R. M. HOE.

Printing-Press.

No. 162,652. Patented April 27, 1875.

Fig 2

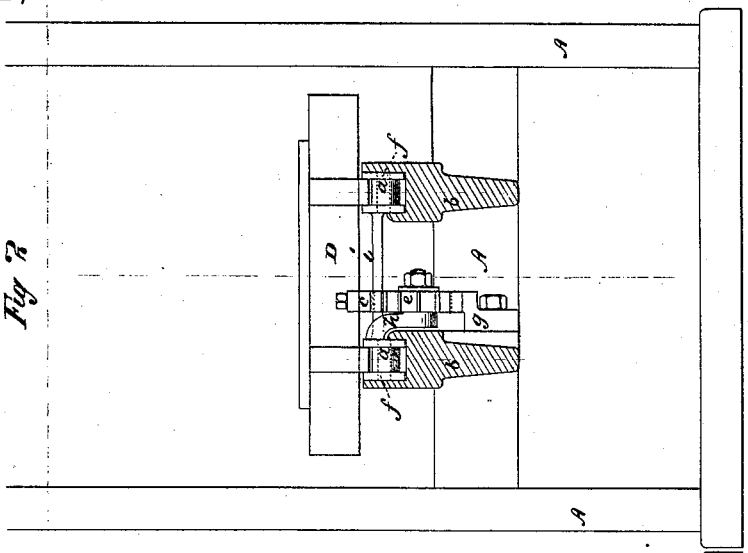
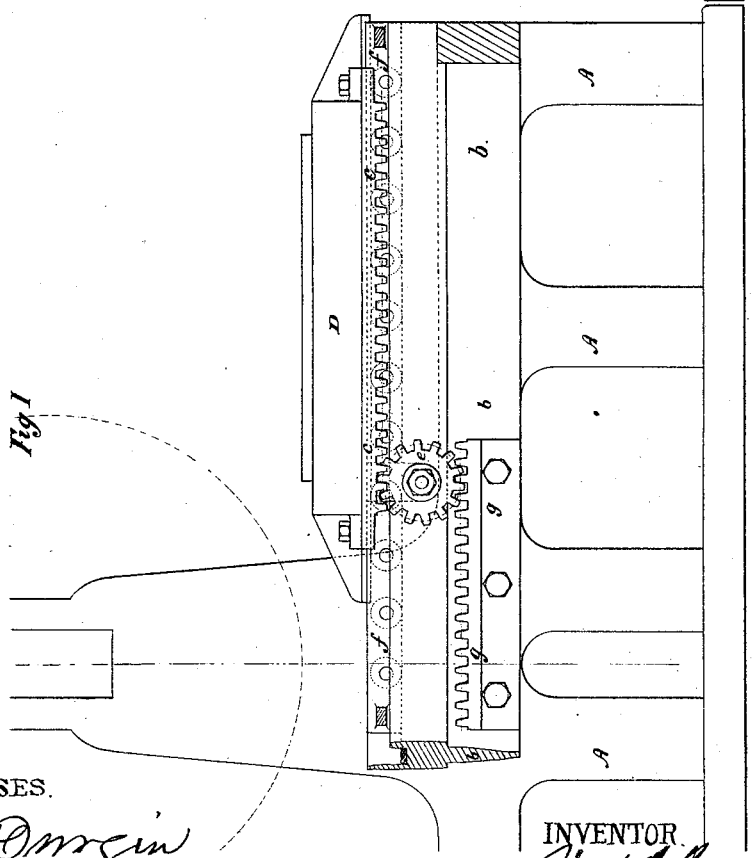


Fig 1



WITNESSES.

E. F. Johnson

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UNITED STATES PATENT OFFICE.

RICHARD M. HOE, OF NEW YORK, N. Y.

IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. **162,652**, dated April 27, 1875; application filed November 13, 1873.

To all whom it may concern:

Be it known that I, RICHARD M. HOE, of the city, county, and State of New York, have invented certain Improvements in Printing-Presses, of which the following is a specification:

My invention relates to the roller-frames or carriages of reciprocating-bed printing-machines, and particularly giving them a positive motion, and by so doing to improve the operation of the machine.

Figure 1 is a vertical longitudinal section. Fig. 2 is a transverse section.

A A represent the frame of the press. *b b* are the ways in which the roller-frames *f f*, conveying their anti-friction rollers A A, run. There are two or more of these ways with their frames and rollers in each press. D D, the bed of the press, resting on the rollers *a a*. A small hanger, *h*, is attached to one of the roller-frames *f*. On this hanger is a stud or bearing on which the pinion E runs and gears into the two racks *c* and *g*, one secured to the under side of the bed D, and the other secured to the ribs or ways *b*. It will be evident that on reciprocating the bed D the rack C will drive the pinion *e*, and this, gearing into the fixed rack *g*, will cause the pinion E and the roller-frame *f*, to which it is attached, to move at one-half the speed of the bed D. Thus we could be sure that all the roller-frames of a press would move with the certain relative speed to the bed, by attaching to each the pinion and racks, but we join the roller-frames or carriages together by means of the bar or frame *i*, and they all move at the same relative speed with but one service of pinion and racks.

What I claim is—

The rack *c* on the bed, pinion *e* fixed to one roller-frame, and stationary rack *g*, in combination with the rods *i*, by which two or more roller-frames are attached together, so as to move in unison, substantially as described.

RICHD. M. HOE.

Witnesses:

N. WALTER ANTHONY,

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