GEORGE F. READ, OF NEW YORK, N. Y., ASSIGNOR TO ROBERT HOE, OF NEW YORK, N. Y.

ANTI-OFFSET MECHANISM.

SPECIFICATION forming part of Letters Patent No. 778,892, dated January 3, 1905.

Application filed March 24, 1902. Serial No. 99,668.

To all whom it may concern:

Be it known that I, GEORGE F. READ, a citizen of the United States, residing at New York, county of Kings, and State of New York, have invented certain new and useful Improvements in Anti-Offset Mechanism, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to improvements in anti-offset devices for the impression-cylinders of printing-presses, and particularly anti-offset devices of the class including a fountain for ink-repellent fluid and rolls for conveying the fluid therefrom and depositing it in a thin layer or film on the surface of the impression-cylinder as the latter revolves during the operation of the press.

The present invention has for its object the provision of an anti-offset device of this character containing no reciprocating rolls and which is otherwise of simple construction and which will, moreover, be reliable and effective in operation for the purpose of supplying the ink-repellent fluid uniformly and otherwise properly to the surface of the impression-cylinder.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of a portion of a printing-press equipped with an anti-offset device embodying the present invention; and Fig. 2 is a detail of a portion of the anti-offset device.

Referring to said drawings, T represents the type-cylinder, and I the impression-cylinder of a printing-couple, the latter being driven in the direction indicated by the arrow in Fig. 1. This impression-cylinder is equipped with an anti-offset device consisting of a distributing-roll *a*, contacting with the surface of the cylinder, a depositing-roll *b*, contacting with said distributing-roll, a fountain *c* for ink-repellent fluid, and a wick *d*, one end of which rests in the fountain and the other end of which passes over a support *e*, so as to contact with the depositing-roll *b* and supply thereto ink-repellent fluid which it withdraws from fountain *c* by capillary action.

The depositing-roll *b* is driven by an inter-

mediate *i'*, which meshes with gear *i* on impression-cylinder I and with a gear *g* on the shaft of roll *b*, which latter gear *g* also meshes with a gear *h* on the shaft of distributing-roll *a*, so as to drive the latter roll. The roll *a* may have the same surface speed as the impression-cylinder; but it is preferred that it should have a different surface speed, and the gearing *i g h* is therefore such as to drive said roll *a* at a surface speed slightly less than that of the impression-cylinder.

The distributing-roll *a* is, as usual in anti-offset devices, preferably provided with a blanket or covering *j* of yielding material.

The support *e* for the wick *d* may be of any suitable form; but it is preferable that its upper surface should be curved, as shown, so as to reduce the amount of surface contact of the roll *b* with the wick. It is also preferable that this support be rotarily adjustable, so that as the wick wears fresh portions may be shifted into position for contact with roll *b*, and for this reason it is shown as in the form of a roll journaled in brackets *o* at opposite sides of the machine, (only one of said brackets being shown.) When in the form of a roll, as shown, the wick will be secured at one end to the roll and wound upon it as it is used up.

It is desirable also that the roll *e* or other support should be held securely in the position to which it is thus rotarily adjusted, and for this purpose locking means are provided consisting of a toothed wheel *k* on roll *e* and a spring-pawl *l*, fast to the bracket *o*, and which when the roll *e* has been adjusted drops between two teeth of wheel *k*, and thus locks roll *e* in its adjusted position.

It is desirable also that the roll or support *e* should be adjustable toward and from the roll *b*, so as to regulate the pressure between the wick and roll *b*, and thereby determine the quantity of the ink-repellent fluid supplied to the depositing-roll *b*. For this purpose the brackets *o*, in which the roll or support *e* is mounted, are pivoted to the frame of the machine and are provided with adjusting-screws *p* on opposite sides of their lower ends, whereby the brackets, and with them the sup-

port or roll *e*, may be adjusted upwardly or downwardly and fixed in their position of adjustment.

Coacting with roll *e* is a pressure-roll *n*,
5 mounted in the pivoted brackets *o*, and which bears against wick *d* and presses surplus fluid therefrom, which is returned to fountain *c*. The pressure of roll *n* upon wick *d* is determined by the position relatively to said roll
10 of the roll *e*, which is mounted in sliding bearings *g*, controlled by set-screws *r*, so that said roll *e* may be adjusted to and from roll *n*.

The depositing-roll *b* also is preferably provided with a scraper *s*, mounted in a bracket
15 *t*, having adjusting-screws *u*.

What is claimed is—

1. The combination with an impression-cylinder, of a fountain for ink-repellent fluid, a distributing-roll, means for conveying fluid
20 from the fountain to the distributing-roll comprising a wick leading from the fountain, and a support for the wick adjustable rotarily to shift the wick and also toward and from the distributing-roll, substantially as de-
25 scribed.

2. The combination with an impression-cylinder, of a fountain for ink-repellent fluid, a distributing-roll, a depositing-roll, means for conveying fluid from the fountain to the de-
30 positing-roll comprising a wick leading from the fountain, and a support for the wick adjustable rotarily to shift the wick and also toward and from the depositing-roll, substantially as described.

3. The combination with an impression-cyl- 35
inder, of a fountain for ink-repellent fluid, a distributing-roll, means for conveying fluid from the fountain to the distributing-roll comprising a wick leading from the fountain, a
40 rotarily-adjustable supporting-roll for the wick, a pressure-roll coacting therewith to press surplus fluid from the wick, and an adjustable bracket carrying said supporting-roll and pressure-roll whereby they may be ad-
45 justed toward and from the distributing-roll, substantially as described.

4. The combination with an impression-cyl- 50
inder, of a fountain for ink-repellent fluid, a distributing-roll, means for conveying fluid from the fountain to the distributing-roll comprising a wick leading from the fountain, a
55 rotarily-adjustable supporting-roll for the wick, a pressure-roll coacting therewith to press surplus fluid from the wick, and an adjustable bracket carrying said supporting-roll and pressure-roll whereby they may be ad-
60 justed toward and from the distributing-roll, said supporting and pressure rolls being adjustable relatively to each other to vary the pressure upon the wick, substantially as de-
scribed.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE F. READ.

Witnesses:

F. W. H. CRANE,
W. F. MORGAN.