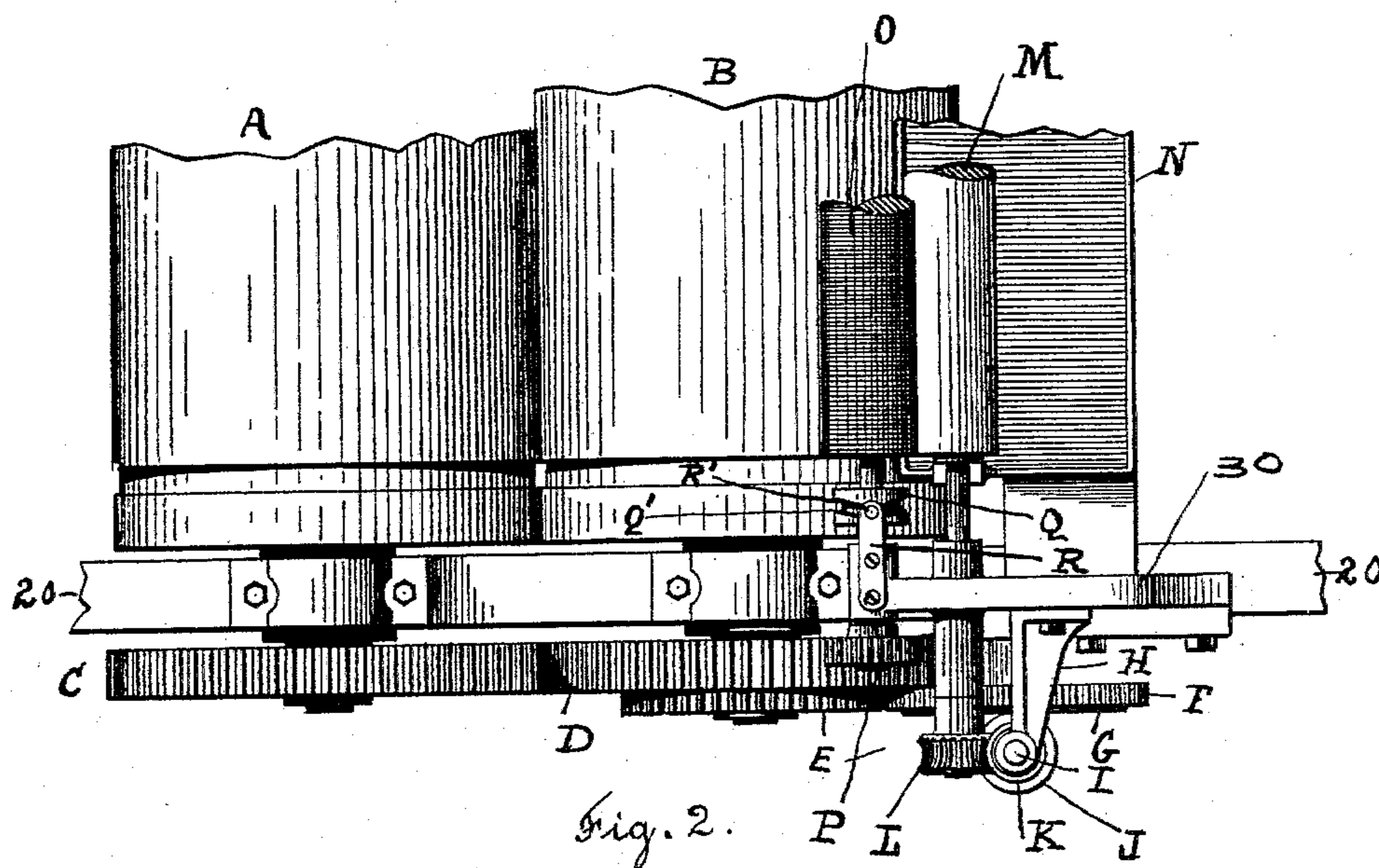
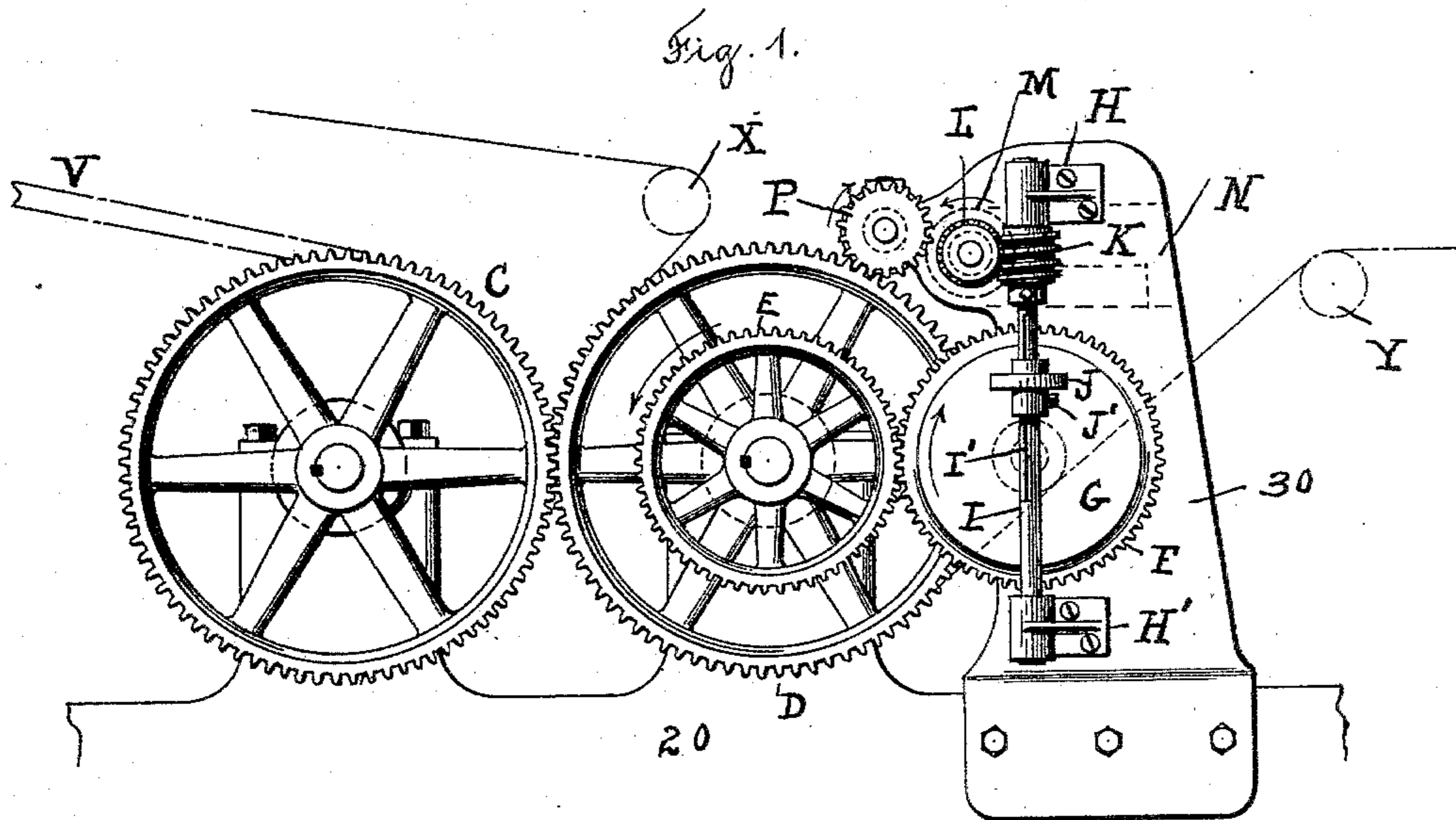


(No Model.)

J. H. STONEMETZ.
OILING DEVICE.

No. 598,122.

Patented Feb. 1, 1898.



Witnesses
Chas. A. Schuchert
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Inventor
John H. Stonemetz,
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UNITED STATES PATENT OFFICE.

JOHN H. STONEMETZ, OF BROOKLYN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE CAMPBELL PRINTING PRESS AND MANUFACTURING COMPANY, OF NEW YORK, N. Y.

OILING DEVICE.

SPECIFICATION forming part of Letters Patent No. 598,122, dated February 1, 1898.

Application filed November 16, 1892. Serial No. 452,220. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. STONEMETZ, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Oiling Devices, of which the following is a specification.

The aim of this invention is to improve the construction of printing-presses; and it especially relates to a means for supplying oil to a second or other impression-cylinder to prevent offset on such cylinder while the sheets or web are printed thereby.

To this end the invention consists of the device described and claimed in this specification and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of part of a machine, showing the application of my improvement; and Fig. 2 is a plan of the same.

Referring to the drawings and in detail, A and B represent two cylinders, which are geared together by means of the gears C and D, fastened on the outer ends of the shafts of the same, as shown.

The cylinder B is supposed to be the second impression-cylinder either of a rotary web-perfecting press or a double-cylinder printing-machine, and the cylinder A is supposed to be either the second type-cylinder of a rotary printing-press or the first impression-cylinder of a double-cylinder printing-press.

Fastened on the shaft of the cylinder B is a small gear E, which meshes with and drives a gear F, fastened on the end of a small shaft which is journaled in a frame 30, extending up and fastened to the main frame 20, as shown. Fastened to the frame 30 are brackets H and H', in which is mounted a vertical shaft I, having a keyway I', and mounted on this vertical shaft I is the adjustable friction-disk J, which has a key fitting into the keyway I', and which has a screw J', by which the same may be secured in any adjusted position. Fastened on the shaft I is a worm K, which meshes with and drives a worm-wheel L, fastened on the end of the fountain-roller M.

N represents an oil-fountain of the usual construction secured to the bracket H, of

which M, before referred to, is the fountain-roller.

O represents a plush or distributor roller, which is adapted to bear both on the fountain-roll M and on the impression-cylinder B, and this roller has on the end of the same a gear P, which meshes with and is driven from the gear D of the impression-cylinder B, and this gearing is so arranged and proportioned that the peripheral speed of the plush roller O and the impression-cylinder B will be the same.

The plush roller O is vibrated axially by means of any of the well-known mechanisms—as, for example, by means of cam Q, secured to the shaft of the same, which cam Q has a cam-slot Q', which engages with a roller R', secured to the bracket R, whereby as the plush roll is turned the same will be moved back and forth axially over the impression-cylinder B to evenly spread the oil thereon, and this axial movement will not effect the mesh between the gears P and D, as the gear P is made of narrower face than the gear D, as shown.

The fountain-roll M is geared so as to turn very much slower than the plush roll O, the plush roll O simply running against the same and taking the oil therefrom, whereby only a slight amount of oil is supplied to the roll O, and which amount of oil can be regulated and adjusted by regulating the speed of the fountain-roller M, which is done by adjusting the friction-disk J, so that the shaft I will be driven at the desired degree of speed. The reduction in speed is obtained by using the worm-gear, which, as well known, greatly reduces the speed. The advantages of this construction are that all the complicated ductor-rollers and equivalent mechanisms are dispensed with, the same function being obtained by the slow speed of the fountain-roll and the slip between the fountain-roll and the plush roll O.

The plush roll O need not necessarily be arranged to bear directly on the oil-fountain roll M, but, if preferred, I may employ any of the ordinary systems of intermediate rolls for conveying oil from the oil-fountain to the plush roll.

The impression-cylinder B may be the sec-

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ond impression-cylinder of a double-cylinder printing-press, in which case the cylinder A would be the first impression-cylinder, and sheets would be fed from a feed-board V first
5 to the impression-cylinder A and printed thereby and then transferred to the impression-cylinder B and printed a second time thereby, or, again, the cylinder B could be the second impression-cylinder of a rotary web-
10 perfecting press, in which case the cylinder A would represent the second type-cylinder, and the web could be led around the impression-cylinder B, as by means of guide-rollers X and R. Thus it will be seen that my oiling
15 mechanism can be applied to any impression-cylinder in which it is desired to oil the surface of the same to prevent offset.

Having thus fully described my invention, what I claim, and desire to secure by Letters
20 Patent, is—

1. The combination of the impression-cylinder, an oil-fountain, an oil-fountain roller, a distributor-roller engaging the impression-cylinder and taking oil from the fountain-
25 roller, and gearing for turning the oil-fountain roller at a slower peripheral speed than the distributor-roller, whereby there will be a peripheral slip between the distributor-roller and the fountain-roller, so that the distribu-
30 ter-roller can deposit a uniform thin film of oil upon the surface of the impression-cylinder, substantially as described.

2. The combination of an impression-cylinder, an oil-fountain, an oil-fountain roller, a
35 distributor-roller, said distributor-roller be-

ing arranged to bear constantly both upon the oil-fountain roller and the impression-cylinder, and means for driving the oil-fountain roller at different relative speeds to regulate the amount of oil transferred to the dis- 40 tributer-roller, substantially as described.

3. The combination with the impression-cylinder of the oil-fountain and fountain-roll, means for taking the oil from the fountain- 45 roller and depositing the same upon the impression-cylinder, gearing for rotating the fountain-roller, and a continually-rotating disk, and an adjustable friction-disk, cooperating therewith for imparting an adjustable speed to the gearing for driving the oil-foun- 50 tain roller, substantially as described.

4. The combination with the impression-cylinder of the distributor-roller bearing thereon, the oil-fountain, and oil-fountain 55 roller, the distributor-roller, also, bearing on the oil-fountain roller, the worm-wheel mounted to turn with the oil-fountain roller, the shaft I, carrying the worm K, engaging the worm-wheel, the continuously-driven disk G, 60 and the adjustable friction-disk J cooperating therewith, said disk J being mounted on the shaft I, substantially as described.

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

JOHN H. STONEMETZ.

Witnesses:

LOUIS W. SOUTHGATE,
H. A. W. WOOD.